

SOURCE PROTECTION AND
CONTINGENCY PLAN
for the
RANDOLPH CENTER
FIRE DISTRICT #1
WATER SYSTEM
WSID #5177
RANDOLPH CENTER, VERMONT



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Table of Contents

Introduction.....	2
Identification of Threats.....	2
Contaminant Sources.....	3
Assessment of Threats.....	4
Management Plan.....	4
Emergency Contacts.....	5
System Shut-Down.....	7
Water Haulers.....	9
Source Protection Area Maps.....	10
SPA Land Abutters.....	13
Sample Letters.....	15

**RANDOLPH CENTER FIRE DISTRICT #1
WATER SYSTEM ID# 5177
SOURCE PROTECTION
and
CONTINGENCY PLAN**

Introduction and Purpose

This Source Protection and Contingency Plan covers the active water supply source for the Randolph Fire District #1 (RFD #1) Water System, WSID #5177, a public community water system located in the Town of Randolph Center, Orange County, Vermont. This Source Protection Plan was updated by P² Environmental, Inc., water system operator.

The purpose of the Source Protection Plan (SPP) is to help protect the quality and quantity of water obtained from the source by identifying and managing potential sources of contamination and threatening activities that may or do occur within the source protection area, in the interest of the RFD#1 water consumers.

This plan is a working document that will be updated every three years to remain current, active, and viable

Facility Description

The drinking water source for the RFD #1 is a spring permitted as WL001. The Spring information is listed below. The known pump capacity of 45 gallons per minute is utilized daily via timer control.

Source #	Source Name	Source Type	Source Yield (gpm)	Authorized MDD Rate (gpd)
WL001	Spring	Groundwater	128	46,080

The source is located off Furnace Road below the Lake Champagne Campground. The source is identified as VT0005177 - See attached Maps. The spring is housed with a springhouse where the water flows from, to a pump house and treatment building. The water is treated with ongoing chlorination, then pumped through distribution. At present, the risk of contamination from known potential sources of contamination is evaluated as low to medium.

Identification of Threats

Delineation of Source Protection Area

The Source Protection Area (SPA) is the area surrounding a source where a contaminant released to the land surface or subsurface would be reasonably likely to move toward and reach the source. The purpose of delineating a SPA is to determine the recharge area that supplies water to a public water source.

The SPA was delineated prior to this project and is shown on Map 1 as provided by the Vermont Natural Resource Atlas.

There are three zones in the SPA:

- **Zone 1** (also called the Isolation Zone) consists of a 200-foot radius circle around the well (water source). Zone 1 is defined as the area where impacts from contamination are likely to be immediate and certain.
- **Zone 2** of the SPA is roughly a circular area outside Zone 1, where groundwater flows to the source from outside Zone 1. Zone 2 is defined as the area where there would be probable impacts to the water supply if contamination were to occur.
- **Zone 3** of the SPA consists of the remaining area that recharges Zone 2 and where impacts from potential sources of contamination are possible. Zone 3 consists of remaining recharge areas or areas of contribution to the wells not delineated as Zone 2 and where there may be possible impacts from potential sources of contamination. This is usually, but not always, the area upslope from Zone 2 to the watershed boundary.

Inventory of Land Uses and Potential Threatening Activities

Land uses and potential threatening activities are listed on the following Table

PSOC ID Number	Description	Risk Evaluation
001	Road salted corridors VT 66, corridors in Campground and driveways	Low to Medium
002	Community On-Site Septic System and fuel storage	Low to Medium

Present Land Use

The Randolph FD #1 Water System facility is located off Furnace Road in the Town of Randolph Center, Vermont. The property consists of multiple land uses including residential and undeveloped land (forest and pasture) and a seasonal campground on Lake Champagne. The water system contains approximately 56 service connections. There is one spring house and one utility building on the site that contains the booster pumps, the chlorine treatment system and other water system operation apparatus.

