VgD: Vershire-Glover-Rock outcrop complex, 8 to 25 percent slopes

These soils formed in loamy glacial till on bedrock controlled uplands. VERSHIRE SOILS are moderately deep to bedrock and well drained. Permeability is moderate. GLOVER SOILS are shallow to bedrock and somewhat excessively drained. Permeability is moderate. ROCK OUTCROP consists of exposures of bare bedrock.

This map unit is poorly suited to cultivated crops, hay and pasture because of stones on the surface and the bedrock outcrops.

Important farmland classification: NPSL	Land capability: 6 s	Vermont Agricultural Value Group: 10
---	----------------------	--------------------------------------

Vermont Residential Wastewater Disposal - Group and Subgroup:

IId.- This unit is moderately suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The depth to bedrock and slopes greater than 20 percent in some areas are the primary concerns. A significant percentage of this map unit has sufficient soil depth over bedrock to accept a range of designs. On-site investigations can help avoid areas with limited depth to bedrock. Additional fill material may be needed in some areas in order to meet the separation distance requirement between the bottom of the leachfield and bedrock. There may be less-sloping areas within the unit that are suitable for siting a septic system, or, if feasible, cut and fill site modifications may produce an acceptable area within the unit. An erosion prevention and sediment control plan is required by the State for construction on sites over 20 percent slope.

		PHYSICAL and CHEMICAL PROPERTIES							EROSION FACTORS		
Soil name	Depth	Typical	Clay	Soil reaction	Permeability (In/Hr)	Organic matter	ERUS		CTORS		
Join Hame	(ln)	texture	(Pct)	(pH)	(Pct)	Kw	Kf	т			
Vershire	0-6	S L	4-18	4.5 - 6.5	0.6-20	1.0-4.0	.24	.28	2		
	6-30	GR-L	4-18	4.5 - 6.5	0.6-2	0.5-3.0	.24	.28			
	30-34	UWB			0.01-20						
Glover	0-8	L	4-18	4.5 - 6.5	0.6-2	2.0-8.0	.24	.32	1		
	8-17	L	4-18	4.5 - 6.5	0.6-2	0.5-3.0	.20	.24			
	17-19	L	4-18	4.5 - 6.5	0.6-2	0.5-3.0	.20	.24			
	19-23	UWB			0.01-20						

WATER FEATURES

SOIL FEATURES

	Hydrologic Depth to seasonal		Floo	Flooding		Ponding		
Soil name	group	high water table (Feet)	Frequency	Duration	Frequency	Duration	Hydric soil?	Depth to bedrock (range in inches)
Vershire	С		None	_	None		No	20-40
Glover	D		None		None		No	10-20

	LAND USE LIMITA	TIONS		AGRICULTURA	L YIELD DATA
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Vershire	Dwellings with basements:	Very limited	Depth to hard bedrock	Pasture	2.8 AUM
Glover	Dwellings with basements:	Very limited	Depth to hard bedrock		
Vershire	Pond reservoir areas:	Very limited	Slope		
Glover	Pond reservoir areas:	Very limited	Slope		

	Management		WOODLAND MANAGE	MENT
Soil name	Management concern	Rating	Reason	Vermont natural communities
Vershire	Harvest equip operability:	Well suited		Northern Hardwood Forest,
Glover	Harvest equip operability:	Well suited		Mesic Red Oak-Northern Hardwood Forest, Rich Northern Hardwood Forest.
/ershire	Road suitability:	Poorly suited	Slope	Hemlock Forest,
Glover	Road suitability:	Poorly suited	Slope	Temperate Acidic Outcrop, Temperate Calcareous Outcrop
/ershire	Erosion hazard (off-road):	Moderate	Slope/erodibility	
Glover	Erosion hazard (off-road):	Moderate	Slope/erodibility	



OVERALL SCORE: 23.2/40 (# 16)

Criteria, Scores, and Notes

- 1. 3.7/5 Site is tight due to little buildable area; no room to expand. Plenty of room for a solar array
- 2. 2.2/5 Front of lot is wetland, quickly slopes up
- 3. 1.2/5 No utilities available, not even 3-phase electric Have to connect at Gallison Hill Road
- 4. 3.2/5 Conditional use; NEPA and wetland permit required
- 5. 2.8/5 Rural site, although commercial is nearby
- 6. 3.5/5 No hindrances to construction. Some demolition
- 7. 3.8/5 Close to Montpelier
- 8. 2.8/5 No wider benefits

FISH & WILDLIFE PROPERTY, BERLIN

Size: 13 acres

Acquisition cost: (none) Rough cost to develop: \$1,720,000 TOTAL \$1,720,000 .





Endangered Species Map - Berlin - F&W

vermont.gov

Consta

GREEN













WGS_1984_Web_Mercator_Auxiliary_Sphere © Vermont Agency of Natural Resources 834.00 1,667.0 Feet

1" = 833 Ft. 1cm = 100 Meters THIS MAP IS NOT TO BE USED FOR NAVIGATION DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

Resources Atlas



Waste Management Locations - Berlin - F&W Vermont Agency of Natural Resources

vermont.gov



		1.100
1:	10,000	197
July	18, 2014	

0

NOTES

Map created using ANR's Natural **Resources Atlas**

WGS_1984_Wr 1ercator_Auxiliary_Sphere © Vermont Age of Natural Resources

1,667.0

1" = 833 Ft. 100 1cm = THIS MAP IS NOT TO BE USED FOR NAVIGATION

1,667.0 Feet

Meters

834.00

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not d to, the warranties of merchantability, or fitness for a particular use, nor any such warranties to be implied with respect to the data on this map.



Buckland

92C: Buckland silt loam, 8 to 15 percent slopes

BUCKLAND SOILS formed in loamy, compact glacial till on uplands. They are very deep to bedrock, shallow to moderately deep to dense basal till and moderately well drained. These soils have a perched water table at depths of 1.0 to 2.0 feet below the surface from Mid-Winter through late Spring. Permeability is moderate in the solum and slow in the substratum.

This map unit is suited to cultivated crops and well suited to hay and pasture. Slope causes a hazard of erosion. The seasonal high water table is a concern during periods of high rainfall. Crop rotation, cover cropping, contour farming and conservation tillage are practices that can be used to help control erosion. The installation of diversion ditches to divert surface runoff can also be used to help control erosion. Tillage in the spring may be delayed because of the seasonal high water table. Subsurface drainage can be used to lower the seasonal high water table. Proper stocking rates and rotational grazing during wet periods will help to maintain a good stand of pasture plants and help to control erosion. Planting water tolerant plants helps to overcome the wetness caused by the seasonal high water table.

Important farmland classification:	Statewide	Land capability: 3 e	Vermont Agricultural Value Group: 7

Vermont Residential Wastewater Disposal - Group and Subgroup:

Pond reservoir areas:

IIId.- This unit is marginally suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natura Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The depth to the seasonal high water table is the major limitation. A detailed, site-specific analysis is generally required. On-site groundwater level monitoring and determination of induced groundwater mounding is often necessary to establish the suitability of this unit. Curtain drains may help lower the water table to an acceptable level.

		PHYSICAL a	nd CHEMICA	AL PROPERT	IES		EDOS		CTORS
Soil name	Depth	Typical	Clay	Soil reaction		Organic	ERUS	DION FA	CTORS
Soli name	(In)	texture	(Pct)	(pH)		(Pct)	Kw	Kf	Т
Buckland	0-5	SIL	5-10	5.6 - 7.3	0.6-2	3.0-8.0	.32	.32	3
	5-20	CN-SIL	5-10	5.6 - 7.3	0.6-2	0.5-2.0	.37	.43	
	20-65	CN-SIL	7-14	5.6 - 7.3	0.06-0.2	0.0-1.0	.28	.32	

		WATE	R FEATURES					SOIL	FEATURES
	Hydrologic	Depth to seasonal	th to seasonal Flooding		Ponding			Hydric	
Soil name	group	high water table (Feet)	Frequency	Duration	Frequ	lency	Duration	soil?	Depth to bedrock (range in inches)
Buckland	С	1.0-2.0	None		None	e		No	
	LAND USE L	IMITATIONS				A	GRICULTUR	AL YIELD	DATA
Soil name	Land use	Rati	ing Rea	ason **		Cro	op name	Yie	eld / acre
Buckland	Dwellings with basem	nents: Very limited	Depth	to saturated	zone		Alfalfa hay		3.5 Tons
Buckland	Pond reservoir areas:	Very limited	Slope		-		Grass-legum	e hay	3 Tons

Slope

	Management	<u>v</u>	OODLAND MANA	GEMENT
Soil name	concern	Rating	Reason	Vermont natural communities
Buckland	Harvest equip operability:	Moderately suited	Wetness	Northern Hardwood Forest,
Buckland	Road suitability:	Moderately suited	Wetness	Rich Northern Hardwood Forest, Sugar Maple-White Ash Northern Hardwood
Buckland	Erosion hazard (off-road):	Slight		Forest Variant

Very limited

20 Tons

3.5 Tons

Corn silage Grass hay

 \bigcirc

C C 0

000000000

93D: Buckland silt loam, 15 to 35 percent slopes, very stony

UCKLAND SOILS formed in loamy, compact glacial till on uplands. They are very deep to bedrock, shallow to moderately deep to Jense basal till and moderately well drained. These soils have a perched water table at depths of 1.0 to 2.0 feet below the surface from Mid-Winter through late Spring. Permeability is moderate in the solum and slow in the substratum.

This map unit is poorly suited to cultivated crops, hay and pasture because of stones on the surface and steep slopes.

Important farmland classification: NPSL	Land capability: 7 s	Vermont Agricultural Value Group: 10

Vermont Residential Wastewater Disposal - Group and Subgroup:

Ille.- This unit is marginally suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natura Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The depth to the seasonal high water table and slopes greater than 20 percent in some areas are the major limitations. A detailed, site-specific analysis is generally required. On-site groundwater level monitoring and determination of induced groundwater mounding is often necessary to establish the suitability of this unit. Curtain drains may help lower the water table to an acceptable level. There may be less-sloping areas within the unit that are suitable for siting a septic system, or, if feasible, cut and fill site modifications may produce an acceptable area within the unit. An erosion prevention and sediment control plan is required by the State for construction on sites over 20 percent slope.

PHYSICAL and CHEMICAL PROPERTIES									
Soil name	Depth	Typical	Clay (Pct)	Clay reaction	Permeability (In/Hr)	Organic matter (Pct)	EROSION FACTORS		
	(In)	texture			(marin)		Kw	Kf	т
Buckland	0-1	HPM, SPM		3.2 - 5.7	2-6	25-95			3
	1-5	SIL	5-10	5.6 - 7.3	0.6-2	3.0-8.0	.28		
	5-28	SIL	5-10	5.6 - 7.3	0.6-2	0.5-2.0	.37	.43	
	28-61	VFSL	7-14	5.6 - 7.3	0.06-0.2	0.5-2.0	.28	.32	

WATER FEATURES							SOIL FEATURES		
Soil name	Hydrologic group Depth to seasonal high water table (Feet)	Depth to seasonal	Flooding		Ponding		Hydric		
		Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)		
Buckland	С	1.0-2.0	None	1	None		No		

		WATE	R FEATURES			14	SOIL	FEATURES
		epth to seasonal	Flooding		Ponding		Hydric	
Soil name	group	high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?	Depth to bedroc (range in inches
Buckland	С	1.0-2.0	None	19	None		No	
1.2012.000	LAND USE LIN	ITATIONS			E	GRICULTUR	RAL YIELD	DATA
Soil name	Land use	Rati	ng Rea	ason **	Crop name		Yield / acre	
Buckland	Dwellings with baseme	nts: Very limited	Slope			Pasture		2.6 AUM
Buckland	Pond reservoir areas:	Very limited	Slope					
	Management	•	WOODLA	ND MANAGE	MENT			
Soil name	management					1		

	Management	· <u>v</u>	VOODLAND MANAGE	MENT
Soil name	concern	Rating	Reason	Vermont natural communities
Buckland	Harvest equip operability:	Moderately suited	Wetness	Northern Hardwood Forest,
Buckland	Road suitability:	Poorly suited	Slope	Rich Northern Hardwood Forest, Sugar Maple-White Ash Northern Hardwood
Buckland	Erosion hazard (off-road):	Moderate	Slope/erodibility	Forest Variant

4A: Sunny silt loam, 0 to 2 percent slopes

SUNNY SOILS formed in loamy over sandy alluvial deposits on flood plains that are frequently flooded for brief duration from Fall through late Spring. They are very deep to bedrock and poorly drained. These soils have a water table at depths of 0 to 1.5 feet below the surface from late Fall through late Spring. Permeability is moderate in the loamy material and rapid in the sandy substratum.

This map unit is poorly suited to cultivated crops and suited to hay and pasture. Flooding and the seasonal high water table are concerns during periods of high rainfall. Flooding is of short duration and usually occurs in the spring which may delay spring tillage. Stubble mulching and cover cropping are practices that help control erosion by flood waters. Land shaping, to provide good surface drainage, helps to dry the soil after flooding. Where suitable outlets are available, subsurface drainage can be used to lower the water table. Streambanks should be maintained in permanent protective cover to help control streambank erosion. Proper stocking rates and rotational grazing during wet periods will help to maintain a good stand of pasture plants and help to control erosion caused by flood water. Planting water tolerant plants helps to overcome the wetness caused by the seasonal high water table.

