

Lyman Meadows Water System
VT0020000



2021 Source Protection Plan Update

Source Protection Plan update assistance from:

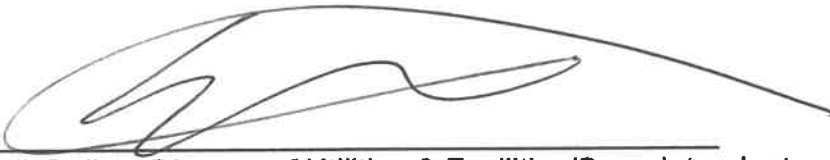


October 2021

SOURCE PROTECTION PLAN UPDATE

Lyman Meadows Water System

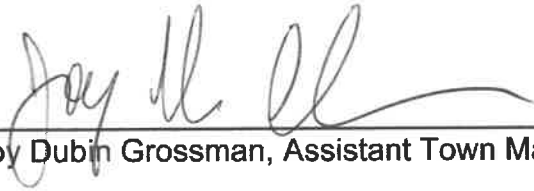
VT0020000



Erik Bailey, Director of Utilities & Facilities/Superintendent

10/22/21

Date



Joy Dubin Grossman, Assistant Town Manager

10/22/21

Date

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General

UPDATE SUMMARY

A Source Protection Area (SPA) field investigation was performed on Monday October 18, 2021 by Diana Butler, Vermont Rural Water Association. The Water System has not undergone any changes and no land use activities have changed within the Source Protection Area (SPA) since the last plan update in January 2019.

The Potential Sources of Contamination (PSOC) Inventory has been reviewed and revised. The *Treatment Building* has been removed. Water System buildings are a permitted land use within the isolation zone (zone 1) according to the Vermont Water Supply Rule, March 2020 revision. The *Permitted Stormwater* (Permit Number: **3281-9050**) outfall has been removed. The permit requires that the outfall and stormwater infrastructure be inspected annually and that a report is submitted online to the ANR. Because the outfall is inspected annually and the source well has been determined not to be under the influence of surface water, this has been removed from the PSOC inventory.

Residential Dwellings have been separated from the *Recreation Path*. It has been expanded to include residential properties as well and has been elevated to High Risk because of the proximity of residences to the source well and the lack of control the Water System has over activities on private property. *Roads* have been expanded to include parking areas and has been elevated to Medium Risk because of the types of hazards associated with a vehicle accident.

This update contains the following revised/new items:

- Photos
- Source Protection Area Maps
- PSOC's Inventory and Risk Assessment
- Emergency use of an Unpermitted or Unauthorized Water Source Procedures
- Updated Emergency Contact Information
- Notification of Water System Users Procedures
- Shutdown/Start-up Procedures
- Action Items for Implementation
- 2021 Landowner List

BACKGROUND AND PURPOSE

The purpose of a Source Protection Plan (SPP) Update is to identify water system vulnerabilities and to suggest techniques and strategies to manage land uses and activities that potentially may contaminate a public water source. While naturally occurring contaminants can usually be controlled by treatment methods, potentially contaminating land uses can be managed by activities outlined in a Source Protection Plan. This Source Protection Plan Update applies to a single bedrock well in the town of Hinesburg, Vermont which provides water to the Lyman Meadows Water System WSID VT0020000. The original

plan was completed by Chevalier Drilling Company in October 1995. This document is based on the last update completed in January 2019.

A Public Water System is defined as “any system(s) or combination of systems owned or controlled by a person, that provides drinking water through pipes or other constructed conveyances to the public and that has at least fifteen (15) service connections or serves an average of at least twenty five (25) individuals daily for at least sixty (60) days out of the year.” (Vermont Water Supply Rule, Chapter 21, Subchapter Section 2.2)

This plan update has been prepared with the assistance of Vermont Rural Water Association. The objective of a Source Protection Plan is to identify potential contamination sources that occur within the Source Protection Area of this public water supply and to provide specific recommendations to manage these potential threats in order to maintain quality drinking water. This document has been prepared in accordance with the Vermont Water Supply Rule, Chapter 21, March 2020 Revision. Under the Rule, a Source Protection Plan consists of the following basic elements:

1. Source Protection Area Maps including:
 - Source identified by name and Drinking Water Groundwater Protection (DWGP) Division source number
 - Associated landowners
 - Potential Sources of Contamination (PSOCs)
 - Source Protection Area Delineation approved by the Secretary
2. An inventory of PSOCs
3. An assessment of risks posed by these PSOCs
4. A management plan to minimize risks to the water source(s)
5. A contingency plan for responding to the loss of the water supply

A Source Protection Plan is a working document that will be reviewed at least annually and updated every three years to remain current, active, and viable. Actions taken by Water System personnel, landowners, and the larger community are key to achieving comprehensive protection.

DESCRIPTION OF WATER SYSTEM AND WATER SOURCE

The water system consists of a single well (WL001); a storage tank; a booster pump; two hydropneumatic tanks; a standby chlorination system (a chemical feed pump and day tank); and the distribution system which serves the condominium complex. Hypochlorite solution is prepared when needed and is not stored onsite. Water is pumped into the 40,000 gallon concrete storage tank by the well pump. System pressure is maintained by a booster pump and two hydropneumatic tanks.

The well completion report was not available, below is an informational summary for the source well:

Source Name	Type	Date of Construction	Depth	Casing Length	Permitted Yield	Diameter
Well WL001	Drilled	1986	400 ft	24 ft	32 gpm	6 in

Source Protection Area

SOURCE PROTECTION AREA DEFINED

A Source Protection Area (SPA) is defined as “the surface and subsurface area through which contaminants are likely to move toward and reach water supplies” (Vermont Water Supply Rule). The purpose of delineating a Source Protection Area is to determine the recharge area that supplies water to a public water source. The recharge area or Source Protection Area for a groundwater source is defined by the nature of subsurface flow and that induced by pumping. Within a Source Protection Area, land uses and/or naturally occurring materials may cause a public water system to be vulnerable to contamination. Source Protection Areas for Public Community Water Systems may be delineated using the following methods:

1. Calculated fixed radius
2. Simplified variable shapes
3. Analytical methods
4. Hydrogeologic mapping
5. Flow models

The Source Protection Area of Public Community Water Systems is further classified into three Zones:

- Zone 1 – 200 foot radius around well (isolation zone)
- Zone 2 – Estimated zone of influence with “probable impacts”
- Zone 3 – Remainder of recharge area (2 year travel time for sewage disposal)

Zone 1: is a 200-foot radius around the well, also known as the isolation zone. This is the area where impacts are likely to be immediate and certain. The isolation zone is the most critical area for protection and should be under the control of the water system. Only activities that are related to the water system should occur within the isolation zone.

Zone 2: Consists of contributions from the monitoring radius as established as part of the Source Interference Testing for new systems and outside Zone 1. This zone is based on criteria such as water usage and pump test rate and is the area where impacts are probable from potential sources of contamination.

Zone 3: Is the outer most boundary of the Source Protection Area. Zone 3 consists of the remaining recharge area not delineated in Zone 2 and is the area where possible impacts from potential sources of contamination may occur. This area may also be thought of as the area supplying recharge to the public source simply by natural groundwater flow.

A two-year travel time zone is used to identify a protection area to provide adequate protection from pathogen threats resulting from onsite disposal of sewage.

DESCRIPTION OF SOURCE PROTECTION AREA

The SPA covers approximately 54 acres of mixed land use. The SPA delineation defines zone 1 and zone 2, there is no zone 3. Land use includes forested land; open fields; the Lyman Meadows condominium complex; individual residences; commercial businesses; the

recreational HART trail; and the elementary school. Vermont Route 116 passes through the southern portion of zone 2. The only surface water within the boundary is an unnamed drainage tributary.

Inventory of Potential Source of Contamination and Assessment of Risk

POTENTIAL SOURCES OF CONTAMINATION

Potential sources of contamination (PSOC) within the SPA for this source was identified using the data available from the Vermont Natural Resources Atlas, field inspections, and interviews with Water System personnel to obtain local knowledge. Each PSOC is assigned a risk level (**Low**, **Medium**, or **High**) based on several factors. To determine these risk levels, the nature and quantity of the contaminants; the level of control the Water System may have over the PSOC; the distance from the source; and the routes by which the PSOC could potentially reach groundwater, were considered. The descriptions of individual PSOCs below match the summary provided.