Contaminant Sources

Known Contamination

Based on a windshield survey and a review of the WHPA on December 6, 2021, there are a few known sources of contamination that exists in the SPA.

Potential Sources of Contamination

- 001 Corridors – Major and Minor. Vermont Route 66 and campground roads. The State highway is heavily salted and has the potential for spills and rollovers.
- 002 Residential On-Site Septic System and Heating Fuel Tanks - Outside some of the homes are #2 fuel tanks.

Assessment of Threats

Present threats - The overall present threat to the water system is evaluated as medium to low because of the nature of the potential sources of contamination. Below is an assessment of the threat for each individual PSOC.

- 001 Corridors – Major and Minor. Vermont Route 66 and campground roads. The State highway is heavily salted and has the potential for spills and rollovers.
This PSOC has been assigned a *Low - Medium risk*.
- 002 Residential On-Site Septic Systems and Heating Fuel Tanks at homes in the SPA.
Moderate risk not knowing how frequent these septic tanks are pumped or what condition any of the fuel tanks are in.
This PSOC has been assigned a *Low - Medium risk*.

Management Plan

Information Circulation

Distribution of Information to local, regional and state boards. The attached educational letter (Attachment 3) will be mailed to local, regional and state agencies within four (4) months of the state's approval of this Plan. This includes Act 250 administrators and the DEC Regional Office located at 100 Mineral Street, Springfield, VT 05156 (telephone number 802.885.8855). The Randolph Town Planner or Planning Board, Town Clerk (Joyce Mazzucco) at 802.728.5433, and the Health Officer (Lorraine Peirce RN, 802.728.3386 or the Deputy Health Officer Jerald Ward at 802.728.6521.

Inform Landowners. A copy of the educational letter (Attachment 4) will be mailed to the land abutters listed on Attachment 1 of this document. The letter will also be posted by the RFD #1 Prudential Committee in the general area of Randolph FD #1 within three months of the State's approval.

Plan Dissemination. Copies of this plan will be provided to the System Owner, Randolph FD #1 in Randolph Vermont. The Town of Randolph - Town Clerk, and the Regional Planning Agency.

Existing Risks Management

Annual Inspection. On a yearly basis, the responsible person, system operator or the water system representatives will conduct an inspection of the SPA. During their inspection, the spring site will be closely inspected and checked for Best Management Practices.

Any new sources of contamination or PSOCs will be visited, described in writing and located on the SPA map. An annual update and report on any new PSOCs will be submitted to the Vermont Drinking Water and Groundwater Division in Montpelier, Vermont. If necessary, as indicated by an inspection, this Plan will be modified to manage any new risks, land use changes, etc.

Future Risks Management

The Randolph FD #1 will make every effort to prevent any future land uses or activities within 200' of the spring that would be excluded by the Vermont Water Supply Rule, within the 200' Isolation Zone for a new source/well.

CONTINGENCY PLAN

This Contingency Plan describes steps to be taken if the source at the RFD #1 (WSID# 5177) became contaminated, declined in yield, or was lost for any reason. Although the Source Protection Plan deems this unlikely, procedures are on file in case such an emergency arises. The Contingency Plan was developed in accordance with the State of Vermont - Water Supply Division publication "Protecting Public Water Sources in Vermont" dated 1997, and is acquired by the RFD #1.

Emergency Response

Notification Roster

If any emergency should occur within the Source Protection Area (SPA) or if sampling indicates the presence of contamination for primary drinking water standards, the following notification procedure should be implemented. The first response should include immediate telephone calls by any person discovering an event, to one or more of the individuals on the "First Tier" list. The first of the following persons to become aware of such an event should also take responsibility for informing all other members in this "First Tier". With this plan, it is desired that these "First Tier" persons will be notified as soon as possible. These persons would then divide up the telephone calls so that the Second Tiers officials as well as the water users are notified.