Important farmland classification: Sta	atewide (b) Land	capability: 4 w V	ermont Agricultural Value Group: 4d
--	------------------	-------------------	-------------------------------------

Vermont Residential Wastewater Disposal - Group and Subgroup:

Management

IVa.- This unit is generally not suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. Excessive soil wetness in association with the minimal slope is the limiting condition. Prolonged periods of saturation at or near the soil surface do not allow for the proper functioning of septic systems.

PHYSICAL and CHEMICAL PROPERTIES									EDOGION FACTORS	
Soil name	Depth	Depth Typical (In) texture	Clay	Soil	Permeability (In/Hr)	Organic matter (Pct)	EROSION FACTORS			
			(Pct)	reaction (pH)			Kw	Kf	Т	
Sunny	0-8	SIL	2-18	5.1 - 6.5	0.6-2	2.0-6.0	.32	.32	3	
	8-34	SIL	2-18	5.1 - 6.5	0.6-2	0.5-3.0	.43	.43		
	34-65	GR-S	0-3	5.1 - 6.5	6-20	0.0-1.0	.10	.15		

WATER FEATURES

SOIL FEATURES

	Hydrologic	Hydrologic Depth to seasonal		Flooding		Ponding			
Soil name	group	high water table	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches).	
Sunny	С	0.0-1.5	Frequent	Brief	None		Yes		

	LAND USE LIMITA	TIONS		AGRICULTURAL YIE	ELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre	
Sunny	Dwellings with basements:	Very limited	Flooding	Grass-legume hay	4 Tons	11.1
Sunny	Pond reservoir areas:	Very limited	Seepage	Grass hay	4 Tons	
o ann y		,		Grass-clover	6.4 AUM	

WOODLAND MANAGEMENT

Soil name	concern	Rating	Reason	Vermont natural communities
Sunny	Harvest equip operability:	Poorly suited	Wetness	Silver Maple-Sensitive Fern Riverine Floodplain
Sunny	Road suitability:	Poorly suited	Flooding	Forest, Alluvial Shrub Swamp,
Sunny	Erosion hazard (off-road):	Slight		Alder Swamp, River Mud Shore

60A: Weider very fine sandy loam, 0 to 3 percent slopes

VEIDER SOILS formed in loamy over sandy alluvial deposits on flood plains that are frequently flooded for brief duration from late all through late Spring. They are very deep to bedrock and moderately well drained. These soils have a water table at depths of 1.5 to 3.0 feet below the surface from late Fall through late Spring. Permeability is moderate in the loamy solum and rapid in the sandy substratum.

This map unit is well suited to cultivated crops, hay and pasture. Flooding and the seasonal high water table are concerns during periods of high rainfall. Flooding is of short duration and usually occurs in the spring which may delay spring tillage. Stubble mulching and cover cropping are practices that help control erosion by flood waters. Land shaping, to provide good surface drainage, helps to dry the soil after flooding. Where suitable outlets are available, subsurface drainage can be used to lower the water table. Streambanks should be maintained in permanent protective cover to help control streambank erosion. Proper stocking rates and rotational grazing during wet periods will help to maintain a good stand of pasture plants and help to control erosion caused by flood water. Planting water tolerant plants helps to overcome the wetness caused by the seasonal high water table.

Important farmland classification:	Prime (f)	Land capability: 2 w	Vermont Agricultural Value Group: 3

Vermont Residential Wastewater Disposal - Group and Subgroup:

IIIb.- This unit is marginally suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natura Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The hazard of flooding and the depth to the seasonal high water table are the major limitations. This unit is on floodplains and typically includes land in the floodway and the special flood hazard area. Consult flood hazard maps prepared by the Federal Emergency Management Agency (FEMA) in local town offices for more information. Wastewater systems must be located, designed and constructed in a manner that avoids impairment to the system and contamination from the system due to flooding. A detailed, site-specific analysis with groundwater level monitoring and determination of induced groundwater mounding may be required to establish the suitability of this unit. Mound system construction and other site modifications are often necessary.

Soil name	Depth	Typical	Clay (Pct)	Soil reaction (pH)	Permeability (In/Hr)	Organic matter (Pct)	EROSION FACTORS		
	(In)						Kw	Kf	Т
'eider	0-6	VFSL	2-18	4.5 - 6.5	0.6-2	1.0-4.0	.32	.32	3
)	6-25	VFSL	2-18	4.5 - 6.5	0.6-2	0.5-3.0	.43	.43	
	25-65	GRV-S	0-3	4.5 - 6.5	6-20	0.0-1.0	.10	.15	

	WATER FEATURES								
Soil name	Hydrologic	Depth to seasonal	Flooding		Ponding		Hydric		
	group	high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)	
Weider	В	1.5-3.0	Frequent	Brief	None		No	- L	

	LAND USE LIMITA		AGRICULTURAL YIELD DATA			
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre	
Weider	Dwellings with basements:	Very limited	Flooding	Alfalfa hay	4 Tons	
Weider	Pond reservoir areas:	Very limited	Seepage	Grass-legume hay	3.5 Tons	
				Corn silage	24 Tons	
				Grass hay	3.5 Tons	
				Grass-clover	5.6 AUM	

Soil name	Management concern	WOODLAND MANAGEMENT			
		Rating	Reason	Vermont natural communities	
Weider	Harvest equip operability:	Well suited		Silver Maple-Ostrich Fern Riverine Floodplain	
Weider	Road suitability:	Poorly suited	Flooding	Forest, River Sand or Gravel Shore,	
Weider	Erosion hazard (off-road):	Slight		Northern Conifer Floodplain Forest Variant	

.



OVERALL SCORE: 20.2 (# 17)

Criteria, Scores, and Notes

- 1. 2.8/5 Site a little tight esp. if septic field is needed No room for solar panels
- 2. 2.8/5 Site is open with good soils
- 3. 3.2/5 Sewer hook up remote. Water nearby No fiberoptic
- 4. 2.8/5 Conditional use, particularly height. NEPA nec.
- 5. 3.2/5 Compatible, although close to interstate
- 6. 3.0/5 Tight site but otherwise good for construction
 - . 1.2/5 Distant from Montpelier
- 8. 1.2/5 No wider benefits

96 GONYEAU ROAD, MILTON

Size: 5.5 acres

Acquisition cost: \$550,000 Rough cost to develop: +/- \$700,000 TOTAL +/- \$1,200,000

STEPHEN D. ALLEN

87 East Spring Street, • Winooski, VT 05404 • W 863-6693 x 106 H 863-4248 • stphnallen@aol.com

May 29, 2014

Mr. Bill Laferriere Director of Property Services State of Vermont 2 Governor Aiken Avenue Montpelier, VT 05633

Re: Land for Proposed State Agricultural and Environmental Collaborative Laboratory

Dear Mr. Laferriere:

Please find enclosed materials relating to an offering of land in connection with the above noted project. I believe the property would be well suited for this project, considering the following attributes:

- Excellent location near Exit 17 of I-89
- Industrial park setting with compatible land uses
- Municipal services
- Natural gas
- No floodplain, no environmental hazards
- Close proximity to Lake Champlain and source rivers
- Parcel shape and size well suited for this development and use
- Industrial zoning with "laboratories" a permitted use
- Level, open site, easily developable.
- Good solar potential as accessory use.

The property is available for sale, or long term ground lease. A one year option to purchase would be provided at a cost of \$22,000.

If you have any questions, or require additional information, please contact me.

Regards

5.0

Stephen D. Allen

Prime Industrial Site For Sale or Lease



96 Gonyeau Road, Milton

Outstanding Development Opportunity 5.5 Acres •Interstate 89 Exposure• Excellent Access to Exit 17

Contact Steve Allen 863-6693 x 106 Broker Participation Invited

Property Summary

 \sim 5.5 ± acres

))

)

- 96 Gonyeau Road, Milton, Vermont
- 900 feet at grade frontage
- Frontage and exposure on Interstate 89
- Excellent access via US Route 7 and I-89
- Prime location in actively developing Exit 17 area
- Growing community
- Municipal water available
- Industrial zoning
- Open, level site. Sandy soils.
- May have subdivision potential.
- Long term ground lease. Rate \$55,000 annually absolute net, adjusted by CPI. Purchase price \$550,000.
- Contact Steve Allen 802-863-6693 x106 (stphnallen@aol.com)



ESRI

in d



SUDB

Aerial View of Neighborhood



TOWN OF MILTON, VERMONT

15

ZONING REGULATIONS

(

(___

SECTION 390 GENERAL INDUSTRIAL (12) DISTRICT

SECTION 391 Purpose

7 5

S

The purpose of this area is to provide adequate space for industries which require room for EXPANSION, space for OUTDOOR STORAGE and separation from residential neighborhoods. These areas are not intended for industries that will create retail traffic.

SECTION 392 Permitted Uses

- - MANUFACTURING
 RESEARCH AND DEVELOPMENT LABORATORIES
 - (2) RESEARCH AND DEVELC(3) PUBLIC WAREHOUSING
 - (4) PRIVATE WAREHOUSING
 - (5) OUTDOOR STORAGE
 - (6) TRUCKING
 - (7) PLANNED UNIT DEVELOPMENTS
 - (8) CONSTRUCTION AND AGRICULTURAL EQUIPMENT SALES AND SERVICE

SECTION 393 Conditional Uses

- (1) PERSONAL SERVICES directly serving industries therein
- (2) PROFESSIONAL SERVICES directly serving industries therein
- (3) Public and private UTILITIES AND UTILITY OFFICES
- (3) Public and private UTII
 (4) STATE FACILITIES
- (5) INSTITUTIONAL ESTABLISHMENTS directly serving industries therein

SECTION 394 Dimensional Requirements

(1)	Minimum LOT AREA	100,000 sq. ft.
(2)	Minimum Road FRONTAGE	200 ft.
(3)	Minimum FRONT SETBACK	50 ft.
(4)	Minimum SIDE SETBACK	35 ft.
(5)	Minimum REAR SETBACK	35 ft.
(6)	Maximum LOT COVERAGE	75%





Drive Time Map 10 - 20 - 30 Minute Drive Time Coverage Areas

D

DD

DD

DODE

D

D

DDDDDDD









Map Showing Abutters



Vermont Warranty Deed

KNOW ALL PERSONS BY THESE PRESENTS

THAT I, VIRGINIA R. GONYEAU, a single person, of Milton, in the County of Chittenden and State of Vermont, Grantor, in the consideration of Ten and More Dollars paid to my full satisfaction by STEPHEN ALLEN and ANITA ALLEN of Burlington, in the County of Chittenden and State of Vermont, Grantees, by these presents do freely GIVE, GRANT, SELL, CONVEY AND CONFIRM unto the said Grantees, STEPHEN ALLEN and ANITA ALLEN, husband and wife, as tenants by the entirety, and their heirs and assigns forever, a certain piece of land in Milton, in the County of Chittenden and State of Vermont, described as follows, viz:

A parcel of land with all structures and improvements thereon, being known and designated as 96 Gonyeau Road.

Said land is bounded on the west by land of the State of Vermont (Interstate Highway 89), northeasterly by Gonyeau Road and southerly by land owned by Roger S. Gonyeau, Sr. and Richard W. Gonyeau and is a portion of the land and premises conveyed to William F. Gonyeau (now deceased) and Virginia R. Gonyeau by Quit Claim Deed of Louis Lisman dated July 23, 1965 as recorded in Volume 51 at Page 137 of the Town of Milton Land Records and being further described as a portion of the land conveyed to Ira Pearl Gonyeau, Agnes H. Gonyeau and William Gonyeau by Warranty Deed of Colchester Milling Co., Inc., dated May 5, 1944 as recorded in Volume 30 at Page 508 of said Land Records.

Reference is hereby made to the above-mentioned instruments, the record thereof, the references therein made, and their respective records and references, in further aid of this description.

TO HAVE AND TO HOLD said granted premises, with all the privileges and appurtenances thereof, to the said Grantees, STEPHEN ALLEN and ANITA ALLEN, husband and wife, as tenants by the entirety, and their heirs and assigns, to their own use and behoof forever; And the said Grantor, VIRGINIA R. GONYEAU, for myself and my heirs and assigns, do covenant with the said Grantees, STEPHEN ALLEN and ANITA ALLEN, their heirs and assigns, that until the ensealing of these presents I am the sole owner of the premises, and have good right and title to convey the same in manner aforesaid, that they are FREE FROM EVERY

A SCHMUCKER ORNEYS AT LAW 110 MAIN STREET A X 238 JURLINGTON, VERMONT 05402

ENCUMBRANCE; And I hereby engage to WARRANT AND DEFEND the same against all(lawful claims whatever.

IN WITNESS WHEREOF, I hereunto set my hand and seal this $2m^4$ day of June, 2008.

IN THE PRESENCE OF:

Mun

Virginia R. Gonyean

Virginia R. Gonyeau by Richard W. Gonyeau, her attorney-in-fact for buend forwar of Attorney Vulue 219 Page 428

STATE OF VERMONT COUNTY OF CHITTENDEN, SS.