Inventory & Risk Assessment Table					
PSOC	Description	Property Type/Use	Zone	PSOCs	Risk
1	Residential Dwellings/Properties: Heating Fuel Storage Tanks Parked/leaking Vehicles Onsite wastewater disposal system Fertilizers/Pesticides/Algaecide Household Hazardous Waste	Residential	1/2	VOC's SOC's Nitrates Bacteria	High
2	Roads & Parking Areas: VT Route 116 Lyman Meadows Access Road Lyman Meadows Parking Area Papa Nicks Parking Area	Transportation	2	VOCs SOCs Sodium Chloride	Medium
3	Hart & Mead Inc: UST's AST's	Commercial	2	VOS'c SOC's	Medium
4	Recreational Path	Recreation	1/2	VOC's SOC's Bacteria	Low
5	Maple Sugar Production	Agriculture	1/2	VOC's SOC's	Low
6	Potential Future Logging: Contamination from surface runoff Leaking vehicles/equipment	Forested	2	VOCs SOCs	Low

PSOC 1 Residential Dwellings/Properties: The source well is located east of the Lyman Meadows condominium complex. The condominium complex has 80 units. There are condominium units located within zone 1 of the source well. Buildings not associated with the

water system are a prohibited land use within zone 1 according to the VT Water Supply Rule (March 2020) Appendix A Subpart 3.3.1.2(e). There is sewer service for the entire SPA, a map is located in **Appendix B**. Some residential parcels located outside the condominium complex may have on-site wastewater disposal systems. Failure to maintain these could result in contamination of groundwater. The condominium complex does not use heating fuel oil, but residences outside the development may have fuel tanks located outdoors or in basements. Tanks located in basements may be located near floor drains where leaks could be released outside. Spills during filling of heating fuel tanks can also occur. Improper disposal of hazardous waste and improper use of fertilizer, herbicides and pesticides could happen on any parcel. Leaking vehicles are always a concern within SPA boundaries. Prohibited land uses within the isolation zone are given a high risk ranking according to the VT Water Supply Rule (March 2020) section 16.2.4. Because the Water System cannot control activities on privately owned parcels and the condominium buildings located within zone 1, this is considered a **High Risk**.

PSOC 2 Roads & Parking Areas: VT Route 116 is a heavily traveled highway that runs through the southern portion of zone 2. Spills/leaks from vehicle accidents including trucks which may haul chemicals or residential heating fuel is a major concern. Because this is a highly traveled highway it has to be maintained for public safety. Salt and sand runoff from road maintenance can effect surface and groundwater quality.

The access road and parking areas for the Lyman Meadows condominium complex receives salt during winter months. Leaking parked vehicles are also a concern. The Lyman Meadows access road and parking areas are the closest to the source well, these areas are paved and slope away from the source well. The graveled portion of the parking area at Papa Nicks restaurant could allow vehicle fluids to enter soils and possibly groundwater.

Roads and parking areas are considered a **Medium Risk** because of the hazards associated with vehicle accidents; spills from trucks hauling chemicals; and leaking parked vehicles.

PSOC 3 Hart & Mead Inc: There are 3 active underground storage tanks (UST) and 3 small quantity above ground storage tanks (AST) at this facility. These tanks contain a variety of fuels. UST details are in **Appendix D**. This is a designated Hazardous Site (site number 931486), resulting from leaking gasoline pipes to a gas pump in 1994. The site has been recommend for a SMAC (site management activity closed) designation. The most current monitoring report can be viewed at:

<https://anrweb.vt.gov/PubDocs/DEC/Hazsites/931486.Site.Investigation.Report.September.2018.pdf>.

Vehicle repair and maintenance activities include a variety of vehicle fluids: oil, fuel, antifreeze, lubricants, cleaners, and diesel exhaust fluid. This facility is a permitted hazardous waste generator VTR000507707. This facility is regulated and located just outside the SPA, it is considered a **Medium Risk**.

PSOC 4 Recreational Path: The HART recreational trail is open to non-motorized activities. The trail crosses through zone 1, approximately 10 feet from the source well. Though this PSOC is located in zone 1, it is not listed as a prohibited land use. Because this trail is restricted to non-motorized recreation it is considered a **Low Risk**.

PSOC 5 Maple Sugar Production: The forested parcel that the source well and treatment building are located on has an active maple sugar production operation. Contamination concerns are associated with vehicle/equipment leakage. Only taps and sap pipelines are located within the SPA, the sugar house is not. This is considered a **Low Risk**.

PSOC 6 Potential Future Logging: There is significant tree coverage in the SPA which is good for maintaining water quality. Forest management on privately owned property may involve future logging activities. Surface runoff from logging operations and leaking equipment/vehicles could be a concern. There are no known active logging operations currently, this is considered a **Low Risk**.

Management of Risk

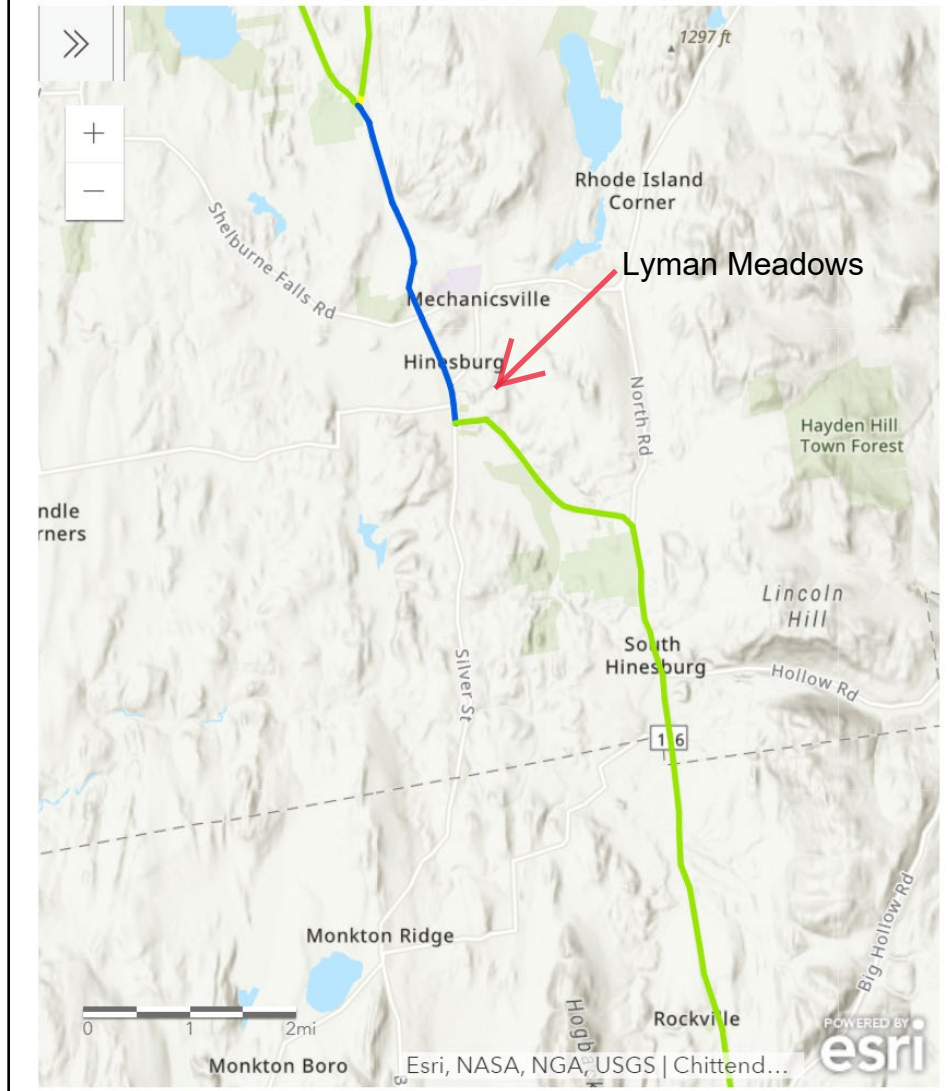
CURRENT SOURCE PROTECTION MANAGEMENT ACTIVITY

- ✓ The Water System adheres to source water monitoring requirements.
- ✓ Landowners received letters regarding the SPA in 2019.
- ✓ Water System personnel perform a monthly SPA inspection.
- ✓ Water System personnel regularly interact with the community members.
- ✓ The SPP update is accessible on the Town of Hinesburg website.
- ✓ The section of VT Route 116 within the SPA is a priority 3 corridor which means it receives less frequent salt application:

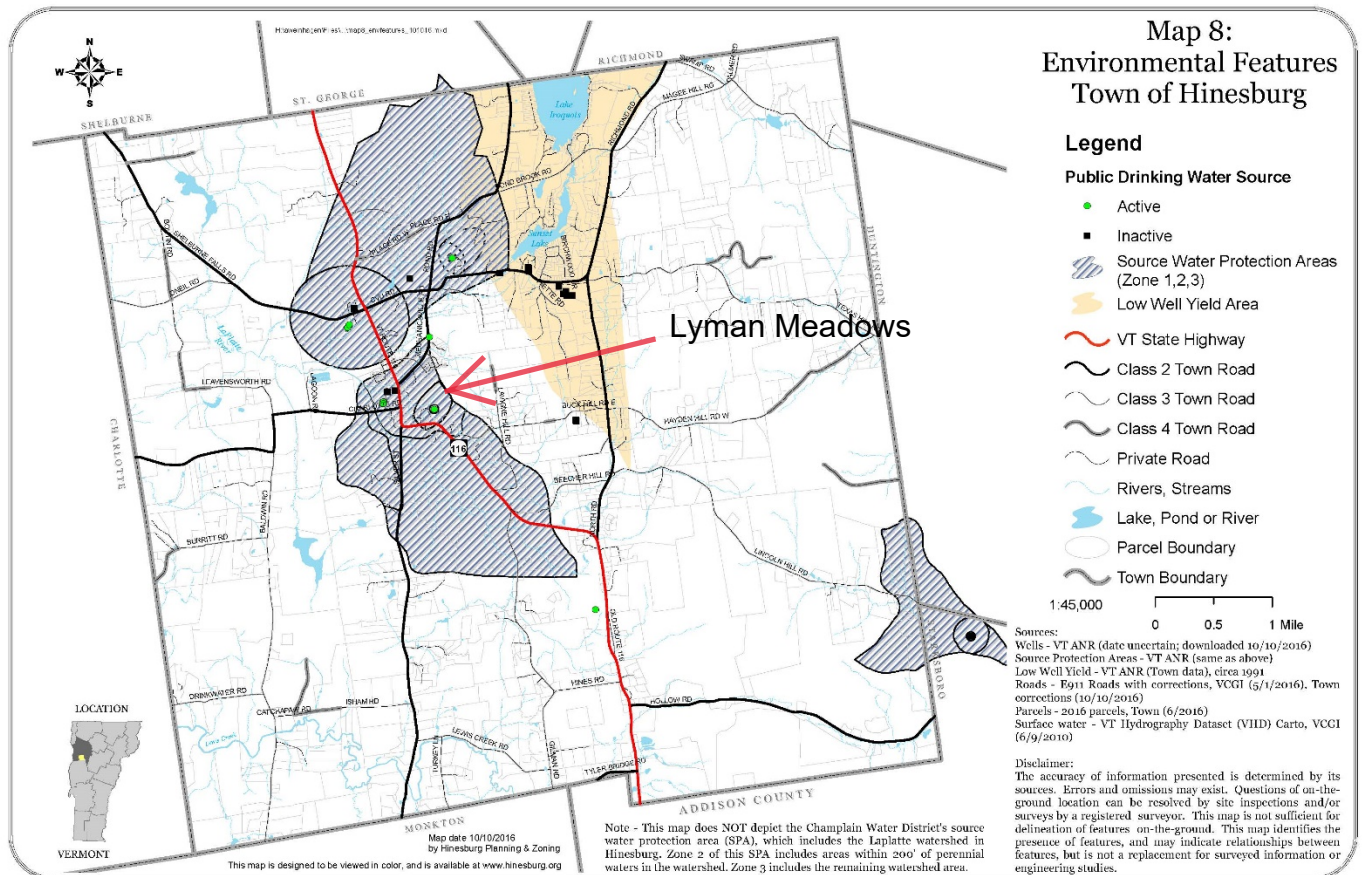
3. CORRIDOR PRIORITY 3 - MEDIUM TRAFFIC HIGHWAYS (GREEN ROADS)

These are medium volume roads. Plowing and material application will be performed during storm events, with reduced coverage generally between 8 p.m. and 4 a.m. The road surface may be snow covered at times during and after the storm. During the next regular working day after the storm has subsided, bare pavement, shoulder-to-shoulder, will be provided as soon as practical. Travelers are reminded to reduce speed and drive according to conditions.

- Corridor Priorities Map -



- ✓ The 2017 Town Plan map 8 identifies the public water sources and SPA's:



- ✓ The 2017 Town Plan prioritizes the preservation of forests:

Forest Resources

Goal 5.1 Keep large forest tracts intact and functional.

Actions:

- 5.1.1 When properties are subdivided, minimize the impact of new development on interior forest areas, core wildlife habitat, and known wildlife corridors.
- 5.1.2 Work with State and regional partners and road crews to create a plan for dealing with invasive species.
- 5.1.3 Create a mechanism to consistently contribute to the Town's Land Preservation Fund (e.g., as a percent of taxes), and protect agricultural and forest resources by promoting the use of this fund.

Actions:

- 5.3.1 Promote local agricultural products and marketing of value added products as a means of fostering the economic vitality of local farms and woodlands, and to increase the supply of locally produced food.
- 5.3.2 Create a mechanism to consistently contribute to the Town's Land Preservation Fund (e.g., as a percent of taxes), and preserve priority resource land by promoting the use of this fund.
- Top Priority** 5.3.3 **Work with the Hinesburg and Vermont Land Trusts, and other appropriate State and National non-profit organizations, to communicate with landowners and the community, to employ the Town's Land Preservation Fund, and leverage other funding sources (State, Federal,**

Hinesburg Town Plan – 2017 – Adopted 9/25/2017

Chapter 5

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Foundations, etc.) to encourage the voluntary protection of existing and potentially productive agricultural and forest land. Explore all options – e.g., fee purchase, purchase/donation of conservation easements and/or development rights with retained agricultural or timber rights, etc.

- 5.3.4 Continue to adjust and fine tune allowed uses in the rural areas to keep pace with trends in value-added agriculture and forestry.
- 5.3.5 Provide staff assistance to landowners with larger parcels to encourage comprehensive planning prior to subdivision.

- ✓ The 2017 Town Plan outlines goals/actions for groundwater protection:

Groundwater

Goal 5.7 Protect the town's groundwater resources.

Actions:

- 5.7.1 Educate residents on groundwater conservation measures and contamination threats and issues.
- 5.7.2 Explore and locate additional municipal wells to support existing needs (e.g., replacement of Lyman Meadows water system) and new development in the village growth area and larger water service area.
- 5.7.3 Consider low well yield areas in the review process for new development. When there are numerous low yield wells in the surrounding area, require that new development demonstrate there will be adequate water supply, either through proven water sources or through the design of adequate water storage systems.

ACTION ITEMS FOR IMPLEMENTATION

- Continue to adhere to the Drinking Water & Groundwater Protection (DWGP) Division's Monitoring Schedule for source water quality.
- Continue to perform a monthly SPA inspection.
- Continue to engage with the community. Communication and education is key for promoting protection.
- Consider adding signage on the HART recreational trail that runs adjacent to the source well that explains the importance of source protection. This could promote awareness within the community.
- Continue to have a copy of the SPP updates available on the Town website for the public to review and reference.
- Continue to encourage forestry stewardship within the Town. Encourage landowners to work with the county forester to develop forest management and timber improvement plans.

Chittenden County Forester
Ethan Tapper
111 West Street
Essex Junction, VT 05452-4695
Work Phone: 802-585-9099
ethan.tapper@vermont.gov

- Distribute informational letter to **new** SPA landowners identified on the landowner list in **Appendix C**. This letter is intended to inform new landowners about the SPA and the SPP. It will also educate individuals about how their actions can directly affect the quality of the drinking water in their community. A copy of the SPA map will be included with the letter. The letter will be distributed to **new landowners** within one month from the Vermont DWGP Division's approval of this Source Protection Plan Update.

SOURCE WATER PROTECTION PLAN UPDATES

Water system personnel will oversee implementation of the measures outlined in this Source Protection Plan update. System representatives may also comment on development proposals that are located within the Source Protection Area. The Water system personnel will perform a detailed survey and inspection of the SPAs every three years to confirm that all parties are following best management practices, and to identify any changes in land uses or property owners. See **Appendix E** for information on updating the plan. The Water System reserves the right to amend or update this plan before the three year submittal cycle has been completed.

Contingency Plan

A Contingency Plan provides procedures that the Water System may take in the event that their source becomes contaminated or quantity declines. The plan may also be implemented if there are problems with the system which requires repair. These situations may result in the loss of water supply for a number of hours, days, weeks, or even permanently. The Contingency Plan specifies names and phone numbers of key people that may be needed to solve a particular problem. In addition to contact information the plan also provides guidance for water user notification; short-term and long-term water supply alternatives; as well as shut down and start-up procedures.

EMERGENCY USE OF AN UNPERMITTED OR UNAUTHORIZED WATER SOURCE

In the event of an emergency situation requiring the water system to use an unpermitted or unauthorized water source, including the emergency use of unpermitted wells, springs, surface water, designated emergency sources, hauled or bulk water, or bottled water, the water system must contact the Drinking Water and Groundwater Protection Division and follow these steps:

1. The Operator or designated representative will notify the Drinking Water and Groundwater Protection Division prior to utilizing the unpermitted or unauthorized source as soon as possible but no later than 12 hours of the connection/use.
2. The Operator or designated representative will provide all public notice as recommended by the Division, which may include issuing a Boil Water, Do Not Drink, or Do Not Use Notification to all users of the Water System. Notifications shall be provided within twelve hours of receiving the Division's recommendation or as otherwise directed by the Division in writing.
3. The water system will follow all actions and provide all documentation as requested by the Division.
4. The unpermitted and/or unauthorized source shall be used for no more than 90 cumulative days unless the water system has submitted a written request to the Secretary for an extension and the Secretary has determined that there is good cause for granting an extension.