First Tier Water System Owner: Randolph Fire District #1

John Lens – Prudential Committee Chair	802-272-2796
Bill DeFlorio: System Engineer	802-728-3077
Dave Farnham: System Engineer	802-565-0345
Plumber: Bart Parmalee.....	802-272-4495 cell
.....	802-728-4311 office
Electrician: Harmony Electric	802-728-3111
Water System Operator:	
Patricia M. Beavers	802-763-3937
Emergency Number:.....	802-384-0421 cell
P2Environmental, Inc. Scott Beavers.....	802-384-3937 cell

Second Tier (Would be contacted by the Water System Owner or Operator)

Vermont State Police:

Bethel Barracks802-234-9933

Vermont DEC

Water Supply Division802-828-1535

Hazardous Material Spills800-641-5005 (24 hour)

Vermont Dept of Health800-439-8550

Emergency.....911

Randolph Town Clerk: Emery Mattheis802-728-5433 ext. 11

Randolph Selectboard: Trini Brassard (Chair)802-728-5739

Randolph Health Officer: Melissa Scalera802-431-3127 Cell

Deputy Health Office: Bob Pressey.....802-431-3021 Cell

Chain of Command, Definition of Duties

1. Randolph Fire District #1 - Water System Owner - Web Site: www.rfd1.org

John Lens: Prudential Committee Chair

802-272-2796

johnelens@gmail.com

Will call the plumber and notify water users of the specific water problem; shut down the system if necessary. Arrange for emergency water delivery.

2. Patricia M. Beavers - Water System Operator

The above list shows the command protocol in case of a water related emergency for the Randolph FD #1 Water System. Should an Owner’s Representative not be available, the responsibilities would be passed onto the Emergency Maintenance. If either are not available, then the Water System Operator should be notified. It is the job of the Water System Owner or their substitute, to be absolutely sure that the notification process is in motion for all three tiers listed in the "Emergency Response" section of this document. It is also the responsibility of the highest person in command who can be reached, to either set in motion or to delegate any other responsibilities as may be deemed appropriate for the specific situation as part of this Plan. Such responsibilities may include soliciting advice from the Consultant, i.e., seeking the alternative water source, coordinating repair of equipment or contracting for repairs, remediation or cleanup related to a specific occurrence or other potentially contaminating event.

In the event of a public water system emergency, the Public Water System must contact the Drinking Water and Groundwater Protection Division (DWGWP) if they are going to connect to or use an unpermitted water source. This includes emergency use of unpermitted wells, springs, surface water, hauled or bulk water and bottled water. The Water System Operator must contact the Division of DWGWP as soon as possible but no later than 12 hours of the connection/use of an unpermitted water system.

Method of Timely Notice by Local and State Governments

The Randolph FD #1 Prudential Committee individuals should hand deliver and/or post a public notice in a general area of the park if the water supply is to be curtailed, temporarily shut down, or

required if the existing well or source is damaged. All water users are within the boundaries of the Randolph FD #1 property.

Customers who cannot be reached by telephone per the attached list (Attachments 1 & 2) will have notices hand delivered to their homes by the Water System Owner.

Short-Term Responses

System Shut Down:

1. Turn off the main breaker for pumps located in the breaker panel in the Treatment Building.



Timer, pump switch and circuit breaker panel box in Treatment Building

2. Turn the yellow and orange ball valves to the CLOSED position, located in the basement of the Treatment Building on the East wall.



Shut-off valves in basement of Treatment Building

System Start Up:

Reverse the above procedure when system is in full operating condition. The pump station should be locked at all times.



Chlorination Day Tank, Pumps, Piping Flow inside Treatment Building



Hatchway and ladder to basement level of Treatment Building

Alternate Water Source

Bulk Water Hauler / Supplier:

- **Pristine Mountain Springs of Vermont, Inc.** 1152 Rte. 100, Stockbridge, VT, 05772
Ron Colton, proprietor. Tel: 802-746-8186

Pristine Mountain Springs has the capacity to truck in a few options of potable water. Small loads can also be hauled at 1,100 gallons to direct fill the spring house.