At Burlington, in said County and State, this 20^{-1} day of June, 2008, RICHARD W. GONYEAU personally appeared, and he acknowledged this instrument, by him sealed and subscribed, to be his free act and deed and the free act and deed of VIRGINIA R. GONYEAU.

Before me:

Ç...

RY & SCHMUCKER ITORNEYS AT LAW 110 MAIN STREET P. O. BOX 238 BURLINGTON, VERMONT 05402

Vitzthum, Sandra

From: Sent: To: Subject: Roger Hunt <rhunt@town.milton.vt.us> Wednesday, July 16, 2014 7:02 AM Vitzthum, Sandra RE: 96 Gonyeau Road

The water mains (there are two, one for fire, one for potable water) are a couple feet off the shoulder on the opposite side of the road.

Roger Hunt, Director Public Works Department Town of Milton, Vermont

From: Vitzthum, Sandra [mailto:Sandra.Vitzthum@state.vt.us] Sent: Tuesday, July 15, 2014 4:08 PM To: Roger Hunt Subject: RE: 96 Gonyeau Road

Thank you very much, Roger! That is what I needed to know. How far away is water service? The building would be approximately on top of the existing structure you describe. Thank you! Sandy

From: Roger Hunt [mailto:rhunt@town.milton.vt.us] Sent: Tuesday, July 15, 2014 4:05 PM To: Vitzthum, Sandra Cc: Amanda Pitts Subject: RE: 96 Gonyeau Road

This is the existing structure at 96 Gonyeau, correct? If so, water and sewer services do not currently extend to the property. Municipal water does serve the industrial park and could furnish 1,100 gpd. The sewer is a little trickier to get to, as it sits it a right of way behind the two buildings across the street. You would need to secure an easement across those two properties to access the sewer. This lot is in an approved water/sewer service area.

Roger Hunt, Director Public Works Department Town of Milton, Vermont

From: Vitzthum, Sandra [<u>mailto:Sandra.Vitzthum@state.vt.us</u>] Sent: Tuesday, July 15, 2014 2:37 PM To: Roger Hunt Subject: FW: 96 Gonyeau Road

Hi Roger,

I am working for the State of Vermont to find out as quickly as possible if 96 Gonyeau Road has current water and/or sewer service. Your colleague told me that she doesn't think it does, but the seller tells us the land has public water. If it does have water, could we use 1,100 gallons per day?

If it does not, is there a water line we could tie into and draw that much water? And does it have sewer? If not, is it in a district where we may extend to a sewer line? Thank you very much, Sandy Vitzthum

Sandra Vitzthum, LEED AP Project Manager II Department of Buildings and General Services 2 Governor Aiken Drive Montpelier, VT 05633-5801

802-505-3389 – mobile 802-828-3533 – fax

From: Amanda Pitts [<u>mailto:apitts@town.milton.vt.us</u>] Sent: Tuesday, July 15, 2014 2:27 PM To: Vitzthum, Sandra Subject: RE: 96 Gonyeau Road

Hi Sandra,

The number for the Public Works department is 802-893-6030. I've forwarded your questions on to them as well with your contact information.

Thanks, Amanda

From: Vitzthum, Sandra [<u>mailto:Sandra.Vitzthum@state.vt.us</u>] Sent: Tuesday, July 15, 2014 2:16 PM To: Amanda Pitts Subject: RE: 96 Gonyeau Road

Hi Amanda,

Thank you so much for your quick help. I am up against a deadline for the State of Vermont. If you could give me a good contact number or email for the person in Public Works, that would be great. I would also like to find out if the property is in the sewer/water service district. Best regards,

Sandy

From: Amanda Pitts [<u>mailto:apitts@town.milton.vt.us</u>] Sent: Tuesday, July 15, 2014 9:28 AM To: Vitzthum, Sandra Subject: RE: 96 Gonyeau Road

Hi Sandra,

The property is in the I2 Zoning District. The property is not in an official growth center. I do not believe this property is on municipal water or sewer. I've emailed Public Works for them to provide answers to your additional questions regarding the closest water and sewer lines.

Let me know if you need anything else.

Thanks, Amanda

From: Vitzthum, Sandra [<u>mailto:Sandra.Vitzthum@state.vt.us</u>] Sent: Friday, July 11, 2014 3:56 PM To: Amanda Pitts Subject: RE: 96 Gonyeau Road

Amanda, if you could also confirm the property is in your I-2 zone that would be great! Thanks again.

From: Vitzthum, Sandra Sent: Friday, July 11, 2014 3:53 PM To: 'apitts@town.milton.vt.us' Subject: 96 Gonyeau Road

Thank you for your help, Amanda!

My questions:

- 1) Is this property in an official Growth Center or other State-designated growth area?
- 2) Is the site on a municipal water line? If so, do you know approximately how large the line is and what its pressure is?
- 3) Is the site on a sewer line? If not, how far away is the nearest line, and does it have available capacity?

Thanks again! Sandy

Sandra Vitzthum, LEED AP Project Manager II Department of Buildings and General Services 2 Governor Aiken Drive Montpelier, VT 05633-5801

802-505-3389 – mobile 802-828-3533 – fax

Disclaimer, please be advised that your email communication to the Town may be considered public record and may be subject to disclosure under the Vermont Open Public Records Act.

Disclaimer, please be advised that your email communication to the Town may be considered public record and may be subject to disclosure under the Vermont Open Public Records Act.

Disclaimer, please be advised that your email communication to the Town may be considered public record and may be subject to disclosure under the Vermont Open Public Records Act.

Disclaimer, please be advised that your email communication to the Town may be considered public record and may be subject to disclosure under the Vermont Open Public Records Act.
Vitzthum, Sandra

From: Sent: To: Subject: Steve Allen <sallen@allenbrooks.com> Friday, July 18, 2014 10:36 AM Vitzthum, Sandra Fwd: Gonyeau Road sewer availability

Hi sandy. I just met with Roger Hunt re: sewer availability. It turns out municipal sewer is available directly on Gonyeau road, southerly of the property. The connection point is roughly 770 feet southerly of the house. Connection would require extension of the municipal sewer which would be part of the DRB process. An easement on another property would therefore NOT be required although it would still be an option. I have spoken to both parties and they are receptive to the idea although details would need to be worked out. The attached sketch shows the existing sewer line and possible points of connection. Regards

Steve

Sent from my iPhone

Begin forwarded message:

From: Roger Hunt <<u>rhunt@town.milton.vt.us</u>> Date: July 18, 2014 at 10:20:24 AM EDT To: "<u>sallen@allenbrooks.com</u>" <<u>sallen@allenbrooks.com</u>> Subject: Gonyeau Road

Google Earth streams the world over wired and wireless networks enabling users to virtually go anywhere on the planet and see places in photographic detail. This is not like any map you have ever seen. This is a 3D model of the real world, based on real satellite images combined with maps, guides to restaurants, hotels, entertainment, businesses and more. You can zoom from space to street level instantly and then pan or jump from place to place, city to city, even country to country.

Get Google Earth. Put the world in perspective.

(http://earth.google.com)

Disclaimer, please be advised that your email communication to the Town may be considered public record and may be subject to disclosure under the Vermont Open Public Records Act.











Flood Hazard Areas - Milton







Conserved Lands - Milton

Vermont Agency of Natural Resources

vermont.gov



NOTES

Map created using ANR's Natural **Resources Atlas**

WGS_1984_Web_Mercator_Auxiliary_Sphere © Vermont Agency of Natural Resources

1,667.0

834.00 1,667.0 Feet

Ft. 1" = 833 1cm = 100 Meters THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

1: 10,000

July 21, 2014





Gpi: Pits, sand and Pits, gravel

This map unit consists of open excavations from which soil material, mostly gravel, has been removed for various uses. Little or no vegetation grows in active excavations, while abandoned sites support scattered trees and shrubs. On-site investigation is needed to identify the soil properties and to determine the hazards and limitations for specific uses.

The soil in this map unit has been altered or removed. This map unit is not suited to cultivated crops, hay or pasture.

Important farmland classification:	NPSL	Land capability: 8 s	3	Vermont Agricultural Value Group: 11

Vermont Residential Wastewater Disposal - Group and Subgroup:

V.- This unit is not rated as a site for soil-based residential wastewater disposal systems. Due to the variable nature of the soils, onsite investigations are needed to determine their suitability.

PHYSICAL and CHEMICAL PROPERTIES							EDOS	ION FA	CTOP
Soil name	Depth	Typical	Clay	Soil reaction	Permeability (In/Hr)	Organic matter	ERUS		CTOR
Johname	(ln)	texture	(Pct)	(pH)	()	(Pct)	Kw	Kf	Т
Pits, gravel	0-6	GRV-COS	0-1		6-20	0.0-0.1	.02		
	6-60	GRV-COS	0-1		6-20		.02		
Pits, sand	0-10	COS	0-1		6-20	0.0-0.1	.17		
	10-60	GR-COS	0-1		6-20		.15		

2		WATER FEATURES						SOIL FEATURES		
Soil name	Hydrologic	Depth to seasonal	Floo	ding	Pon	ding	Hydric			
	group	high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)		
Pits, gravel			None		None		Unranked			
Pits, sand			None		None		Unranked			

	LAND USE LIMITA	TIONS		AGRICULTUR	AL YIELD DATA
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Pits, sand	Dwellings with basements:	Not rated			
Pits, gravel	Dwellings with basements:	Not rated			
Pits, sand	Pond reservoir areas:	Not rated			
Pits, gravel	Pond reservoir areas:	Not rated			
				and the second se	

	Management		WOODLAND MANAGEMENT	
Soil name	concern	Rating	Reason	Vermont natural communities
Pits, sand	Harvest equip operability:	Not rated		
Pits, gravel	Harvest equip operability:	Not rated		
Pits, sand	Road suitability:	Not rated		
Pits, gravel	Road suitability:	Not rated	3	
Pits, sand	Erosion hazard (off-road):	Not rated		
Pits, gravel	Erosion hazard (off-road):	Not rated		

USDA Natural Resources Conservation Service

Vermont Soil Fact Sheet

AdA: Adams and Windsor loamy sands, 0 to 5 percent slopes

These soils formed in glaciofluvial or glaciolacustrine sands on outwash plains, lake plains, terraces and eskers. ADAMS SOILS re very deep to bedrock and somewhat excessively drained and excessively drained. Permeability is rapid in the solum and very apid in the substratum. Some areas of these soils have contrasting very gravelly deposits below a depth of 40 inches. WINDSOR SOILS are very deep to bedrock and excessively drained. Permeability is rapid or very rapid.

This map unit is suited to cultivated crops, hay and pasture. Low available water capacity and droughtiness are the major management concerns.

Important farmland classification:	Statewide	Land capability: 3 s	Vermont Agricultural Value Group: 6
------------------------------------	-----------	----------------------	-------------------------------------

Vermont Residential Wastewater Disposal - Group and Subgroup:

Ia.- This unit is well suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The rapid permeability in the substratum is a concern. Backfilling absorption trenches with at least one foot of finer textured material or other site modifications may be necessary to slow the percolation rate enough to allow for thorough filtering of effluent.

PHYSICAL and CHEMICAL PROPERTIES								ION FA	CTOPS
Soil name	Depth	Depth Typical		Soil Permeability	ical Clay reaction (In/Hr)	Organic matter	ERUS		CIUKS
Soil name	(ln)	texture		(0010)		(Pct)	Kw	Kf	т
Adams	0-7	LS	0-5	3.6 - 6.0	6-20	2.0-5.0	.17	.17	5
	7-30	LFS	0-5	4.5 - 6.0	6-20	1.0-3.0	.17	.17	
	30-65	LFS	0-5	4.5 - 6.5	20-100	0.0-0.5	.17	.17	
Windsor	0-6	LS	1-3	4.5 - 6.0	6-20	2.0-4.0	.17	.17	5
	6-23	LS	0-3	4.5 - 6.0	6-20	0.5-2.0	.17	.17	
	23-65	COS	0-2	4.5 - 6.5	6-20	0.0-0.5	.10	.10	

	WATER FEATURES								
	Hydrologic	Depth to seasonal	Floo	ding	Pone	ding	Hydric		
Soil name	Hydrologic	high water table (Feet)	Frequency	Duration	Frequency Duration		soil?	Depth to bedrock (range in inches)	
Adams	А	(<u></u>)	None		None		No		
Windsor	А		None		None		No		

	LAND USE LIMITA	AGRICULTURAL YI	ELD DATA			
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre	
Adams	Dwellings with basements:	Not limited		Corn silage	16 Tons	_
Windsor	Dwellings with basements:	Not limited		Grass-legume hay	4 Tons	
Adams	Pond reservoir areas:	Very limited	Seepage	Pasture	4.5 AUM	
Windsor	Pond reservoir areas:	Very limited	Seepage			

	Management		WOODLAND MANA	GEMENT
Soil name	concern	Rating	Reason	Vermont natural communities
Adams	Harvest equip operability:	Well suited		Hemlock-Northern Hardwood Forest,
Windsor	Harvest equip operability:	Well suited		Hemlock-White Pine-Northern Hardwood Forest Variant.
Adams	Road suitability:	Well suited		White Pine-Northern Hardwood Forest Variant,
Windsor	Road suitability:	Well suited		Hemlock Forest
Adams	Erosion hazard (off-road):	Slight		
Windsor	Erosion hazard (off-road):	Slight		

10

D

 $\frac{1}{2}$

.