EMERGENCY CONTACT LIST

Vermont Drinking Water & Groundwater Protection Division David Love 802-585-4902 david.love@vermont.gov Jeff Girard 802-585-0314 jeff.girard@vermont.gov	802-828-1535
Erik Bailey Director of Utilities & Facilities/Superintendent	802 482-6097 ebailey@hinesburg.org
John Alexander Assistant Chief Operator	802 482-6097 jalexander@hinesburg.org
Assistant Town Manager: Joy Dubin Grossman	802 482-4207 jdubingrossman@hineburg.org
Town Manager: Todd Odit	802 482-4206 todit@hinesburg.org
Sprague GeoScience LLC	802 434-5522
Vermont State Police- Williston	911 Non-emergency: 802 878-7111

Hinesburg Police 24-Hour Dispatch: 802 985-8051	911 Non-emergency: 802 482-3397
Hinesburg Fire Department	911 Non-emergency: 802 482-2455
VT Department of Emergency Management Duty Officer	800-347-0488
National Response Center 24-HR HazMat Hot line	800-424-8802
VT Waste Management and Prevention	802-828-1138
Division 24-HR HazMat Hotline	800-641-5005

NOTIFICATION OF WATER SYSTEM USERS

During any type of emergency, either water quality or water quantity, the Water System should notify water users so that they will be informed of the emergency. In the case of a contamination of the water supply, the water system users should be notified by the quickest and most reliable means. This includes public notice to its users prior to any use of or connection to an unpermitted source. The Water System operator will issue a *Boil Water Notice* or a *Do Not Drink* notification when applicable and at the direction of the DWGP Division. User notification will occur in accordance with the Agency's public notification requirements. Notification methods include: social media, local television and radio stations, as well as appropriate printed methods.

Water System users' notification should include the following information:

- An explanation of what has happened.
- How the emergency is being handled.
- What the customer must do.
- How long the measures are anticipated to last.
- Who they can contact for additional information.

SHORT TERM SOLUTIONS

Temporary disruption in the source supply could be compensated by bulk water hauling to the storage tank. Below are some service providers that could provide short term assistance:

Bottler Water Providers		
Misty Meadows	Rutland, VT	802 775 1172
Vermont Heritage	Newport, VT	802 334 2528
Crystal Rock	Williston, VT	800-201-6218
JMJ Beverages/Vermont Pure	Sandwich, MA	508-833-7873
Monadnock Mountain Spring Water	Wilton, NH	603-654-2728
Reinhart Foods	Essex, VT	800-272-5302 802 288 5000
Vermont Natural Water (PEPSI)	Brattleboro, VT	802-254-6093

Bulk Water Haulers					
Name	Phone #	Alternate	Website	Capacity	Water Source
Fresh Water Hauler (Underhill)	802-658-2223	802 355 4321	www.freshwaterhaulers.com	4600 gallon	Stowe Water District
Pristine Mountain Springs (Stockbridge)	802-746-8186	802-236-3989 cell	https://pristine-mountain-springs.business.site/	8000 gallon (4)	Colton Springs Water Supply
Lynde Well Drilling (Guilford)	802-254-2250	800 242-5516	https://lyndewelldrilling.com	4200 gallon 5300 gallon	Brattleboro
A-1 Water Delivery (St Albans)	802-355-4892	gwright@surfglobal.net	http://a1waterdeliveryvt.com/	4250 gallon	Purchase from Municipality
H2O Express Transport, LLC (Schuylerville, NY)	518-791-2484		www.h2oexpress.com	6200 gallon	City of Troy

LONG TERM SOLUTIONS

The Water System has a treatment building that could accommodate new treatment technologies depending on the type and extent of the contamination event. This would be the first option explored. Connection to the Hinesburg Water Department VT0005070 once their new source well is online is a future long term option. Drilling an additional well may also be an option, though additional easements or land purchase may be required.

WATER SYSTEM SHUTDOWN & START-UP PROCEDURES

Shutdown:

- Turn off well pump using electrical breaker located inside treatment building.
- Turn off booster pump using electrical breaker located inside treatment building.
- Close valve from well to storage tank.
- Close valve from pneumatic tanks to distribution.

Start-up:

- Ensure all source, treatment, and distribution components are properly functioning.
- Flush appropriate system components if necessary.
- Open valve from well to storage tank.
- Open valve from pneumatic tanks to distribution.
- Turn well pump on using electrical breaker.
- Turn on booster pump using electrical breaker.
- Check pressures.