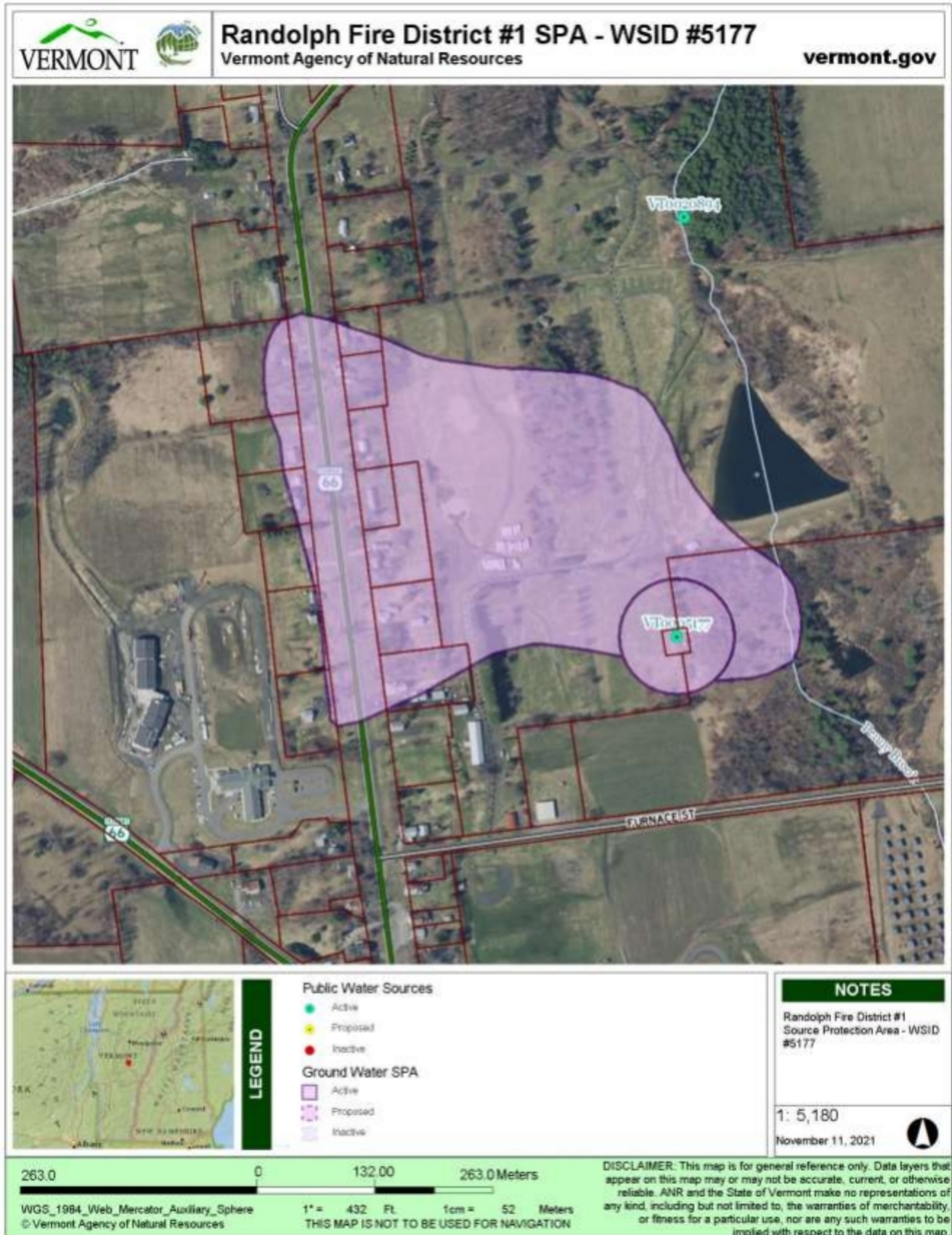
Long Term Alternatives

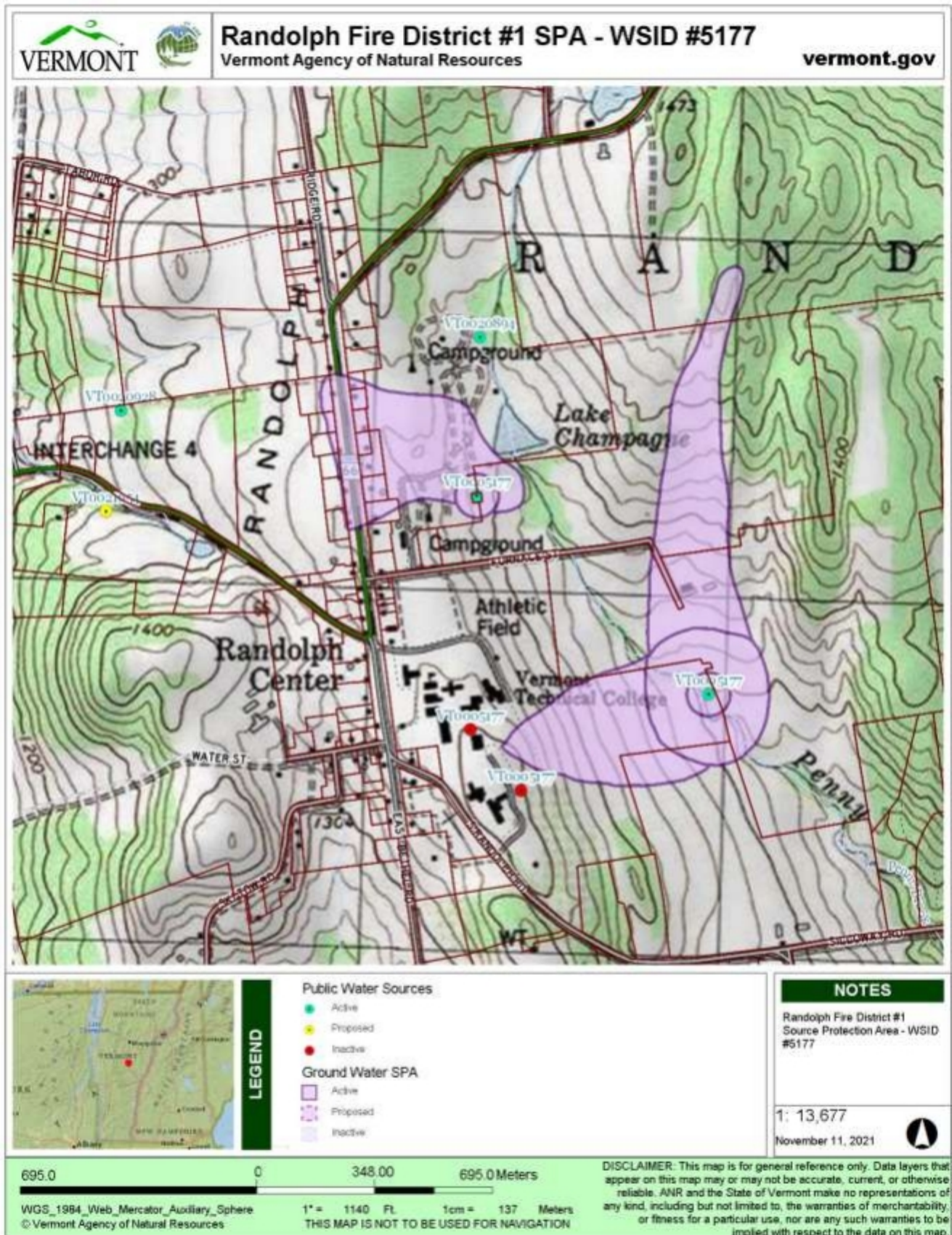
Once the source of contamination is identified and removed, remediated or deemed not to be removed, the Randolph Fire District #1 System may have to implement long term alternatives. Regular monitoring of the sources will continue until contamination is no longer present. Decisions will be considered in conjunction with the Drinking Water and Groundwater Protection Division at the Vermont Department of Environmental Conservation and a drinking water consultant, if appropriate. Long term alternatives to be considered include but are not limited to the following:

- Installing appropriate treatment
- Repair or replacement of select distribution system elements
- Rehabilitation of the existing well source
- Drilling one or more new wells (cost, feasibility and regulation are major factors)

Updates and Reporting

The SPP will be considered an integral part of the normal operations related to the Randolph Fire District #1 Water System. The SPP and yearly activities conducted with respect to the SPP will be reviewed on, at least, a yearly basis, and the SPP will be modified and updated on an as needed basis. The specifics of the contingency plan will be further evaluated each year and further defined in an evolutionary fashion aimed at making the plan progressively more specific with time. Both short-term and long-term responses / alternatives will be reviewed, and as specific responses / alternatives develop, the contingency plan will become more specific, with actual contacts and specific solutions identified.





Land Abutters / Owners in the Source Protection Area

Randolph Fire District #1 Source Area Parcel Information - 2021	
Parcel ID	Owner
108013	RANDOLPH FIRE DISTRICT NO 1, MIKE REGAN 50 FURNACE ROAD RANDOLPH CENTER, VT, 05061
108014.01	VERMONT STATE OF, STATE BUILDINGS DEPARTMENT 2 GOVERNOR AIKEN AVENUE MONTPELIER, VT, 05602
108011	LAKE CHAMPAGNE RESORT VERMONT INC, CLARK & SHERYL CAMPBELL 53 LAKE CHAMPAGNE DRIVE, 53 Furnace Road, RANDOLPH CENTER, VT, 05061
108028	MILLS SUSAN, PO BOX 61 RANDOLPH CENTER, VT, 05061-0061 (3356 VT RT 66)
108026	LACKARD VALENTIA M, LACKARD JOHN M 3322 VT ROUTE 66 RANDOLPH CENTER, VT, 05061
108025	SHAPPELL MARY C, 3280 VT ROUTE 66 RANDOLPH CENTER, VT, 0506
108023	GALLO SHANON M, 3242 VT ROUTE 66 RANDOLPH CENTER, VT, 05061
108021	STOKES EDWARD H TRUSTEE, STOKES MARGARET W TRUSTEE 3204 VT ROUTE 66 RANDOLPH CENTER, VT, 05061
108019	TRASK KRYSTAL A, 3164 VT ROUTE 66 RANDOLPH CENTER, VT, 05061
108017	DANIEL GEORGE E, 3116 VT ROUTE 66 RANDOLPH CENTER, VT, 05061-9767
108018	DEFLORIO WILLIAM J (LIFE ESTATE), DEFLORIO TRUDY E 3115 VT ROUTE 66 RANDOLPH CENTER, VT, 05061-4414
108020	STRODE ELEANOR & SCHMIDT LINDA LIFE EST, GIFFORD MEDICAL CENTER 3171 VERMONT ROUTE 66 RANDOLPH CENTER, VT, 05061
108022	DILEO ROBERT P, DILEO CAROLYN P P.O. BOX 112 RANDOLPH CENTER, VT, 05061 (3199 VT RTE 66)
108024	WANG CHENGJUN, 3247 VT ROUTE 66 RANDOLPH CENTER, VT, 05061-4434
108025.01	K CORP, ARTHUR C KNIPPLER PO BOX 155 RANDOLPH CENTER, VT, 05061-0155 (3283 VT RTE 67)
108027	NEW MEADOW PARTNERS LLC, 209 TILTON ROAD RANDOLPH, VT, 05060