•

D 0 D D 0



OVERALL SCORE: 17.5/40 (# 18)

ROUTE 2, RICHMOND

Criteria, Scores, and Notes

- 2.3/5 Flat area of site is limited. Minimal room for a solar array if 5 acres purchased
 3.0/5 Site is open with good soils; slopes
 1.5/5 No utilities now except fiberoptic. Town is
 - Committed to providing utilities by next year
- 4. 2.5/5 Use not permitted under current regs; in revision
- 5. 2.2/5 Compatible neighborhood, although close to interstate
- 6. 3.0/5 No significant barriers to construction
- . 1.7/5 Distant from Montpelier
- 8. 1.3/5 No wider benefits

Size: 5 acres

Acquisition cost: \$1,250,000 Rough cost to develop: \$800,000 - \$950,000 **TOTAL** \$2,100,000+

 \cdot

July 3, 2014

Robert and Joy Reap PO Box 442 Richmond, VT 05477

Bill Laferriere Director of Property Services 2 Governor Aiken Ave Montpelier, VT 05633

Re: Proposed State Agricultural and Environmental Collaborative Laboratory

Dear Mr. Laferriere:

We are pleased to submit this proposal for the State Agricultural and Environmental Collaborative Laboratory. We have a location in Richmond, VT that we believe meets all of your criteria and would be an ideal location for the new facility.

Enclosed you will find the following:

- Information about the property, including a site plan;
- Copy of the deed;
- Documentation that the property meets the state's needs
- Mapping of the Property
- **Pricing options**

If you would like to discuss this proposal further or have any questions, please do not hesitate to call. Our daytime phone number is 802-434-4993.

Sincerely,

Rey Ney





Parcel of Land | State of VT - State Agricultural and Environmental Collaborative Laboratory

July 7, 2014



Parcel of Land | State of VT - State Agricultural and Environmental Collaborative Laboratory



Parcel of Land | State of VT - State Agricultural and Environmental Collaborative Laboratory

July 7, 2014

 $\begin{array}{c} \cdot & \cdot \\ \circ & \circ \\$



Parcel of Land | State of VT - State Agricultural and Environmental Collaborative Laboratorv

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS That, BEVERLY F. WILLIS,

Trustee of the BEVERLY F. WILLIS FAMILY TRUST dated April 10, 1996, of Williston,

County Chittenden, State of Vermont, Grantor, in the consideration of Ten or More Dollars paid

to its full satisfaction by ROBERT T. REAP and JOY REAP of Richmond, County of

Chittenden, State of Vermont, Grantees, by these presents, does freely GIVE, GRANT, SELL,

CONVEY AND CONFIRM unto said Grantees, ROBERT T. REAP and JOY REAP, husband

and wife, as tenants by the entirety, their heirs, successors and assigns forever, a certain piece of

land in Richmond, in the County of Chittenden and State of Vermont, described as follows, viz:

Being a portion of the lands and premises conveyed to Beverly F. Willis, Trustee of the Beverly F. Willis Trust dated April 10, 1996 by Trustee's Deed of Beverly F. Willis dated April 9, 1999 and recorded in Volume 110 at Page 444 of the Land Records of the Town of Richmond.

Being a portion of the same lands and premises conveyed to Richard T. Willis (now deceased) and Beverly F. Willis by Warranty Deed of Frank G. Westall and Dorothy M. Westall dated July 15, 1970 and recorded in Volume 28 at Page 26 of the Land Records of the Town of Richmond.

Being an unimproved parcel of land said to contain 8.91 acres, more or less, with barn located thereon and more particularly depicted as "Lot 2" on a plat of survey entitled, "Plat of Survey Showing Two Lot Subdivision of Lands of Beverly F. Willis, Trustee, 840 West Main Street, Richmond, Vermont," prepared by Button Professional Land Surveyors, PC dated December 27, 2011, last revised July 9, 2013, and recorded on January 6, 2014 at Map Slide 136, Page 2 of the Land Records of the Town of Richmond.

Lot 2 conveyed herein is subject to an easement and right-of-way, to be used in common, for ingress, egress and the placement of utilities. Said easement and right-of-way is located on the herein conveyed lot adjacent to the southerly boundary of Lot 1, and is sixty feet (60') in width as it proceeds in an easterly direction from the sideline of U.S. Route 2 for a distance of one-hundred eighty feet (180'), and then narrows to a width of thirty-five feet (35') and continues easterly for a distance of forty-six and thirty-eight one-hundredths feet (46.38'), all as more particularly shown on the above-referenced plat of survey. Grantees herein, their heirs, successors and assigns, are subject to the duty to

LAW OFFICE OF DAVID M. SUNSHINE PC

-] -

00000000000

D

D

D

D

D

D

nnnn

DDD

D

D

5

D

D

0000

B | DEED

share in the maintenance and upkeep for any roadway located within the said shared easement and right-of-way with other users of said right-of-way. The costs of maintenance, repair, snowplowing and any other expenses of any roadway located within said right-of-way shall be shared on a pro-rata basis taking into consideration the actual number of users and the point or area where such maintenance, repair, snowplowing or other expenses are carried out. Notwithstanding the foregoing, any damages to any roadway constructed within said right-of-way, beyond normal wear and tear, shall be promptly repaired by the owner of the premises who causes such damage.

Lot 2 conveyed herein is subject to an easement and right-of-way for a proposed subsurface sewage disposal system serving Lot 1, and as more particularly shown and depicted on the above-referenced plat of survey and plans approved by the Vermont Department of Environmental Conservation pursuant to Wastewater System and Potable Water Supply Permit #WW-4-3790-1, as the same may be amended from time to time.

Also conveyed to the herein Grantees, their successors and assigns, is a utility easement and right-of-way which shall run with the land for the benefit of the herein conveyed parcel. Said utility easement and right-of-way being fifty feet (50') wide and extending across Lot 3 in a generally southern direction from the herein conveyed parcel to the common boundary of Lot 3 and the parcel adjacent to Lot 3 now owned by the Chittenden East Supervisory Union School District. The exact location of said utility easement and right-of-way shall be determined by the herein Grantees, their successors and assigns, at a later time and in the sole discretion of the herein Grantees, their successors and assigns, but shall lie within an area described as follows: beginning at a point where the highway known as Interstate 89, the land owned by Chittenden East Supervisory Union School District, and Lot 3 meet, thence traveling southwest twohundred feet (200') along the common boundary between CESU and Lot 3 to a point, thence turning towards the southwest corner of the large barn on Lot 2 and proceeding to a point on that line where Lots 2 and 3 meet, thence turning east and following the boundary between Lots 2 and 3 to a point where Lots 2 and 3 meet Interstate 89 property, thence turning south and following the boundary between Lot 3 and Interstate 89 to the point and place of beginning.

Said utility easement and right-of-way shall be for construction, installation, repair, replacement and maintenance of utilities for the benefit of the above conveyed parcel. The Grantees shall exercise this right in a careful manner and any damages to said Lot 3 caused by the Grantees shall be borne by the Grantees.

Upon establishing the final location of the easement, the Grantor, for its successors, and assigns, hereby covenants and agrees not to construct, install or permit the construction or installation of any structures or objects of any kind upon or under the surface of the ground or to change the elevation of said easement area except with the written approval of the herein Grantees, their successors and assigns such approval not to be withheld unreasonably.

C

C

<u>__</u>

Grantees shall have the right of ingress and egress over said Lot 3 at convenient points within the area described above for the exercise of the rights, privileges and easements herein granted provided, however, that said right must be exercised in a careful manner and any damages to said Lot 3 caused by the Grantees shall be borne by the Grantees.

The herein conveyed lands and premises are subject to an access easement and right of way, which shall run with the land for the benefit of the parcel adjacent to Lot 3 now owned by the Chittenden East Supervisory Union School District. Said access easement and right of way being one hundred feet wide, to be located in the westernmost portion of Lot 2 and Lot 3, running generally parallel to the highway known as Interstate 89, and extending across both the parcel herein conveyed and said Lot 3 for the purpose of an emergency road serving Chittenden East Supervisory Union School District.

Reference is hereby made to the instruments aforementioned, and the records thereof, and the instruments therein referred to, and the records thereof, in further aid of this description.

Reference is hereby made to a Trustee's Certification from Beverly F. Willis, Trustee of the Beverly F. Willis Family Trust dated January 10, 2014 and recorded in Volume 223 at Page 171 of the Land Records of the Town of Richmond. It is noted that due to scrivener's error, the Grantee in the deed from Beverly F. Willis to Beverly F. Willis, Trustee of the Beverly F. Willis Trust dated April 9, 1999 and recorded in Volume 110 at Page 444 of the Land Records of the Town of Richmond was misidentified. The correct name of the Trust (and thus the party that should have been named Grantee in the foregoing deed) is Beverly F. Willis Family Trust dated April 10, 1996 not the Beverly F. Willis Trust. To address this issue Beverly F. Willis hereby signs as A) Trustee of the Beverly F. Willis Trust, B) as Trustee of the Beverly F. Willis Family Trust and C) individually to convey any interest each of those three parties may have in the property.

TO HAVE AND TO HOLD said granted premises, with all the privileges and

appurtenances thereof, to the said Grantees, ROBERT T. REAP and JOY REAP, husband and

wife, as tenants by the entirety, their heirs, successors and assigns, to their own use and behoof

forever; and BEVERLY F. WILLIS, Trustee of the BEVERLY F. WILLIS FAMILY

TRUST dated April 10, 1996, for itself and its successors and assigns, does covenant with the

said Grantees, ROBERT T. REAP and JOY REAP, and their heirs, successors and assigns,

that until the ensealing of these presents it is the sole owner of the premises, and has good right

and title to convey the same in manner aforesaid, that it is FREE FROM EVERY

LAW OFFICE OF DAVID M. SUNSHINE PC

ENCUMBRANCE; except as aforesaid, and except for taxes and municipal charges hereafter due and payable, which have been pro-rated as of the date of closing and which the Grantees accordingly assume and agree to pay; and it hereby engage to WARRANT and DEFEND the same against all lawful claims whatever, except as aforesaid.

IN WITNESS WHEREOF, Grantor has hereunto caused its hand and seal to be set this 25th day of June, 2014.

IN THE PRESENCE OF:

The BEVERLY F. WILLIS FAMILY TRUST dated April 10, 1996

B | DEED

Tratec By: BEVERLY E WILLIS, Trustee

Witness

STATE OF VERMONT CHITTENDEN COUNTY, SS.

At Essex Junction, in said County, this 25th day of June, 2014 personally appeared BEVERLY F. WILLIS, Trustee of the BEVERLY F. WILLIS FAMILY TRUST dated April 10, 1996, and she acknowledged this instrument, by her subscribed, to be her free act and deed and the free act and deed of the BEVERLY F. WILLIS FAMILY TRUST dated April 10, 1996.

- 4 -

Before me,

Notary Public – **David M. Sunshine** My commission expires: 2/10/2015

LAW OFFICE OF DAVID M. SUNSHINE PC

IN WITNESS WHEREOF, Grantor has hereunto caused its hand and seal to be set this $\frac{1}{4}$ 25th day of June, 2015.

IN THE PRESENCE OF:

Witness

STATE OF VERMONT CHITTENDEN COUNTY, SS. The BEVERLY F. WILLIS TRUST dated April 10, 1996

BEVERLY F. WILLIS, Trustee By:

At Essex Junction, in said County, this 25th day of June, 2014 personally appeared BEVERLY F. WILLIS, Trustee of the BEVERLY F. WILLIS TRUST dated April 10, 1996, and she acknowledged this instrument, by her subscribed, to be her free act and deed and the free act and deed of the BEVERLY F. WILLIS TRUST dated April 10, 1996.

Before me,

Notary Public – David M. Sunshine My commission expires: 2/10/2015

IN WITNESS WHEREOF, Grantor has hereunto caused her hand and seal to be set this

25th day of June, 2014.

Witness

BEVERLY F. WILLIS

STATE OF VERMONT CHITTENDEN COUNTY, SS.

At Essex Junction, in said County, this 25th day of June, 2014 personally appeared

BEVERLY F. WILLIS, individually, and she acknowledged this instrument, by her subscribed,

to be her free act and deed.

Before me,

Notary Public – David M. Sunshine My commission expires: 2/10/2015

LAW OFFICE OF DAVID M. SUNSHINE PC

- 5 -

Parcel of Land | State of VT - State Agricultural and Environmental Collaborative Laboratory

C

C

C | DOCUMENTATION THAT PROPERTY MEETS STATE'S NEEDS

PROPERTY INFORMATION

This parcel of land is located at 840 West Main St. in Richmond. It is currently owned by Robert and Joy Reap. The site is less than a mile from the interstate ramp and the village center. Our parcel of land is just under nine acres and we would offer up to five acres to the State.

UTILITIES

Currently there is three phase power, fiber optic and gas lines running along Route 2 in front of the property. We are working with the town to bring water and sewer in and have attached a letter from the town demonstrating their intent to do so.