Appendix A

Water System Photos





10/18/2021 SPA zone 1



10/18/2021 Treatment Building & Storage Tank



10/18/2021 Storage Tank



10/18/2021

Lyman Meadows Condominium Complex Access Road & Parking Areas



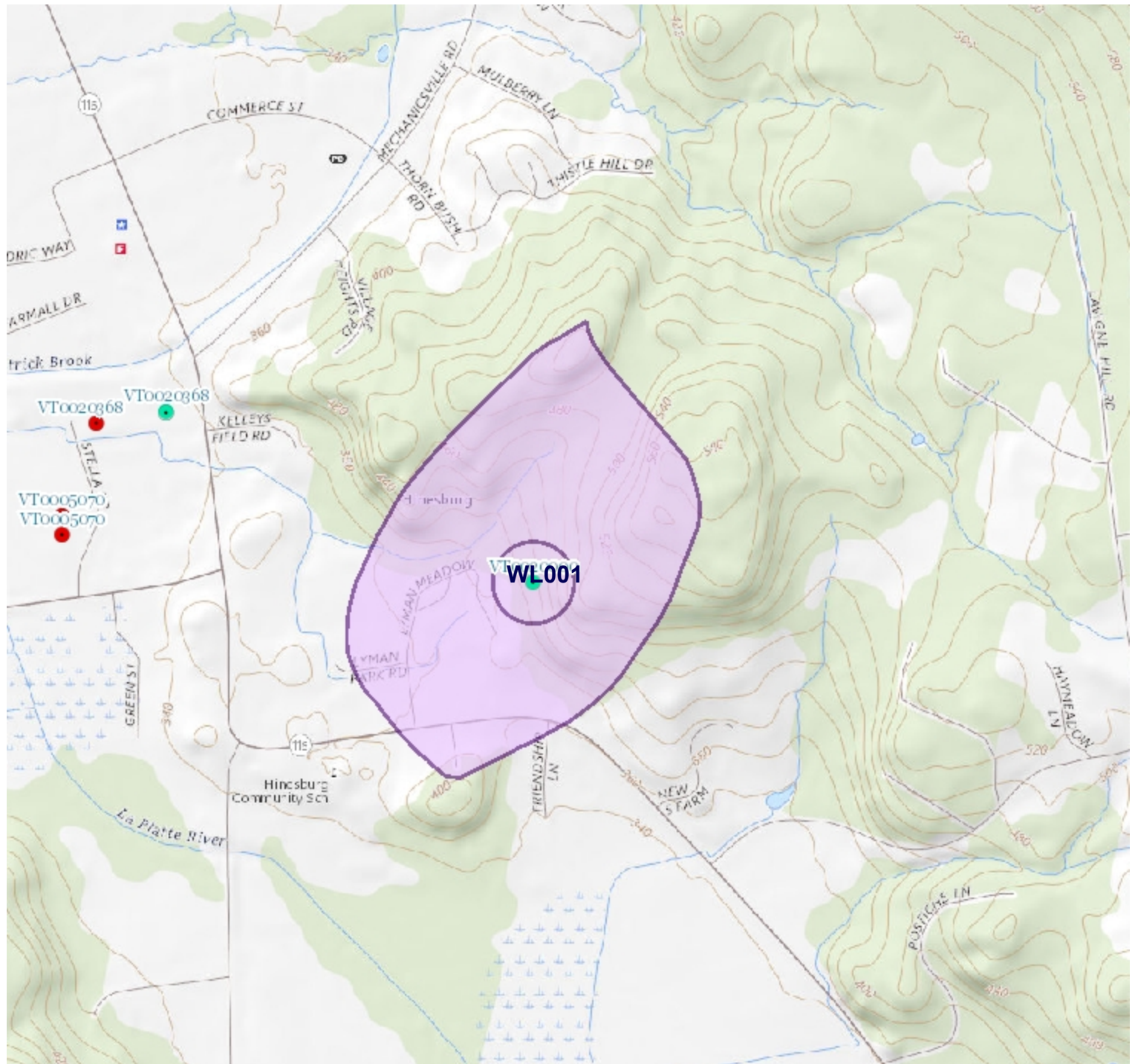
7/18/2021 Hart & Mead Facility



7/18/2021 VT Route 116 zone 2

Appendix B

Maps



LEGEND

Public Water Sources

- Active
- Proposed
- Inactive

Ground Water SPA

- Active
- Proposed
- Inactive

NOTES

WSID VT0020000
Topo

1: 8,820

January 21, 2019

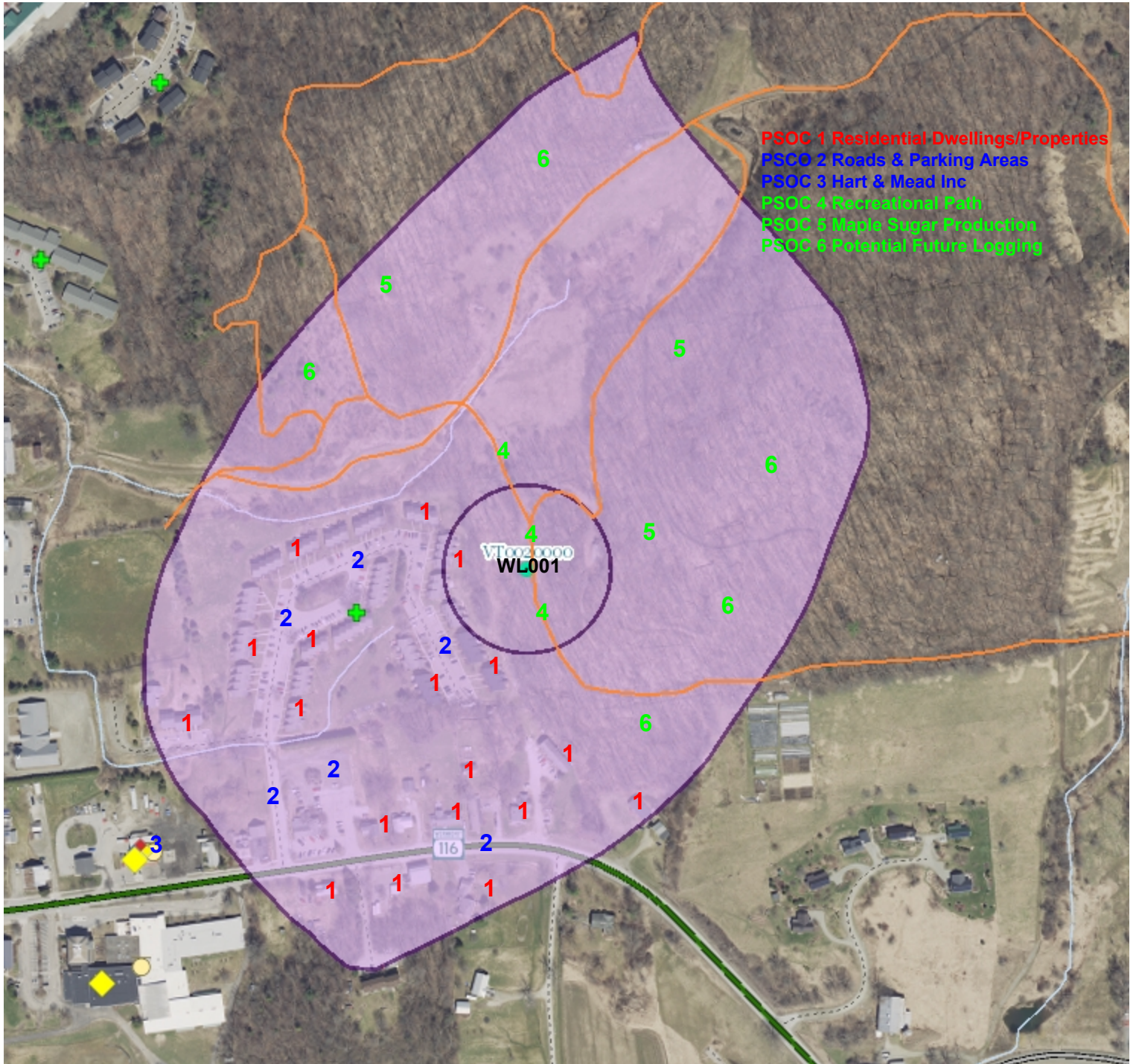


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1" = 735 Ft. 1cm = 88 Meters
THIS MAP IS NOT TO BE USED FOR NAVIGATION

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PSOC 1 Residential Dwellings/Properties
 PSOC 2 Roads & Parking Areas
 PSOC 3 Hart & Mead Inc
 PSOC 4 Recreational Path
 PSOC 5 Maple Sugar Production
 PSOC 6 Potential Future Logging



LEGEND

Stormwater Permits (Issued)

- + Operational
- + Construction
- + Industrial - NOI
- + Industrial - NOX
- + Other

- ♦ Hazardous Site
- ♦ Hazardous Waste Generators

NOTES

WSID VT0020000
 PSOC

1: 4,304

October 20, 2021

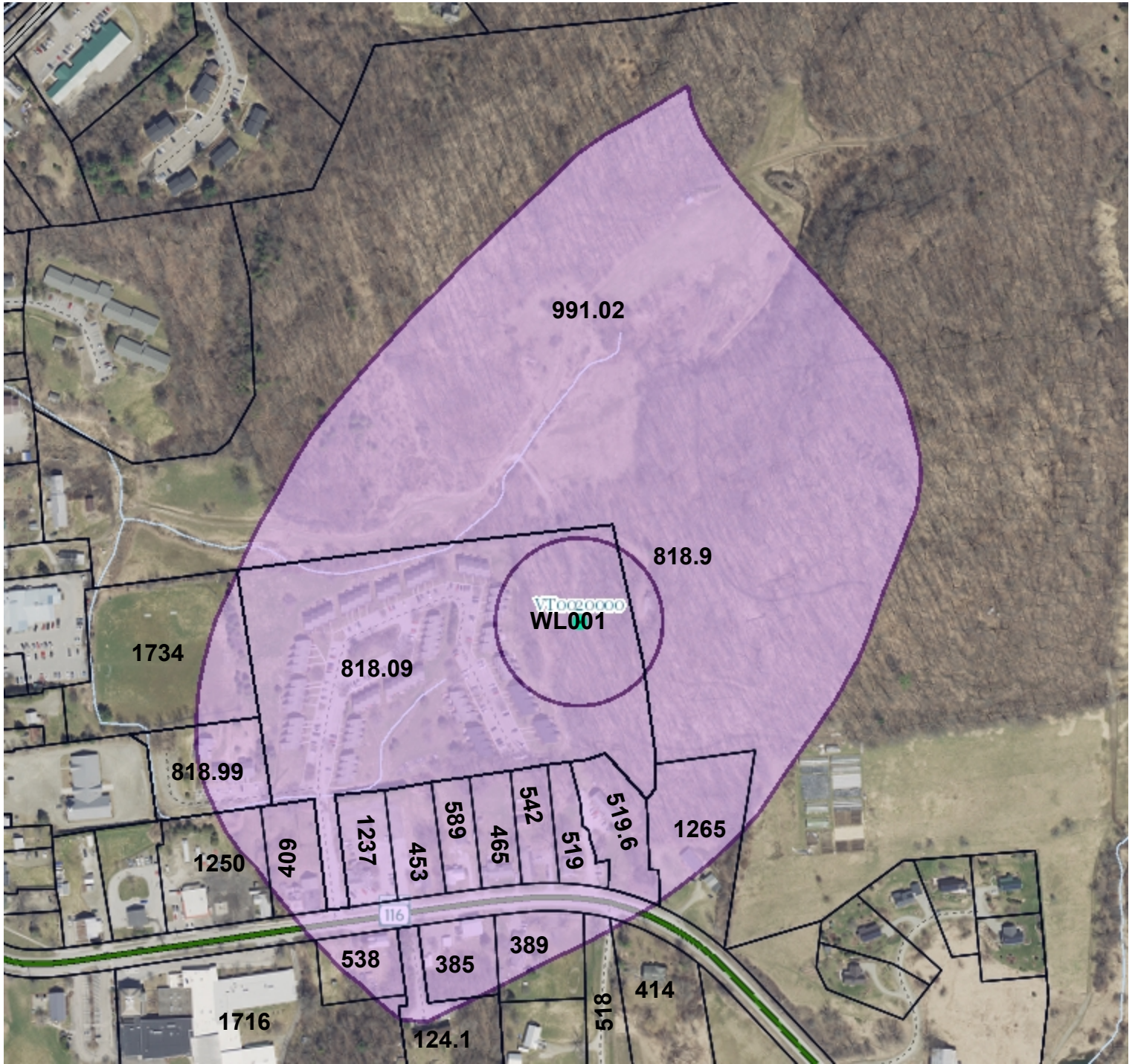


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1" = 359 Ft. 1cm = 43 Meters
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LEGEND

Public Water Sources

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Ground Water SPA

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NOTES

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October 18, 2021



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Map 10: Sewer & Water Town of Hinesburg

Legend

- Town Water Line
- Water/Wastewater Service Area
- Village Growth Area
- State Hwy
- Class 2 Rd
- Class 3 Rd
- Class 4 Rd
- Private Rd
- Rivers, Streams
- Lake or River
- Parcel Boundary
- Town Boundary