Landowners in Source Protection Area - Contact Information

Name	Street Address	Phone	Email
George Daniel	3116 VT RTE 66	802-728-4894	geodaniel@comcast.net
Krystal Trask	3164 VT RTE 66	802-431-3331	krystalotr@gmail.com
Edward & Margaret Stokes	3204 VT RT 66	323-825-1944	
Shanon Gallo	3242 VT RTE 66	802-272-7091	shanon_g@yahoo.com
Mary Shappell	3280 VT RTE 66	910-265-7788	mary.shappell@yahoo.com
William & Trudy DeFlorio	3115 VT RTE 66	802-728-3077	deflorio3@comcast.net
Eleanor Strode (Home owned by Gifford)	3171 VT RTE 66	802-728-2498	pgiordano@giffordmed.org
Chengjun Wang	3247 VT RT 66	334-246-1641	wangch2@auburn.edu
Valentia Lackard	3322 VT RTE 66	802-431-3086	vmlackard@gmail.com
Susan Mills	3356 VT RT 66	802-728-9033	
Robert & Carolyn DiLeo	3199 VT RTE 66	802-989-2024	rpdcpd718@gmail.com
Arthur Knippler	3283 VT RTE 67	802-728-5533	
Clark & Cheryl Campbell	53 Furnace RD	802-728-5293	sparkyktm@gmail.com

SAMPLE LETTER TO TOWN AND STATE OFFICIALS

Dear Town and State Officials,

As a representative of The Randolph Fire District #1 water system, I have attached a copy of the source protection area for our water system. As you may know, the source protection area (SPA) defines the land surface, which is believed to contribute drinking water to our public water supply. Therefore, activities, which could release contaminants into the environment within this SPA zone, could threaten our water supply.

Since most of you are involved in making land use decisions at the state and local level, we thought it was very important that you receive a copy of our source protection area as provided to us by the state's Drinking Water and Groundwater Protection Division. As you are aware, we are very concerned about protecting the water quality of our source since many people depend upon this water for drinking and other uses. We are not only interested in protecting the source today, but for the future as well. In addition to the source protection area being a useful management and planning tool for you, we would hope that you would keep us informed of any related issues and involve us in the planning and decision process where it is deemed appropriate.

On behalf of the Randolph Fire District #1 water system, I want to thank you for your attention to this matter. Please contact me if you have any questions or if we can be of any assistance.

Sincerely,

Water System Owner Representative

cc: Town Conservation Commission
Town Planning Commission
Town Clerk
Town Health Officer
Department of Environmental Conservation, Regional Office

**SAMPLE LETTER TO PROPERTY OWNERS WITHIN THE
SOURCE PROTECTION AREA**

Dear Neighbor,

We are working with the Vermont Drinking Water and Groundwater Protection Division to develop a program to protect our groundwater supply. Groundwater as a drinking water supply source is generally of high quality; however, it is vulnerable to contamination from a wide range of activities which take place on the ground surface. Once the groundwater is contaminated, it is difficult and expensive to clean to a level which is suitable for drinking.

Because of the high cost associated with groundwater clean- up, we, The RFD #1 water supply system, are in favor of a program of protection which reduces the risk of contamination our groundwater resource. As part of this effort, we have identified that area of land, which directly contributes recharge to the public water supply source - see attached maps. This is known as the Source Protection Area (SPA). It is especially important that activities within the source protection area do not discharge contaminants, which may threaten the groundwater which is used for human consumption.

This letter was prepared with the intention of informing you that you have been identified as an owner of a property that is located in the source protection area for our water supply system and to increase your awareness of this public groundwater resource. Improperly operated on-site septic disposal systems, accidental chemical spills, and underground fuel storage tanks are only a few examples of land use activities which threaten groundwater quality and of which we hope you will share our concern.

We are asking you to do your best to minimize the release of contaminants in the source protection area which could threaten our groundwater supply. We have information available to help you adopt these preventative practices.

If you have any questions, want further information, or want to discuss this letter or your operating practices, please contact the water system Prudential Committee Chair, John Lens at 802-272-2796. He can, in turn, with your permission, contact the State Department of Environmental Conservation, DWGW Division, or whomever else would best respond to your request.

Sincerely,

Water System Owner Representative

cc: Public Water System O&M Manual