PERMITTING AND ZONING

This property is located in the Gateway Zoning District. We are currently working with the Town Planning Commission to change some zoning regulations for the Gateway District to accommodate this and other potential businesses on this property. We have attached a letter from the Planning Commission that documents that they are planning to implement zoning changes necessary for this research laboratory.

SITE DESCRIPTION

This site is clear of flood plains and does not have any toxins that we are aware of (it has been a farm for 100+ years). We have included a site plan that shows the current conditions and a draft site plan situating a building with a 15,500 SF footprint, parking for 50 cars, outdoor storage, maneuverability and parking for 20' long trucks, a storm water pond or swale and solar collectors. There is more acreage potentially available if the State grows out of the identified location.

The neighboring property owners are as follows:

- Robert and Joy Reap (lot 1 with the farmhouse)
- ▶ Rodney and Kristin Hayden-West
- ▶ Beverly Willis Trust (lot 3 is under contract with the Richmond Land Trust)
- ► Peggy Far, Trustee
- ▶ John and Pamela Scott

The development design for the rest of the adjoining property in "Lot 2" is still in the planning phases, however we have identified a few uses that are most desirable for the location. A preschool/after school center, a brew-pub restaurant and a bank are interested in the barn and its surrounding land.

C | DOCUMENTATION THAT PROPERTY MEETS STATE'S NEEDS



Planning & Zoning Office Town of Richmond P.O. Box 285 Richmond, VT 05477 (802) 434-2430 phone townplanner@gmavt.net

July 2, 2014

Bill Laferriere Director of Property Services 2 Governor Aiken Ave Montpelier, VT 05633

Re: Proposed Zoning Changes for the Gateway District, Richmond, VT and the State Agricultural and Environmental Collaborative Laboratory

Dear Mr. Laferriere,

The Richmond Planning Commission understands Joy and Robert Reap intend to respond to the recently published *Notice to Bidders* for the proposed State Agricultural and Environmental Collaborative Laboratory. The purpose of this letter is to demonstrate the Richmond Planning Commissions' intent to amending the Gateway Zoning to help facilitate economic development while maintaining the visual and scenic integrity of the gateway to the Village of Richmond.

Joy and Robert Reap currently own property located at 840 West Main Street, Richmond, VT, which is located within the town's Gateway Zoning District. As documented within recent meeting minutes, the Richmond Planning Commission is in the process of amending the zoning regulations for the Gateway District and are considering the following changes: removing the maximum square footage size of a single use (such as for business and professional office use and research laboratory use); increasing the maximum building size from 10,000 square feet to 17,000 square foot footprint; and adjusting the parking lot location requirement and roof pitch requirement, among other potential changes.

The Richmond Planning Commission is committed to drafting the zoning changes in an expeditious manner ready for the statutory adoption process which could be completed by the end of 2014.

Sincerely,

Bruce LaBounty, Co Chair Richmond Planning Commission

C | DOCUMENTATION THAT PROPERTY MEETS STATE'S NEEDS



TOWN OF RICHMOND RICHMOND TOWN CENTER

203 Bridge Street, P.O. Box 285 Richmond, Vermont 05477



June 30, 2014

Robert and Joy Reap Reap Construction, Ltd. PO Box 442 Richmond, VT 05477

RE: Request to Extend Water and Sewer Service to 840 West Main Street

Dear Robert and Joy:

In response to your request that the town extend municipal water and sewer service to your property located at 840 West Main Street, this letter shall serve as the position of the Water Resources Department until formally acted upon by the Richmond Water Commission.

The Water Resources Department agrees that extension of the municipal water and sewer service to West Main Street is the only practical way to grow system customers and we have the excess water and sewer capacity to serve properties in this area. We are in favor of system growth and successful economic development for Richmond. While doing so is no small undertaking, we believe that the opportunity to make these improvements is important and time is of the essence. We understand that you may have a client that has certain requirements as far as public utilities are concerned and we desire to develop a solution suitable for everyone. Should we come to a successful agreement then we will be able to find a way to get service to you in an expeditious manner.

Should you have any questions, please do not hesitate to contact me at (802) 434-5170.

Regards Geoffrey Urbanik Town Manager

Cc: Ashlev Lucht, Water Commission Chair Kendall Chamberlin, Water Resources

Selectboard & Town Manager 802-434-5170/FAX 434-5570

July 7, 2014

Town Clerk & Treasurer 802-434-2221/3139

Highway 434-2153 434-2631

Police

Library Water & Sewer 434-3036 434-2178

Planning & Zoning 434-2430

C | DOCUMENTATION THAT PROPERTY MEETS STATE'S NEEDS



July 1, 2014

REAP Construction 1931 Hillview Road Richmond, VT 05477

Dear Joy.

In regard to your property on 840 West Main Street in Richmond, VT, it is my pleasure to inform you that Waitsfield and Champlain Valley Telecom / Green Mountain Access has fiber optics that run right in front of that property.

Your clients will have access to up to 1Gigabit / second internet speeds. We provide wireless routers and installation. We provide inside wiring if needed. We can even provide your customers with some advice on how to prepare their telecom infrastructure.

Waitsfield and Champlain Valley Telecom can also provide the latest in Telecom solutions, whether it is a Hosted phone system solution that integrates nicely with their mobile devices or Hosting and email services.

We are a locally owned Telecommunications company who have been serving our customers faithfully for over 100 years and we look forward to helping in any way we can.

Warm Regards,

Krio D. Merchant

Sales Manager Waitsfield and Champlain Valley Telecom Green Mountain Access 888-866-8554 kmerchant@gmavt.net

C | DOCUMENTATION THAT PROPERTY MEETS STATE'S NEEDS



DISTANCE TO THE FOLLOWING PLACES FROM THE SITE:

- ✓ Nearest Bus Stop 0.7 miles 1 minute
- ✓ Downtown Richmond 0.9 miles 2 minutes
- ✓ Burlington 12.6 miles 15 minutes
- ✓ Williston 7.9 miles 11 minutes
- ✓ Montpelier 27.8 miles 27 minutes



Bus Service availability to Richmond site

D | ASKING PRICE

We recently purchased this property with the intent on it being a long-term investment. Therefore, selling land at this time is not our first choice. We would prefer to build this facility by partnering with our friends at DEW Construction Corp and rent that facility to the state. Or, as an alternate option to that, lease the land to the state. We have, however, included an asking price for five acres of land as well.

OPTION 1: LONG TERM LEASE ON THE FACILITY:

For Option 1 long term lease, the Reaps, in conjunction with DEW, will partner to develop this property and building for the State. If this is of interest we can discuss the details further for this option. Below is a description of DEW and their extensive experience:

DEW Construction Corp. was founded in 1997 by President Donald Wells on the principles of strong leadership and providing the best in client focused services in the market. Headquartered in Williston, Vermont, DEW has grown from a small local company to one of Northern New England's and upstate New York's largest Construction Managers. In 2012 DEW acquired The MacMillin Company, a 67-year old construction management firm in Keene, NH. MacMillin brings a rich history of service and customer satisfaction in a region where DEW was interested in expanding.

DEW | MacMillin are committed to safety, quality, and ethical business practices, and to providing creative solutions that integrate all aspects of the construction process. We incorporate and encourage leading-edge processes, such as Integrated Project Delivery (IPD), Building Information Modeling (BIM), and green building practices. Our construction management procedures deliver forward-thinking collaborative insight, from preconstruction planning to project close-out. Our relationships with customers are driven by a mutual respect and a steadfast commitment to complete every job on budget and on time.

DEW Properties State Projects:

- Barre City Place 80,000 sf State Office Building
- CCV Rutland 32,500 sf Academic Building
- Prospect Place 43,000 State Office Building (starting July 2014)

DEW Construction State Projects:

- Numerous State College System (Castleton, Johnson State, UVM)
- Numerous Public Schools
- VT Archives
- Rutland State Airport
- Northbound Information Center / Rest Area I-89
- Barre City Place State Office Building
- CCV Rutland
- Prospect Place State Office Building (starting July 2014)

OPTION 2: LONG TERM LEASE ON THE LAND:

A long term land lease with the State leasing the property is an option and can be discussed in greater detail. With this option, the State will be required to construct the building.

OPTION 3: SALE PRICE FOR THE FIVE ACRES OF LAND:

The sale price for the land is \$1,250,000 with no improvements other than access to water and sewer lines and a sewer pump station. The sewer pump station will be located along route 2 on the northwesterly corner of Lot 1 and the water line will be installed parallel to the emergency access road from the school.



CCV Rutland

E | ONE YEAR OPTION TO PURCHASE

The cost of the one year option to purchase or lease is \$50,000 and is refundable if the state decides this property does not meet their needs within ninety days. After that, the \$50,000 is nonrefundable.

Vitzthum, Sandra

From: Sent: To: Subject: Clare Rock - Richmond Planning & Zoning Dept <townplanner@gmavt.net> Thursday, July 17, 2014 9:02 AM 'Richmond Town Manager'; Vitzthum, Sandra RE: questions for two possible sites

Hi Sandy,

The notes look correct to me.

~ Clare

From: Richmond Town Manager [mailto:townmgr@gmavt.net]
Sent: Wednesday, July 16, 2014 1:43 PM
To: Vitzthum, Sandra
Cc: townplanner@gmavt.net
Subject: Re: questions for two possible sites

I think you're correct with the Water and Sewer details. Our system is designed for 275,000 gallons per day and we've got plenty of excess capacity right now.

Geoffrey Urbanik Town Manager

Town of Richmond P.O. Box 285 Richmond, VT 05477 (802) 434-5170 townmgr@gmavt.net

On Wed, Jul 16, 2014 at 1:30 PM, Vitzthum, Sandra <<u>Sandra.Vitzthum@state.vt.us</u>> wrote:

Dear Clare and Geoffrey,

Thank you both for speaking with me today. If you can today, please check my notes from our conversations and let me know if they are correct, or tell me any edits.

Thank you!

Sandy

Creamery:

-- Town water/sewer capacity is only 50% used at this point, so it should not be difficult to get a permit if the Creamery's permit expired (or if they never got one).

-- A penthouse may be exempt from the 38' maximum building height. If it is not, the State should be able to negotiate a solution with the fire department (such as a standpipe).

840 Main Street:

-- Yes, the P.C. is actively updating their zoning regulations, and this should be complete by the end of 2014.

-- The Town is very interested in extending water/sewer service to or past 850 West Main St. All parties are in favor, and an engineer has been retained to do a preliminary design and cost estimate. It should be known by the end of October if this project will proceed.

Thank you,

Sandy Vitzthum

From: Vitzthum, Sandra Sent: Tuesday, July 15, 2014 4:37 PM To: 'townplanner@gmavt.net' Subject: questions for two possible sites

Hi Clare,

I am evaluating two sites in Richmond for a State office building. I have a few questions that I hope you can help me with at your earliest convenience.

One site is 840 West Main Street, now owned by the Reaps, and the other is the old Creamery site.

Is the Creamery still served by water and sewer? Have either of its permits expired? Our use would require about 1,100 gal/day for water. Would service be sufficient for this demand?

I understand the height limit for the Creamery location is 38', based on firefighting equipment limitations. If we supply a standpipe, may we build up to 45'?

Is the revised zoning ordinance on track to be adopted by the end of 2014?

I see in a letter from Geoffrey Urbanik that the Town supports extending water and sewer service to the area near 840 West Main Street. Can you tell me how likely it is that those services will be in place by 2017?

Thank you,

Sandy Vitzthum

Sandra Vitzthum, LEED AP

Project Manager II

Department of Buildings and General Services

2 Governor Aiken Drive

Montpelier, VT 05633-5801

802-505-3389 -- mobile

802-828-3533 - fax



Ground Surface Slope Map - Ric. mond - Route 2 Vermont Agency of Natural Resources



1. 14	1: 5,000
	July 18, 2014
for general re	eference only Data lavers th

0

vermont.gov

1000	1000		_	
- N.I	\sim	-		c
- IN	100		-	-
	~		-	

Map created using ANR's Natural **Resources** Atlas

833.0 0	and the second s	416.00		833.0	833.0 Feet		
WGS_1984_Web_Mercator_Auxiliary_Sphere	1" =	417	Ft.	1cm =	50	Meters	
© Vermont Agency of Natural Resources	THIS	MAP IS	NOT T	O BE USED FO	RNAV	IGATION	

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.








Flood Hazard Areas - Richmonu - Route 2 Vermont Agency of Natural Resources

vermont.gov









Conserved Lands - Richmond - ...oute 2 Vermont Agency of Natural Resources

vermont.gov







USDA Natural Resources Conservation Service

An: Alluvial land

Udifluvents

Udifluvents

This map unit consists of very deep to bedrock, moderately well drained to poorly drained soils in narrow valleys along small streams. They formed in sandy, loamy, gravelly or cobbly and stony alluvial deposits. These soils are subject to frequent or occasional flooding by stream overflow. The important soil properties differ greatly from place to place. On-site investigation is needed to identify the soil properties and to determine the hazards and limitations for specific uses.

This map unit is not suited to cultivated crops, hay or pasture because of the hazard of flooding and the stones on the surface.