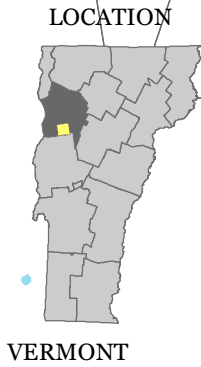
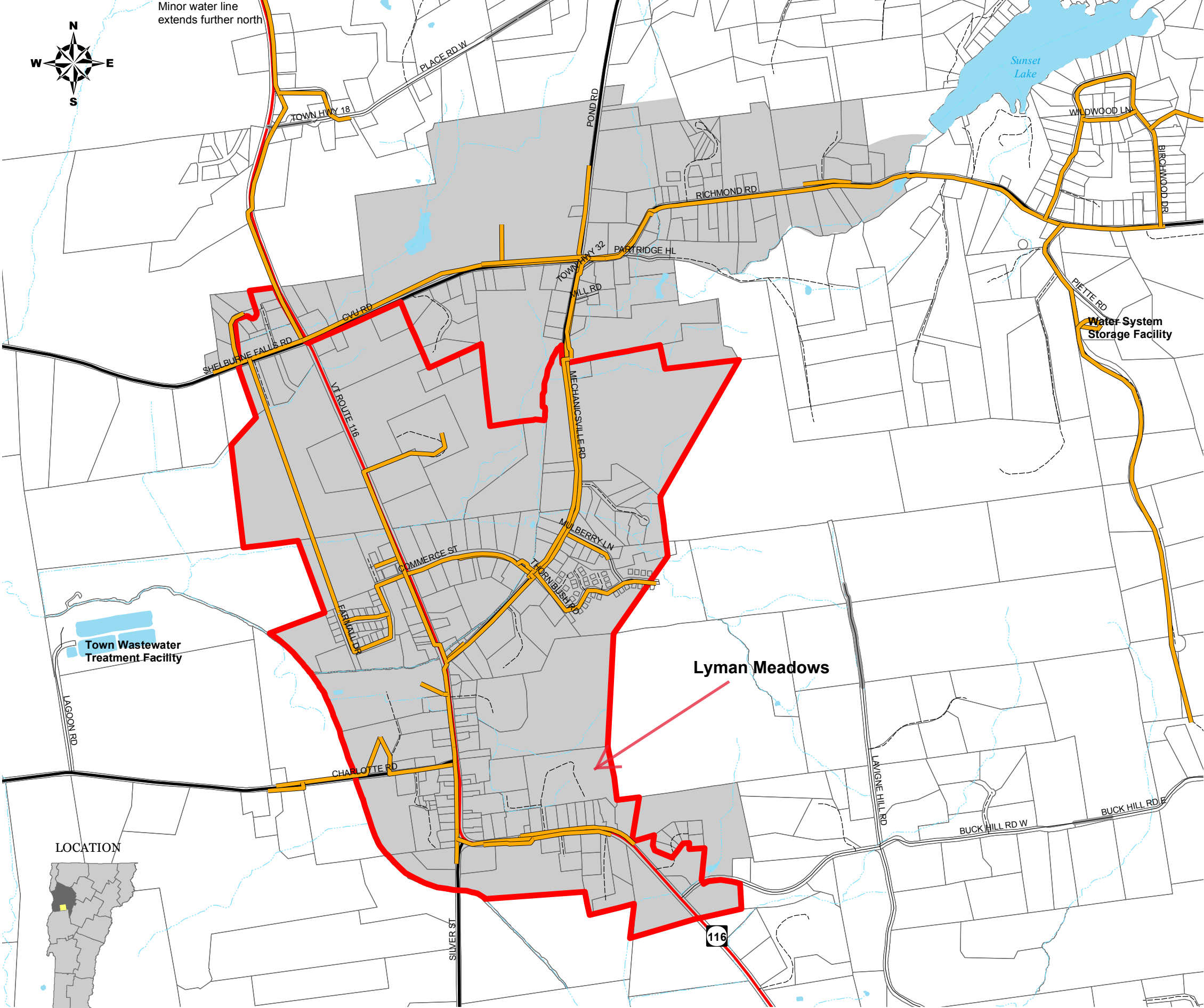
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Sources:
Town Water Lines - Town (5/26/16)
Service Area - Town (2016)
Roads - E911 Roads with corrections, VCGI (5/1/2016), Town corrections (10/10/2016)
Parcels - 2016 parcels, Town (6/2016)
Surface water - VT Hydrography Dataset (VHD) Carto, VCGI (6/9/2010)

Disclaimer:
The accuracy of information presented is determined by its sources. Errors and omissions may exist. Questions of on-the-ground location can be resolved by site inspections and/or surveys by a registered surveyor. This map is not sufficient for delineation of features on-the-ground. This map identifies the presence of features, and may indicate relationships between features, but is not a replacement for surveyed information or engineering studies.



Minor water line
extends further north



Appendix C

2021 Landowner List & Landowner Letter

2021 Landowner's Source Protection Area WSID VT0020000		
Acres	Landowner & Mailing Address	Property ID
	Lyman Meadows Water System, TOWN OF HINESBURG, 10632 ROUTE 116 HINESBURG, VT, 05461	818.9
106.5	RUSSELL FAMILY TRUST, C/O ANNE DONEGAN 742 POND BROOK RD	991.02
3.24	Lyman Park, TOWN OF HINESBURG, 10632 ROUTE 116 HINESBURG, VT, 05461	1734
0.15	PALMER CAROLYN A, PO BOX 536 HINESBURG, VT, 05461	818.99
1.3	HART & MEAD INC, PO BOX 307 HINESBURG, VT, 05461	1250
0.8	MEAD FAMILY TRUST, DOUGLAS MEAD PO BOX 623 HINESBURG, VT, 05461	409
0.74	PALMER SHARLENE THURSTON, PALMER DAVID P PO BOX 98 HINESBURG, VT, 05461	538
33.6	TOWN OF HINESBURG, 10632 ROUTE 116 HINESBURG VT, VT, 05461	1716
0.2	TOMKO JOSEPH, 47 ORCHARD HILL ROAD HINESBURG, VT, 05461	124.1
1.05	CASCO CALEB MICHAEL, PO BOX 343 HINESBURG, VT, 05461	385
1	JACOBS MICHAEL J, 11064 ROUTE 116 HINESBURG, VT, 05461	389
2.8	PALMER GEORGE & LINDA, 98 FRIENDSHIP LANE HINESBURG, VT, 05461	518
1.7	NEVIUS JOHN M & JUDITH M, 19 FRIENDSHIP LANE HINESBURG, VT, 05461	414
1.8	HART THOMAS, 11141 ROUTE 116 HINESBURG, VT, 05461	1265
0.18	SPILLANE LOWELL T JR & SHELLEY, 336 TAMARACK SHORES SHELBURNE, VT, 05482	519.6
0.52	THIBAUT FARM PROPERTIES LLC, 2512 WITHEY COURT TAMPA, FL, 33618	519
0.57	LANG JOSHUA BRENT, 41 LEARY ROAD JERICHO, VT, 05465	542
0.6	BUSIER BRYCE & JENNIFER, 11057 ROUTE 116 HINESBURG, VT, 05461	465
1	ZONTANOS VOULA P TRUSTEE, VOULA P ZONTANOS REVOCABLE TRUST 3 ROSEWOOD LANE ESSEX JCT, VT, 05452	589

*Landowners that will receive informational SPA letters are highlighted

0.8	ZONTANOS VOULA P TRUSTEE, VOULA P ZONTANOS REVOCABLE TRUST 3 ROSEWOOD LANE ESSEX JUNCTION, VT, 05452	453
0.62	ZONTANOS VOULA P TRUSTEE, VOULA P ZONTANOS REVOCABLE TRUST 3 ROSEWOOD LANE ESSEX JUNCTION, VT, 05452	1237
12	Lyman Meadows	818.09

Lyman Meadows	
Property ID	Landowner & Mailing Address
818.19	HAESLER PAMELA, 160 LYMAN MEADOW ROAD E1 HINESBURG, VT, 05461
818.59	ALBRIGHT JOANNA J, 189 LYMAN MEADOW ROAD N4 HINESBURG, VT, 05461
818.38	PRICE LINDSAY D, 133 LYMAN MEADOW ROAD I2 HINESBURG, VT, 05461
818.37	TRINGALE NICHOLAS, 133 LYMAN MEADOW ROAD I1 HINESBURG, VT, 05461
818.35	LAPIER CHREISTINE LOUISE, 121 LYMAN MEADOWS UNIT H3 HINESBURG, VT, 05461
818.61	BALL EARLE JR & LISA, 6 BROOKVIEW CT CLIFTON PARK, NY, 12065-6911
818.5	GAREN TRACY 175 LYMAN MEADOW L3 HINESBURG, VT, 05461
818.23	CAMPBELL DARYL J, JOHNSON JANEL L 2814 B NW 56TH STREET SEATTLE, WA, 98107
818.6	CARLSON JANET, P.O. BOX 861 WILLISTON, VT, 05495
818.21	BEAULAC JUDITH L, 160 LYMAN MEADOW ROAD E3 HINESBURG, VT, 05461
818.32	ABBOTT REBECCA METZ, 719 HILLS POINT ROAD CHARLOTTE, VT, 05455
818.16	BEVINS LEE E, 144 LYMAN MEADOW ROAD D4 HINESBURG, VT, 05461
818.07	PARROTT PHYLLIS LIVING TRUST, PARROTT PHYLLIS TRUSTEE 78 LYMAN MEADOW ROAD B3 HINESBURG, VT, 05461
818.52	RIGGS STEPHANIE, 185 LYMAN MEADOW ROAD M1 HINESBURG, VT, 05461
818.57	PLANTE MARGARGET, 189 LYMAN MEADOW ROAD N2 HINESBURG, VT, 05461