Important farmland classification:	NPSL	Land capability: 8 s	Vermont Agricultural Value Group: 11

Vermont Residential Wastewater Disposal - Group and Subgroup:

Road suitability:

Erosion hazard (off-road): Not rated

Not rated

V.- This unit is not rated as a site for soil-based residential wastewater disposal systems. Due to the variable nature of the soils, onsite investigations are needed to determine their suitability.

			PHYSICAL and	CHEMICAL	PROPERT	ES		EROSION FACTORS		
Soil name		Depth (In)	Typical texture	Clay (Pct)	Soil reaction (pH)	Permeability (In/Hr)	Organic matter (Pct)		Kf T	
Udifluvents										
			WATE	R FEATURE	<u>s</u>			<u>sc</u>	DIL FEATURES	
Soil name group high wa		Depth to seasonal	Flo	oding	Pon	ding	Hydrid			
		group high	high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?		
Udifluvents			1	Frequen	t Brief	None		Unrank	ed	
		LAND USE	LIMITATIONS			4	GRICULTU	RAL YIEL	D DATA	
Soil name		Land use	Rat	ing Re	eason **	Cr	op name		Yield / acre	
Udifluvents	Dwelli	ngs with base	ments: Not rated	S. 10			, <u> </u>			
Udifluvents	Pond	reservoir areas	s: Not rated							
Soil name		Management concern	Rating	WOODL	AND MANAC		Vermont nat	ural comm	unities	
Udifluvents	Harve	st equip opera	ability: Not rated	and the set is	for an and	10 1157 - 1	5			

USDA Natural Resources Conservation Service

MyB: Munson and Raynham silt loams, 2 to 6 percent slopes

Munson soils formed in loamy over clayey glaciolacustrine deposits and Raynham soils formed in loamy glaciolacustrine deposits on terraces and lake plains. MUNSON SOILS are very deep to bedrock and somewhat poorly drained. These soils have a perched vater table at depths of 0.5 to 2.0 feet below the surface from late Fall through early Summer. Permeability is moderate in the surface layer, moderately slow to moderate in the subsoil and slow in the substratum. RAYNHAM SOILS are very deep to bedrock and poorly drained and somewhat poorly drained. These soils have a water table at depths of 0 to 2.0 feet below the surface from late Fall through late Spring. Permeability is moderate or moderately slow in the solum and slow in the substratum.

This map unit is suited to cultivated crops if adequate drainage is provided. They are well suited to hay and pasture. A seasonal high water table may inhibit the establishment of some crops. Areas of this map unit may be classified as wetland and drainage may be regulated.

Important farmland classification:	Statewide (b)	Land capability: 3	3 w	Vermont Agricultural Value Group: 4d

Vermont Residential Wastewater Disposal - Group and Subgroup:

IVa.- This unit is generally not suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. Excessive soil wetness in association with the minimal slope is the limiting condition. Prolonged periods of saturation at or near the soil surface do not allow for the proper functioning of septic systems.

PHYSICAL and CHEMICAL PROPERTIES									EROSION FACTORS		
Soil name	Depth	Typical	Clay	Soil reaction	Permeability (In/Hr)	Organic matter			CIUKS		
	(In)	texture	(Pct)	(pH)		(Pct)	Kw	Kf	Т		
Munson	0-8	SIL	3-10	5.6 - 6.5	0.6-2	3.0-10	.49	.49	2		
	8-15	SIL	3-16	5.6 - 6.5	0.2-2	0.5-3.0	.49	.49			
	15-65	SIC	35-60	5.6 - 7.3	0-0.2	0.0-1.0	.49	.49			
Raynham	0-6	SIL	3-16	5.1 - 7.3	0.2-2	3.0-10	.49	.49	5		
	6-22	SIL	3-16	5.1 - 7.3	0.2-2	0.5-2.0	.64	.64			
	22-65	SIL	3-16	5.6 - 7.8	0.06-0.2	0.0-0.5	.64	.64			

WATER FEATURES							SOI	SOIL FEATURES		
Soil name	Hydrologic Depth to				Ponding		Hydric			
	group high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)			
Munson	D	0.5-2.0	None	1.1	None		No			
Raynham	С	0.0-2.0	None		None		Yes			

	LAND USE LIMITA	AGRICULTURAL YIELD DATA			
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Munson	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-clover	5.6 AUM
Raynham	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-legume hay	3.5 Tons
Munson	Pond reservoir areas:	Somewhat limited	Slope	Corn silage	22 Tons
Raynham	Pond reservoir areas:	Somewhat limited	Seepage	Grass hay	4 Tons

	Management	<u>v</u>	OODLAND MANA	GEMENT
Soil name	concern	Rating	Reason	Vermont natural communities
Munson	Harvest equip operability:	Poorly suited	Wetness	Valley Clayplain Forest
Raynham	Harvest equip operability:	Moderately suited	Wetness	
Munson	Road suitability:	Poorly suited	Wetness	
Raynham	Road suitability:	Poorly suited	Wetness	
Munson	Erosion hazard (off-road):	Slight		
Raynham	Erosion hazard (off-road):	Slight		

D

D

MyC: Munson and Raynham silt loams, 6 to 12 percent slopes

Munson soils formed in loamy over clayey glaciolacustrine deposits and Raynham soils formed in loamy glaciolacustrine deposits on terraces and lake plains. MUNSON SOILS are very deep to bedrock and somewhat poorly drained. These soils have a perched water table at depths of 0.5 to 2.0 feet below the surface from late Fall through early Summer. Permeability is moderate in the surface layer, moderately slow to moderate in the subsoil and slow in the substratum. RAYNHAM SOILS are very deep to bedrock and poorly drained and somewhat poorly drained. These soils have a water table at depths of 0 to 2.0 feet below the surface from late Fall through late Spring. Permeability is moderate or moderately slow in the solum and slow in the substratum.

This map unit is suited to cultivated crops. It is well suited to hay and pasture. Erosion is a hazard. A seasonal high water table may inhibit the establishment of some crops.

	Important farmland classification:	Statewide (b)	Land capability: 3 e	Vermont Agricultural Value Group: 7d
--	------------------------------------	---------------	----------------------	--------------------------------------

Vermont Residential Wastewater Disposal - Group and Subgroup:

IIId.- This unit is marginally suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natura Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The depth to the seasonal high water table is the major limitation. A detailed, site-specific analysis is generally required. On-site groundwater level monitoring and determination of induced groundwater mounding is often necessary to establish the suitability of this unit. Curtain drains may help lower the water table to an acceptable level.

PHYSICAL and CHEMICAL PROPERTIES									CTORS
Soil name	Depth	Typical	Clay	Soil reaction	Permeability (In/Hr)	Organic matter	ERUS		
Soir name	(In)	texture	(Pct)	(pH)	((Pct)	Kw	Kf	т
Munson	0-8	SIL	3-10	5.6 - 6.5	0.6-2	3.0-10	.49	.49	2
	8-15	SIL	3-16	5.6 - 6.5	0.2-2	0.5-3.0	.49	.49	
	15-65	SIC	35-60	5.6 - 7.3	0-0.2	0.0-1.0	.49	.49	
Raynham	0-6	SIL	3-16	5.1 - 7.3	0.2-2	3.0-10	.49	.49	5
	6-22	SIL	3-16	5.1 - 7.3	0.2-2	0.5-2.0	.64	.64	
	22-65	SIL	3-16	5.6 - 7.8	0.06-0.2	0.0-0.5	.64	.64	

WATER FEATURES								SOIL FEATURES	
	Hydrologic	Depth to seasonal	Floo	ding	Pon	ding	Hydric		
Soil name	group	high water table	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)	
Munson	D	0.5-2.0	None		None		No	-	
Ravnham	С	0.0-2.0	None		None		Yes		

	LAND USE LIMITA	AGRICULTURAL YIELD DATA			
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Munson	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-clover	5.6 AUM
Raynham	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-legume hay	3.5 Tons
Munson	Pond reservoir areas:	Very limited	Slope	Corn silage	20 Tons
Raynham	Pond reservoir areas:	Very limited	Slope	Grass hay	4 Tons

	Management	WOODLAND MANAGEMENT					
Soil name	concern	Rating	Reason	Vermont natural communities			
Munson	Harvest equip operability:	Poorly suited	Wetness	Valley Clayplain Forest			
Raynham	Harvest equip operability:	Moderately suited	Wetness				
Munson	Road suitability:	Poorly suited	Wetness				
Raynham	Road suitability:	Poorly suited	Wetness				
Munson	Erosion hazard (off-road):	Slight					
Raynham	Erosion hazard (off-road):	Slight					



OVERALL SCORE: 17.2/40 (# 19)

195 COLCHESTER AVENUE, BURLINGTON

Criteria, Scores, and Notes

1.	1.2/5	Site is very tight. Limited to 36 parking spaces	
		No room for exterior storage or solar array	
2.	1.5/5	Site is sloped to the east. Requires 3 story building	Size: 1.4 acres
3.	4.8/5	All utilities including fiberoptic are on site	
4.	2.0/5	Pre-existing use, dimensional requirements can	
		be met. Parking is problem. Needs Act 250 amendment	Acquisition cost: (none)
5.	2.0/5	Residential neighborhood to east; they will lose open space	Rough cost to develop: \$950,000 - \$1,200,000
6.	1.0/5	Urban restrictions to construction; demolition	TOTAL \$950,000+
1.	1.5/5	Distant from Montpelier. Hard to get to interstate	
8.	3.2/5	Closest location to UVM interns and faculty	

(c) District Specific Regulations: Design Review Overlay District:

Within this overlay district, no structure may be erected, reconstructed, substantially altered, restored, moved, or demolished or any site improvement or modification made without approval subject to the provisions of Article 3, Part 4 pertaining to Design Review and the review criteria described in Art 6.

Sec. 4.5.2 Institutional Core Campus Overlay Districts

(a) Purpose

nnnnnnn

D

D

D

D

D

D

D

D

D

0.000000

The Institutional Core Campus Overlay (ICC) districts are intended to provide for reasonable future growth for institutions within the core of their respective campuses without further intrusion into surrounding residential neighborhoods. This overlay allows increased development than would typically be found in the underlying districts. Development is intended to be more intense than the surrounding neighborhoods with higher lot coverage and larger buildings. New development should provide sensitive transitions to the historic development pattern and scale of the surrounding campus. Buildings both large and small should be designed with a high level of architectural detailing to provide visual interest and create enjoyable, human-scale spaces. Sites should be designed to be pedestrian friendly and encourage walking between buildings. Circulation should largely emphasize the needs of pedestrians and bicycles, and parking should be very limited and generally provided offsite. Where parking is provided, it should be hidden either within or underneath structures.

(b) Areas Covered.

The Institutional Core Campus Overlays as delineated on Map 4.5.2-1, and are further described as follows:

- 1. Fletcher Allen Health Care Medical Center Campus (ICC-FAHC) allows for an increased development scale and intensity than would typically be found in the adjoining and underlying districts to support continued growth and expansion of the state's academic medical center. As a regional tertiary-level care facility, on-site parking is expected to play a larger role than otherwise would be expected for other institutional campus overlays in order to accommodate the needs of patients and visitors. While outdoor spaces and circulation systems should be inviting and accommodating for pedestrians, the overall development of the campus would be expected to meet patient care requirements;
- 2. UVM Central Campus (ICC-UVM) allows for an increased development scale and intensity than would typically be found in the adjoining and underlying districts to support continued growth and expansion of the state's flagship academic institution. In contrast to the ICC-FAHC, this core campus would be expected to be dominantly pedestrian-oriented, with all but the most essential parking provided off-site. Development within this core campus should reflect the institution's core educational values in both design and quality;

v. 09.10.12



Map 4.5.2–1: Institutional Core Campus Overlay

Article 4: Zoning Maps and Districts

(c) District Specific Regulations: Fletcher Allen Health Care Medical Center Campus (ICC-FAHC);

1. Transitional Buffer:

0000000

D

D

D

20

A. The Transitional Buffer shall include all property within the area as measured from the centerlines of Colchester Avenue and East Avenue, and extending 150 feet into the ICC-FAHC District as delineated on Map 4.5.2-2 Transitional Buffer.



Map 4.5.2-2: Transitional Buffer

- B. Lot coverage shall not exceed 40% for the aggregate of all land owned by an institution and located within the Transitional Buffer.
- C. Unless replaced on site, no housing unit in a residential structure located within the Transitional Buffer shall be demolished or converted to a nonresidential use, except for housing units which are exempt from the provisions of Article 9. The Housing Replacement standards of this ordinance shall apply to any such activity.

2. Lot coverage

Maximum lot coverage shall be applied to the aggregate of all lots owned by a respective institution and located within the ICC-FAHC District. Lot coverage shall not exceed 60% except as provided below.

The maximum lot coverage for the entire tract of land owned by an institution within the ICC-FAHC District may be increased by one percent for each one percent that the Transitional Buffer coverage is less than 40%, up to a maximum of 65%.

3. Setbacks

Minimum side and rear yard setbacks in the underlying zoning district shall not be applicable within the ICC-FAHC District.

Front setbacks shall be fifteen (15') feet measured only along any street defining the Transitional Buffer. okay - I guess this include Ezst Dre. V.