818.74	MACLAY LAURA DEAN, 226 LYMAN MEADOW ROAD S2 HINESBURG, VT, 05461
818.2	CASEY EILEEN M, 160 LYMAN MEADOW ROAD E2 HINESBURG, VT, 05461
818.15	LAPERLE DONNA, 144 LYMAN MEADOW ROAD D3 HINESBURG, VT, 05461
818.3	CLARK LUCY M, 101 LYMAN MEADOWS UNIT G2 HINESBURG, VT, 05461
818.68	GAREY BRENDA S, 245 LYMAN MEADOW ROAD Q3 HINESBURG, VT, 05461
818.06	KUHAR JENNIFER, 78 LYMAN MEADOW ROAD B2 HINESBURG, VT, 05461
818.28	DOHERTY RICHARD M, 85 LYMAN MEADOW ROAD F4 HINESBURG, VT, 05461
818.44	DOOLEY ELLEN, 151 LYMAN MEADOW ROAD J4 HINESBURG, VT, 05461
818.08	GALLOWAY MATTHEW, 78 LYMAN MEADOWS ROAD B4 HINESBURG, VT, 05461
818.62	RYAN DOUGLAS & CATHERINE, 203 LYMAN MEADOW ROAD O3 HINESBURG, VT, 05461
818.04	MIHAVICS ALEXANDER, MIHAVICS BETHANY 62 LYMAN MEADOW ROAD A4 HINESBURG, VT, 05461
818.79	FITZSIMMONS AMY MELISSA, 242 LYMAN MEADOW ROAD T3 HINESBURG, VT, 05461
818.49	MASHIA MAGHAN CHARLAND, 175 LYMAN MEADOW ROAD L2 HINESBURG, VT, 05461
818.66	THOMAS KIMBERLY A, 245 LYMAN MEADOW ROAD Q1 HINESBURG, VT, 05461
818.78	ZDUNCZYK ANDRE J, ARMS LAUREN 1259 SHELLHOUSE MOUNTAIN ROAD FERRISBURGH, VT, 05456
818.45	DENIS BROOKE, 163 LYMAN MEADOWS K1 HINESBURG, VT, 05461

818.17	DECKER JENNIFER, 144 LYMAN MEADOW ROAD UNIT D5 HINESBURG, VT, 05461
818.48	HANLON SHARON L, 175 LYMAN MEADOWS ROAD L1 HINESBURG, VT, 05461
818.01	BARBIERI MARISSA, 62 LYMAN MEADOW ROAD A1 HINESBURG, VT, 05461
818.51	YANDOW TIMOTHY S, ROWE JANE E 32 MARTEL LANE WILLISTON, VT, 05495-9618
818.1	CHERNEK WAYNE F, CHERNEK SUSAN J 17 LILLY ST NEWBURGH, NY, 12550
818.25	HULSHOF JEREMY B, HULSHOF ARIANNA K 85 LYMAN MEADOW ROAD F1 HINESBURG, VT, 05461
818.72	COUGHLIN KATHRYN, 249 LYMAN MEADOW ROAD R3 HINESBURG, VT, 05461
818.03	ZIMICKI CAROL, 62 LYMAN MEADOW ROAD A3 HINESBURG, VT, 05461
818.41	HICKERSON JACKLYN J, 151 LYMAN MEADOW ROAD J1 HINESBURG, VT, 05461
818.33	DENSMORE DOUGLAS & LYNDA, 121 LYMAN MEADOWS UNIT H-1 HINESBURG, VT, 05461
818.53	KONKEL CONSTANCE M, 185 LYMAN MEADOW ROAD M2 HINESBURG, VT, 05461
818.67	DONER NICOLE S, 245 LYMAN MEADOW ROAD Q2 HINESBURG, VT, 05461
818.75	WITHUM MICHAEL K, 226 LYMAN MEADOW ROAD S3 HINESBURG, VT, 05461
818.42	LYMAN JAMMIE M, P.O. BOX 414 HINESBURG, VT, 05461
818.73	NALETTE DONNA, 226 LYMAN MEADOW ROAD S1 HINESBURG, VT, 05461
818.7	HOWE CAROLYN TRUSTEE, CAROLYN L HOWE REVOCABLE TRUAT HINESBURG, VT, 05461

818.13	MARRA AMY M, 144 LYMAN MEADOW ROAD D1 HINESBURG, VT, 05461
818.71	ROOT SUE, 249 LYMAN MEADOW R2 HINESBURG, VT, 05461
818.47	HERNANDEZ MARIO DOMINGUEX, KELLOGG ANNE 163 LYMAN MEADOW ROAD K3 HINESBURG, VT, 05461
818.64	SMITH LINDSEY ANN, 221 LYMAN MEADOW ROAD P2 HINESBURG, VT, 05461
818.14	BIRCHMORE SAMUEL, 144 LYMAN MEADOW ROAD UNIT D2 HINESBURG, VT, 05461
818.18	MCCABE ELIZABETH R, 144 LYMAN MEADOW ROAD UNIT D-6 HINESBURG, VT, 05461
818.65	MOTT BRENT & PHEBE, 221 LYMAN MEADOW ROAD P3 HINESBURG, VT, 05461
818.29	SULLIVAN RONALD, SULLIVAN LORENE L 101 LYMAN MEADOWS G1 HINESBURG, VT, 05461
818.55	ASHFORD REBECCA G, 185 LYMAN MEADOW ROAD M4 HINESBURG, VT, 05461
818.56	PAGE MICHAEL D & BETH A, 189 LYMAN MEADOW ROAD HINESBURG, VT, 05461
818.63	PICCINI ANGELA, 221 LYMAN MEADOW ROAD P1 HINESBURG, VT, 05461
818.11	MELI ISABEL, DIAZ DONOSO CARMEN 3356 MARTHA CUSTIS DR ALEXANDRIA, VA, 22302-2115
818.4	JARVIS JAMES L, JARVIS MARGUERITE L 133 LYMAN MEADOW ROAD I4 HINESBURG, VT, 05461
818.34	MILLS DANIEL P, CAULFIELD HEATHER A 121 LYMAN MEDOW ROAD H2 HINESBURG, VT, 05461
818.36	KARMOSKY WALTER & ANN TRUSTEES, REVOCABLE TRUST OF ANN P KARMOSKY 121 LYMAN MEADOW ROAD H4 HINESBURG, VT, 05461

818.77	GAGNE JEAN-PIERRE, 242 LYMAN MEADOW ROAD T1 HINESBURG, VT, 05461
818.22	HASKINS SHANE M, 160 LYMAN MEADOW ROAD E4 HINESBURG, VT, 05461
818.54	SHERWOOD KEITH R, 185 LYMAN MEADOW ROAD M3 HINESBURG, VT, 05461
818.26	BOLDUC ANDREW M, 85 LYMAN MEADOW ROAD HINESBURG, VT, 05461
818.12	WESLEY WILLIAM L, 114 LYMAN MEADOW ROAD C4 HINESBURG, VT, 05461
818.24	WALKER DEBRA, 160 LYMAN MEADOW ROAD E6 HINESBURG, VT, 05461
818.31	STEWART DOUGLAS A & JENNEE E, 300 FARMALL DR HINESBURG, VT, 05461
818.58	LIUZZI NATACHA MARIA, 189 LYMAN MEADOW ROAD N3 HINESBURG, VT, 05461
818.76	TRZEPACZ JAMES, 226 LYMAN MEADOW ROAD S4 HINESBURG, VT, 05461
818.27	WALSH FRANCES E, 85 LYMAN MEADOW ROAD F3 HINESBURG, VT, 05461
818.8	BAUCH JANICE A REV TRUST, 242 LYMAN MEADOW ROAD T4 HINESBURG, VT, 05461
818.43	MARINO PAUL S, 151 LYMAN MEADOW ROAD J3 HINESBURG, VT, 05461
818.05	LAVIGNE LORA LESHEA, 78 LYMAN MEADOW ROAD B1 HINESBURG, VT, 05461
818.39	BROD FAMILY TRUST, 133 LYMAN MEADOW ROAD I3 HINESBURG, VT, 05461
818.69	FREGEAU EMILY E, 245 LYMAN MEADOW ROAD Q4 HINESBURG, VT, 05461
818.46	WRIGHT DENIS T, 163 LYMAN MEADOW ROAD K2 HINESBURG, VT, 05461