4. Surface Parking

No new outdoor surface parking spaces shall be permitted unless the number of the new outdoor surface parking spaces is offset by a corresponding removal of outdoor surface parking spaces existing as of January 1, 2007, and upon the approval by the DRB.

5. Building Height

No portion of any building within the ICC-FAHC Height Overlay (as delineated on Map 4.5.2-3 ICC-FAHC Height Overlay) shall exceed the elevation of a plane running parallel to the earth at 540-feet above mean sea level. The provisions of Sec. 5.2.5 Building Height Limits shall not be applicable within the ICC-FAHC Height Overlay.



Map 4.5.2-3 ICC-FAHC Height Overlay

No portion of any building outside of the ICC-FAHC Height Overlay may exceed the elevation of a plane running parallel to sea level from the highest point of the tallest

structure at the highest elevation within the ICC-FAHC District as depicted as of January 1, 2009.

6. Density

nnhnnnn

D

D

D

D

D

D

D

D

D

In the ICC-FAHC District, density restrictions set forth in Article 4, Sec. 4.4.4 shall not apply to dormitories and rooming houses as defined in Chapter 18 of the Burlington Code of Ordinances. The restrictions on the non-residential equivalent set forth in Art. 5, Sec. 5.2.7 (a) 2 shall not apply in the ICC-FAHC District.

(d) District Specific Regulations: UVM Central Campus (ICC-UVM);

1. Transitional Buffer:

- A. The Transitional Buffer shall include all property within the area as measured from the centerlines of Colchester Avenue, East Avenue, Main Street, and South Prospect Street and extending 150 feet into the ICC-UVM District as delineated on Map 4.5.2-2 Transitional Buffer above.
- B. Lot coverage shall not exceed 40% for the aggregate of all land owned by an institution and located within the Transitional Buffer.
- C. Unless replaced on site, no housing unit in a residential structure located within the Transitional Buffer shall be demolished or converted to a nonresidential use, except for housing units which are exempt from the provisions of Article 9. Housing Replacement standards of this ordinance shall apply to any such activity.

2. Lot coverage

Maximum lot coverage shall be applied to the aggregate of all lots owned by the institution and located within the ICC -UVM District. Lot coverage shall not exceed 65% except as provided below.

The maximum lot coverage within the ICC -UVM District may be increased by one percent for each one percent that the Transitional Buffer coverage is less than 40%, up to a maximum of 70%.

3. Setbacks

Minimum side and rear yard setbacks in the underlying zoning district shall not be applicable within the ICC -UVM District.

Front setbacks shall be fifteen (15') feet measured only along any street defining the Transitional Buffer.

4. Surface Parking

No new outdoor surface parking spaces shall be permitted unless the number of the new outdoor surface parking spaces is offset by a corresponding removal of outdoor surface parking spaces existing as of January 1, 2007, and upon the approval by the DRB.

(b) Dimensional Standards and Density:

The density and intensity of development, dimensions of building lots, the heights of buildings and their setbacks from property boundary lines, and the limits on lot coverage shall be governed by the following standards:

NIA due to

V. 09.10.12

Table 4.4.2 -1	Dimensional	Standards	and Density	

Districts	Max. Intensity (floor area ratio ¹)	Max. Lot Coverage	Minimum Front ⁴	Building Set Side ²	backs (feet) Rear ²	Height (feet)
NAC	2.0 FAR	80%5	0	0	0	Max: 35
NMU	2.0 FAR	80%	06	0	0	Min: 20 ³ Max: 35
NAC- Riverside	2.0 FAR	80%	0	0	0	Min: 20 ³ Max: 35

1. Floor area ratio is defined in Art. 13 and described in Art 5. Actual maximum build out potential may be reduced by site plan and architectural design considerations of Art 6.

2. Structures shall be setback a minimum of 15-feet along any property line that abuts a residential zoning district.

 Minimum building height shall be 20-feet and 2 story's. Measurement of and exceptions to height standards are found in Art 5. Bonuses for additional building height are described in section (d)3 below.

4. All structures shall be setback 12-feet from the curb on a public street.

5. Exceptions to minimum lot coverage are provided in (d)2.

6. Notwithstanding footnote 4, the NMU district at the intersection of Pine St. and Flynn Avenue shall have a minimum front yard setback of 10 feet.

(c) Permitted and Conditional Uses:

The principal land uses that may be permitted, or conditionally permitted pursuant to the requirements of Article 3, within the Neighborhood Mixed Use districts shall be as defined in Appendix A - Use Table.

(d) District Specific Regulations:

1. Ground Floor Residential Uses Restricted

In order to maintain an active streetscape for pedestrians and pedestrian-oriented businesses and activities, residential uses shall not be permitted within 25-feet of a public street right-of-way along the street-level frontage in the NAC District.

2. Exception to Maximum Lot Coverage in NAC District

The following exceptions to the maximum lot coverage standards for the NAC District of Table 4.4.2 -1 may be provided as follows:

A. Landscaping

Developments that provide landscaping within a parking lot may increase lot coverage above the allowable 80% maximum up to a lot coverage maximum of















Conserved Lands - Burlington - .95 Colchester Ave Vermont Agency of Natural Resources

1: 10,000 July 17, 2014 1,667.0 834.00 1,667.0 Feet DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 833 Ft. 1cm = 100 Meters limited to, the warranties of merchantability, or fitness for a particular use, nor © Vermont Agency of Natural Resources THIS MAP IS NOT TO BE USED FOR NAVIGATION are any such warranties to be implied with respect to the data on this map.



NOTES

Map created using ANR's Natural Resources Atlas





GeB: Georgia stony loam, 3 to 8 percent slopes

GEORGIA SOILS formed in loamy glacial till on uplands. They are very deep to bedrock and moderately well drained. These soils have a perched water table at depths of 1.5 to 3.0 feet below the surface from late Fall through late Spring. Permeability is moderate in the solum and slow in the substratum. Depth to bedrock is greater than 40 inches.

These soils are well suited to cultivated crops, hay and pasture. Erosion is a hazard. A seasonal high water table may inhibit the establishment of some crops. Stones on the surface are troublesome in tillage and harvesting operations but they do not prohibit use.

Important farmland classification: Prime	Land capability: 2 e	Vermont Agricultural Value Group: 3
--	----------------------	-------------------------------------

Vermont Residential Wastewater Disposal - Group and Subgroup:

IIh.- This unit is moderately suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The depth to the seasonal high water table is the primary concern. Mound system construction and other site modifications are often necessary. On sloping sites, curtain drains can help lower the water table to an acceptable level. In some cases, a detailed, site-specific analysis with groundwater level monitoring and determination of induced groundwater mounding may be required to establish the suitability of this unit.

	PHYSICAL and CHEMICAL PROPERTIES									
0-11	Depth	Typical	Clay	Soil reaction	Permeability (In/Hr)	Organic matter	ERUS	EROSION FACTORS		
Soil name	(In)	texture	(Pct)	(pH)		(Pct)	Kw	Kw Kf T		
Georgia	0-8	L	7-18	5.1 - 7.3	0.6-2	3.0-8.0	.32	.32	3	
	8-26	L	5-18	5.1 - 7.3	0.6-2	0.0-1.0	.32	.37		
	26-65	L	10-18	5.1 - 7.3	0.06-0.2	0.0-0.5	.32	.37		

		WATE	R FEATURES			4	SOI	FEATURES
	Hydrologic	Depth to seasonal	Floo	ding	Pon	ding	Hydric	
Soil name	group	high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)
Georgia	С	1.5-3.0	None		None		No	

	LAND USE LIMITA	TIONS		AGRICULTURAL YIE	LD DATA
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Georgia	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-clover	6.4 AUM
Georgia	Pond reservoir areas:	Somewhat limited	Seepage	Alfalfa hay	5 Tons
Coorgia	r ond reservoir areas.	oomonnat innitou	eeopage	Grass-legume hay	4 Tons
				Corn silage	23 Tons
				Grass hay	4 Tons

	Monogement		WOODLAND MANA	GEMENT
Soil name	Management concern	Rating	Reason	Vermont natural communities
Georgia	Harvest equip operability:	Well suited		Mesic Maple-Ash-Hickory-Oak Forest,
Georgia	Road suitability:	Well suited		Rich Northern Hardwood Forest, Sugar Maple-White Ash Northern Hardwood
Georgia	Erosion hazard (off-road):	Slight		Forest Variant

USDA Natural Resources Conservation Service

AdB: Adams and Windsor loamy sands, 5 to 12 percent slopes

These soils formed in glaciofluvial or glaciolacustrine sands on outwash plains, lake plains, terraces and eskers. ADAMS SOILS are very deep to bedrock and somewhat excessively drained and excessively drained. Permeability is rapid in the solum and very apid in the substratum. Some areas of these soils have contrasting very gravelly deposits below a depth of 40 inches. WINDSOR SOILS are very deep to bedrock and excessively drained. Permeability is rapid.

This map unit is suited to cultivated crops, hay and pasture. Erosion is a hazard. Low available water capacity and droughtiness are the major management concerns.

Important farmland classification: Statewide (a)	Land capability: 4 e	Vermont Agricultural Value Group: 6
--	----------------------	-------------------------------------

Vermont Residential Wastewater Disposal - Group and Subgroup:

Ia.- This unit is well suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. The rapid permeability in the substratum is a concern. Backfilling absorption trenches with at least one foot of finer textured material or other site modifications may be necessary to slow the percolation rate enough to allow for thorough filtering of effluent.

	PHYSICAL and CHEMICAL PROPERTIES									
Soil name	Depth	Typical	Clay	Soil reaction	Permeability (In/Hr)	Organic matter	ERUS	ROSION FACTORS		
ooii name	(in)	texture	(Pct)	(pH)	(1010)	(Pct)	Kw	Kf	Т	
Adams	0-7	LS	0-5	3.6 - 6.0	6-20	2.0-5.0	.17	.17	5	
	7-30	LFS	0-5	4.5 - 6.0	6-20	1.0-3.0	.17	.17		
	30-65	LFS	0-5	4.5 - 6.5	20-100	0.0-0.5	.17	.17		
Windsor	0-6	LS	1-3	4.5 - 6.0	6-20	2.0-4.0	.17	.17	5	
	6-23	LS	0-3	4.5 - 6.0	6-20	0.5-2.0	.17	.17		
	23-65	COS	0-2	4.5 - 6.5	6-20	0.0-0.5	.10	.10		

		WATE	R FEATURES				SOIL	SOIL FEATURES			
	Hydrologic	Depth to seasonal	Floo	ding	Pono	ding	Hydric				
Soil name	group	high water table (Feet)	Frequency	Duration	Frequency	Duration	soil?	Depth to bedrock (range in inches)			
Adams	А		None		None		No				
Windsor	А		None		None		No				

	LAND USE LIMITA	AGRICULTURAL YI	ELD DATA		
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Adams	Dwellings with basements:	Somewhat limited	Slope	Grass-legume hay	4 Tons
Windsor	Dwellings with basements:	Somewhat limited	Slope	Pasture	4.5 AUM
Adams	Pond reservoir areas:	Very limited	Seepage	Corn silage	16 Tons
Windsor	Pond reservoir areas:	Very limited	Seepage		

Soil name	Management concern	WOODLAND MANAGEMENT		
		Rating	Reason	Vermont natural communities
Adams	Harvest equip operability:	Well suited	14	Hemlock-Northern Hardwood Forest, Hemlock-White Pine-Northern Hardwood Forest Variant, White Pine-Northern Hardwood Forest Variant, Hemlock Forest
Windsor	Harvest equip operability:	Well suited		
Adams	Road suitability:	Moderately suited	Slope	
Windsor	Road suitability:	Moderately suited	Slope	
Adams	Erosion hazard (off-road):	Slight		
Windsor	Erosion hazard (off-road):	Slight		

How Different Site Locations for the Future ANR & AAFM Laboratory Will Affect the Programs They Support Aug. 05, 2014





50

DDD

B

D

Results from the Survey of ANR § AAFM Lab Users and Lab Personnel



 $\begin{array}{c} & & \\$

An Evaluation of Prospective Site Locations for the Agency of Natural Resources and Agency of Agriculture, Food, and Markets Laboratory

Vermont Department of Environmental Conservation Kellie Merrell, Trey Martin, Neil Kamman, John Schmeltzer, and Ben Whitney

5 August 2014

Cover Photo of LaRosa Laboratory post Tropical Storm Irene Flood

EXECUTIVE SUMMARY

The optimal location for the future combined Agency of Natural Resources (ANR) and Agency of Agriculture, Food and Markets (AAFM) laboratory is currently under evaluation. To provide operational efficiency data and associated information to decision-makers, Programs from the Agency of Natural Resources and Agency of Agriculture, Food and Markets (ANR, AAFM)were asked to complete a survey aimed at capturing how different site locations of the future combined laboratory may affect operational efficiency. The survey had 49 valid respondents, 28 from ANR and 21 from AAFM. Twenty different programs in ANR and 11 programs in AAFM were represented in the survey. Both quantitative and qualitative information were obtained from the survey.



Ten-year projection of operational cost and CO2 emissions for six potential locations of the AAFM-ANR Laboratory.