818.02	PROVOST LYNSEY, 62 LYMAN MEADOW ROAD A2 HINESBURG, VT, 05461
818.09	BESSETTE CURTIS P, BESSETTE ROBYN 114 LYMAN MEADOW ROAD C1 HINESBURG, VT, 05461
	HAM-ELLIS EMILY 85 LYMAN MEADOWS F2 HINESBURG, VT 05461
	TURNER, YECHIEL 249 LYMAN MEADOWS R1 HINESBURG VT, 05461



Town of Hinesburg Water Department

10632 VT Route 116

Hinesburg, Vermont 05461

Dear Neighbor,

In 1986 Lyman Meadows drilled a bedrock supply well which continues to be the primary source of the Lyman Meadows community municipal water system. This letter is to advise you of the **Source Protection Plan (SPP)** for the Lyman Meadows water system. As required by the State of Vermont we have developed an SPP, with the purpose of protecting the quality and quantity of this source. As part of this SPP, we have delineated the surface and subsurface area from which contaminants are considered to be reasonably likely to reach our wells. This land area is referred to as the **Source Protection Area (SPA)**. A map showing the location of the SPA is available at <http://www.hinesburg.org>. We are sending this letter to all new property owners located within the SPA.

Your property is located within our SPA; therefore, the activities that you conduct on your property could potentially affect the quality of our water. For example, anything that is disposed of on the ground could potentially enter the groundwater and thus impact our water supply. Be mindful of this when disposing household wastes, changing oil in your car or tractor, and maintaining equipment. Please do not put hazardous materials down sinks, toilets, or drains. Avoid or minimize application of pesticides and herbicides to lawn and gardens.

If you have an on-site septic system, please see the fact sheet online at <http://www.hinesburg.org> for tips on how to best care for your system.

If you have a fuel oil storage tank (either above ground or underground) on your property take a look at the flyer "Think Oil and Water" online at <http://www.hinesburg.org>. Avoid spills and over filling of the tank, and inspect the area around the tank at least once a week for obvious signs of leakage. If it is an older underground storage tank, consider replacing it with an above ground tank, or a doubled walled tank. If you have an above ground tank, make sure it is secure and on poured concrete surface. It should also be under a roof and protected from the weather. If you notice a release, please notify the Town of Hinesburg at (802)482-2281.

A complete copy of the **SPP** is available at <http://www.hinesburg.org>

If you have questions or want further information, please contact me at (802) 482-6097.

Sincerely,

The Hinesburg Water Department

Appendix D

UST Details

Site Details

Facility Name	Hart & Mead Texaco
Facility ID	1487
DEC Pin#	EJ97-0196
Address	10919 Route 116
Town	Hinesburg
Permit Issued	06-30-2021
Permit Starts	07-01-2021
Permit Expires	07-01-2026
Owner Name	Hart & Mead Inc
Operator Name	Hart & Mead Inc
Last Inspected	07-17-2019

Facility Tanks

TankID	Tank Status	CAT	Capacity	Year Installed	Year Removed	Pulled Condition	Compartment ID	Compartment Substance	Compartment Capacity
1988-4	ACTIVE	1	10000	1988			A	Kerosene	10000
2016-1	ACTIVE	1	12000	2016			A	Gasoline	8000
2016-1	ACTIVE	1	12000	2016			B	Gasoline	4000

1987-1	PULLED	1	6000	1987	2016		A	Gasoline	6000
1987-2	PULLED	1	4000	1987	2016		A	Gasoline	4000
1987-3	PULLED	1	4000	1987	2016		A	Gasoline	4000
1984-4	PULLED		1000	1984	1993	POOR	A	Diesel	1000
1973-5	PULLED		25000	1973	1997	EXCELLENT	A	Fuel Oil #2 or #4	25000
1971-1	PULLED		6000	1971	1987	UNKNOWN	A	Gasoline	6000
1966-2	PULLED		3000	1966	1987	UNKNOWN	A	Gasoline	3000
1971-3	PULLED		4000	1971	1987	UNKNOWN	A	Gasoline	4000

*Brown shaded tank rows indicate a 'pulled' status, and are not present at the facility.

Relationships

Type	ID 1	ID 2	Staff
Hazsite	931486		Matthew Becker
UST	1487		N/A

Appendix E

Source Protection Plan Update Instructions



PREPARING A SOURCE PROTECTION PLAN UPDATE

Guidance for Public Community and Non-Transient-Non Community Water Systems

With the adoption of the new Water Supply Rule on December 29, 2000, all public community and non-transient, non-community water systems must update their approved Source Protection Plans *every three years*. Prior to this Rule, the updates were required annually. Source Protection Plan (SPP) Updates are also required for all water systems applying for Phase II/V monitoring waivers and waiver renewals. This information sheet gives guidance on how to prepare a Source Protection Plan Update.

Summary of Steps for Updating a Source Protection Plan

- ✓ Inspect the Source Protection Area and Update PSOC Maps and Inventory
- ✓ Weigh Risks from New PSOCs and Identify Risk Management Measures
- ✓ Update Landowner List
- ✓ Communicate with Relevant Landowners and Town/County/State Officials
- ✓ Make sure your Contingency Plan Information is Current
- ✓ Summarize Progress in Reducing Threats to your Source



Inspect the Source Protection Area and Update Your PSOC Maps and Inventory

Visually inspect the Source Protection Area and review the potential sources of contamination (PSOCs) identified in your original Source Protection Plan or most recent SPP Update. Note any key changes. Is the local farmer still using the same pesticides and fertilizers on crop land? Check for any evidence of new land uses or activities that may threaten the water source. Has a new residence been constructed? If so, does it have a septic system? What fuel is used for heating the home? Discuss any important changes you have discovered. Modify your PSOC Inventory and PSOC map to reflect your observations.



Weigh the Risks from New PSOCs and Identify Risk Management Measures

Determine the risk level posed by any new potential source of contamination you have found. Then outline the management measure you intend to use to reduce the risk. In many cases the management measure can be as simple as communicating with the landowner and asking for assistance in protecting the water supply. If you think of a new way to manage the risk from a previously identified PSOC, take the time to outline your ideas and plans in the update.



Update Your Landowner List

Visit your town clerk's office to determine whether any land or land rights within your Source Protection Area have changed hands. Add any new landowners to your list and remove anyone that no longer owns property in your SPA.



Communicate with Relevant Landowners and Town/County/State Officials

Send out letters to regulatory agencies to remind them that you are concerned about land use activities in your SPA. Also, send letters to newly identified landowners who may not know about your water source. Although not required, it is a good idea to contact the other landowners within your SPA with a positive message about actions they can take to help protect your supply, and to thank them for any efforts they have made since your last letter.

Make Sure Your Contingency Plan Information is Current

Check the emergency contact information in your contingency plan and make sure all of the information is up-to-date. Make sure any new water system personnel have the information they need to make good decisions in an emergency situation.



Summarize Progress in Reducing Threats to Your Source

Look back over the last three years and think about what actions you have taken to make your source of water less vulnerable to contamination. Have you worked with a local farmer to reduce pesticide and fertilizer use in your SPA? Have you purchased development rights for land in your SPA? Have you posted signs at key locations to notify people when they enter your SPA? Have you responded swiftly and appropriately to an emergency situation? Use the SPP Update as an opportunity to boast about the progress you have made.

Source Protection Plan Update Checklist

Your SPP Update may be as simple as a detailed short letter or it may be a comprehensive revision or rewrite of your original SPP. The format you choose will depend on what you discovered in the steps outlined above. However, regardless of the format, please be sure you have included the relevant items from the following checklist when you submit the SPP Update:

- _____ Text describing your PSOC inspection and any changes and additions you are making to the Source Protection Plan. If there are no changes, please state clearly that you have performed an SPA inspection and found no changes in land use, land ownership, risk levels, etc. Provide date of inspection.
- _____ Text describing the progress you have made in implementing risk management measures since your original SPP (or last update) was prepared.
- _____ Updated PSOC Inventory (if applicable)
- _____ Updated PSOC Map (if applicable)
- _____ Updated Management Plan (if applicable)
- _____ Updated Landowner List (if applicable)
- _____ Updated Contingency Plan information (if applicable)
- _____ Copy of letter sent to ongoing SPA landowners (optional)
- _____ Copy of letter sent to new SPA landowners (if applicable)
- _____ Copy of letter to town/county/state officials

Please send your Source Protection Plan Update to:

Water Tguyt egu Section

VT-DEC, Drinking Water & Groundwater Protection Division
1 National Life Drive, Davis 4, Montpelier, VT 05620-3521