The quantitative information can be used to gauge the cost effectiveness of several possible locations, and to consider the impacts to climate related to emissions from fuel usage. The graphs above show that salary and fuel costs incurred by ANR and AAFM, and associated CO2 emissions, can be minimized based on selection of an optimum laboratory location. Specifically:

- The combined cost of both fuel and salary that ANR and AAFM may spend annually on transit between current work stations and the future lab ranges from ~\$237,000 to \$430,000 annually depending upon location.
- From a ten-year program usage perspective, the most cost effective locations are Montpelier, Berlin, and Waterbury. Costs increase substantially for locations in Burlington, Randolph, and Milton.
- Expressed in terms of greenhouse gas emissions resulting from the transport of staff, supplies,

Executive Summary

and samples, CO2 emissions would be doubled for a site in Milton, and would be between 45% and 60% greater for Randolph and Burlington, respectively, relative to the lowest emissions location, near Montpelier.

Laboratory staff and programmatic users were also asked to state preference based upon their operational usage and individual work efficiencies, which revealed:

- Property owned by the state in Berlin or another location within 5 miles of Montpelier had the largest proportion of respondents, 37%, who ranked that location as their first choice.
- Roughly a quarter of respondents (26%) ranked Waterbury as their first choice. Twenty-one percent of respondents ranked property not owned by the state in Montpelier as their most preferred site.
- Sixteen percent of respondents preferred Burlington.
- Combining the results from Montpelier and Berlin, 58% of respondents chose a site within 5 miles of Montpelier as their number one preference, and 84% expressed preference for a location no further from Montpelier than Waterbury.
- Thirty-eight percent of respondents said the location of the lab would affect their usage patterns, while an additional 13% said it might affect their use of the lab.

The survey was designed to capture the impacts that location would have on ANR and AAFM internal clients of laboratory services, and also laboratory staff chemists of both agencies who work in the facility. Respondents fell into three broad groupings depending on their relationship to the lab, and within each group there was consensus that:

- ANR and AAFM staff that presently work at the laboratory in Burlington agreed that the lab should be located in Burlington.
- Staff located in temporary laboratory settings in Essex, Montpelier, and Berlin also expressed preferences for their current respective locations.
- The third and largest group of respondents, ANR and AAFM clients of lab services, agreed that from programmatic standpoints it was best to locate the lab in a central Vermont location, optimally between Waterbury and Berlin.
INTRODUCTION

In 2011, Tropical Storm Irene destroyed the LaRosa Laboratory located in Waterbury, VT. The LaRosa Laboratory served many programs within both the Agency of Natural Resources and Agency of Agriculture, Food and Markets (ANR, AAFM). The location of the lab could impact programmatic usage of the facility by the various component functional laboratories at the Agency of Natural Resources and the Agency of Agriculture, Food and Markets. In order to inform this process from the bottom up, a team from within ANR designed and implemented the survey summarized in this document, to capture and quantify the effect different site locations may have on programmatic usage. The information gathered and presented herein is intended to provide input to be used by decision-makers in making assessments as to the optimum location for a new facility to support current and future program needs within both Agencies.

A Survey was designed to be sent to both Agencies. The survey was designed to capture the number of trips typically made to the facility by laboratory users from across ANR and AAFM, and other operational factors. The results presented herein use both quantitative and qualitative assessments. The quantitative approach was used in order that each site can be evaluated objectively against the other sites proposed, based on a set of readily calculated time, cost, and greenhouse gas emissions measures. The qualitative approach is used to capture effects not easily enumerated and graphed. Data for both approaches was collected via Survey Monkey.

METHODS

Survey Monkey was used to survey all programs within the Vermont Agency of Natural Resources and Agency of Agriculture, Food and Markets to collect the quantitative and qualitative information below. Prior to developing the estimates presented below, scientists at ANR examined the underlying survey responses, and conducted a quality assurance evaluation to ensure that the responses reflected in the quantitative section of this report are accurate reflections of program usage. By contrast, in the more free-form qualitative section of this report, responses are presented as they were given by the respondents, with no crosschecking. As such, while the qualitative results provide an indication of generalized staff preference towards location, the quantitative results present reasonable and conservative cost and emissions measures.

QUANTITITATIVE METHOD

The quantitative method for calculating the impact the location of the laboratory has on programs is based solely on the number of trips a program makes to the laboratory each year. It calculates several measures: 1) annual mileage; 2) annual fuel cost; 3) annual hours; 4) annual salary; and, 5) annual pounds of carbon emitted, using the assumptions listed in Table 1.

Methods

Table 1. Annual impact on programs calculated from number of trips to the lab a program makes in a year

Annual Impact	Calculation		
Mileage	Round trip mileage from respondent's official work station to laboratory location*, using the MapQuest online mileage estimation tool		
Fuel cost	Round trip fuel cost, from respondent's official work station to Laboratory Location* Uses Chevy Colorado and assumes 16 city mpg, 22 hwy mpg and \$3.65/gal on MapQuest		
Staff hours	Round trip travel time, from respondent's official work station to Laboratory Location*		
Salary	Multiplies staff hours by \$45.67 per hour. This salary includes fringe, overhead, benefits, etc.		
Pounds carbon emitted	Assumes average of 17 mpg fuel economy (mileage/17 mpg) X 19.6 lbs/gal		

- 1) Waterbury: 103, S. Main St., Waterbury
- 2) Burlington: DOH-111 Colchester Ave, Burlington
- 3) Property owned by state: Berlin or other location 4 miles from National Life
- 4) Property not owned state: Montpelier location 1 mile from National Life
- 5) Milton, near I 89 north of Milton exit
- 6) Randolph, at Vermont Technical College.

Each program provided an estimate of the number of trips they make to the laboratory in a year. This number was intended to reflect the number of trips that would be made to accomplish the program's mission, based on usage patterns. Its intent was that the location was not to be taken into consideration when estimating the number of visits, but rather should have considered the pre-Irene 'total trips to the LaRosa Lab in a year' to provide this number, or envisioned total trips to achieve programmatic goals.

QUALITATIVE METHOD

Programs are asked to answer the following questions, with the context provided in the below paragraph.

The Agencies consider that a systematic process evaluating prospective locations of a joint Vermont Agency of Natural Resources and Vermont Agency of Agriculture laboratory would provide useful information to decision-makers. The following sites were evaluated as part of the qualitative analysis: 1) Waterbury: 103, S. Main St., Waterbury, 2) Burlington: DOH-111 Colchester Ave, Burlington, 3) Property owned by the state near Berlin, VT, 4) Property not owned by the state near Montpelier or Berlin. 5) A site in Milton, VT, and 6) a site near Vermont Technical College. A copy of the survey is provided in Appendix A.

RESULTS

QUANTITATIVE APPROACH RESULTS

A total of 28 ANR staff and 21 AAFM staff responded to the survey. ANR respondents had workstations either in Montpelier, in one of the ANR Regional Offices, certain home offices, or in one of the State's fish hatcheries. AAFM staff were similarly located throughout the state.

The total number of trips to the lab that AAFM and ANR staff makes to the lab each year was 4,215. Of these, 2,398 are made by AAFM, and 1,817 by ANR. These estimates include only programs that answered the survey. The results may be conservative in that certain programs may have chosen not to respond to the survey.

To perform the quantitative analysis, the total number of trips made from each work station was tallied and calculations were performed for each proposed lab location. Calculations could not be made for the six respondents who failed to list their official work station. The six respondents who did not name their official work station make 837 trips to the lab each year, these trips could not be included in the quantitative analysis since the starting location was unknown. This is another reason for which the results may be considered conservative.

The graphical findings presented below permit a comparison of costs, expressed as staff time, staff salary, fuel costs, and greenhouse gas emissions, for each of the six locations evaluated using the data gathered by this survey.



The location showing the lowest number of miles incurred is that within the vicinity of Montpelier. Annual mileage ANR & AAFM staff incur using State vehicles increases as the distance from this location increases.

1 0 1000 D D D D D D D D D D D D D D D D D D) D 0

Results



The annual aggregate hours that ANR and AAFM staff will spend in transit also increases as the distance from Montpelier increases (Figure 2).



Depending on where the lab is sited, ANR & AAFM would spend between \$188,399 and \$357,514 in annual staff salaries transporting samples, equipment, supplies, or making other necessary trips to the facility.



The range in spending that ANR and AAFM will have annually in fuel costs for these trips depends on location, and ranges from \$37,442 to 72,873.



The location of the laboratory will impact the amount of greenhouse gases resulting from ANR and AAFM vehicular use transporting samples, equipment, supplies, or making other necessary trips to the facility. Estimates range from 121 to 243 tons/year.

D

D

D

D

D

D

D

D

D



Using 2014 dollar values, and conservatively assuming fixed levels of usage and operations over a ten year period, the combined cost of fuel and salary that ANR and AAFM will spend transporting samples, equipment, supplies, or making other necessary trips to the facility ranges from \$2.3 million to \$4.3 million.

RESULTS

QUALITATIVE APPROACH RESULTS

Both a summary of the results of the survey and individual responses can be viewed at the Survey Monkey website here <u>https://www.surveymonkey.com/results/SM-MRMJP2N8/</u>. The results from that site have been pasted below. To view responses from each individual respondent, visit the web link above. The results presented in the remainder of this document are unedited from the original survey responses.

			Export
What Agency, Dep Section do Answered	o you work in?	n and	
Answer Choices		Responses	
Answer Choices What Agency do you work for?	Responses	Responses	51
	Responses Responses	ALC: NO	51 40
What Agency do you work for?		100.00%	
What Agency do you work for?What Department?	Responses	100.00% 78.43%	40

C C C C Ċ C C C C C C C C

C

All three departments within the Agency of Natural Resources responded, with majority of respondents from the Department of Environmental Conservation (Table 3). Seven different departments were denoted by AAFM staff. Only 40 of the 51 respondents denoted which department they worked in. Light green highlighting in tables denotes answers from AAFM.

Department	Number of Responses (40 responded in total)		
Environmental Conservation	25		
Fish and Wildlife	2		
Forests, Parks and Recreation	3		
Plant Industry			
Ag Lab	2		
Food Safety and Consumer Protection			
ARMES	2		
Plant Inspector	1		
Food and Markets	1		
Ag N/A	1		

Ten different divisions from ANR responded, with the majority of respondents from within the Watershed Management Division (Table 4). Four different divisions from AAFM responded, with the majority of respondents from Food Safety and Consumer Protection and Agricultural Resource Management. Only 44 of the 51 respondents denoted the division they were from.

Division	Number of Responses (44 responded in total)
Watershed Management	12
Drinking Water and Groundwater Protection	1
Forestry	3
Fisheries	2
Air Quality and Climate	1
VTDEC Lab	4
Waste Management and Prevention	4
Facilities and Engineering	1
ANR	1
Compliance and Enforcement	1
Ag Lab	1
Food Safety and Consumer Protection (FSCP)	6
Agricultural Resource Management (ARM, ARMES, ARMS)	6
Dairy	1

Not all respondents listed the section they were from, but for the 22 of 30 ANR respondents that did, there were 17 sections represented. The lakes section in ANR had the most respondents with five programs within that section responding (Table 5). Five sections from AAFM were represented by the survey with the Dairy section having the majority of respondents.

Section	Number of Responses (41 of 51 responded in total)
Lakes	5
Indirect Discharge and Underground Injection Control	1
Protection	2
Fish Culture	2
Air Monitoring	1
Non-Automated Chemistry, ICP Metals, Fibers/Feed/Fertilizer	1
Metals and Organics (and Laboratory)	1
Sites Management	1
Agency Facilities	1
Fish Culture	1
МАРР	3
Operation and Management	1
Wetlands	1
Biomonitoring and Aquatic Studies	1
SMS	1
Sites	1
Dairy	7
Ag Lab	5
Consumer Protection	2
Plant Industry	3
Meat and Poultry Inspection	1

Page 14 of 48

Twenty different programs in ANR and eleven programs in AAFM were represented in the survey (Table 6).

Program	Number of Responses (36 of 51 responded in total)
Lake Assessment	1
ID & UIC	1
Forest Health	2
Fish Health Program	1
NA	1
Aquatic Invasive Species	1
Lakeshore Assessment	1
Air, Water and Soil	1
Elizabeth Mine Project	1
Solid Waste Management	1
Acid Lakes Monitoring (LTM)	1
Ecosystem Restoration Program	1
Forest Biology Lab	1
Wastewater Management	1
Monitoring and Bioassessment	1
Planning	1
Monitoring, Assessment and Planning Program	1
Memphremagog Tributary Water Sampling	1
Lay Monitoring Program	1
Champlain Monitoring	1
Dairy/Animal Health	3
Dairy	1
Farm/Dairy Inspector	1

Page 15 of 48

How choice of location of lab will affect the programs using it

Dairy and Molecular Genetics	1
Weights & Measures/Consumer Protection/Marc Paquette	2
Milk Quality Enhancement Program	1
Organics	1
Mosquito-borne Surveillance	1
Pesticides	1
Entomology	1
CAPS/FPOSP	1

03

Export -

C

C

C

C

Ċ

In 250 words or less, describe what the purpose of your program is and how a lab helps you accomplish that mission.

Answered: 26 Skipped: 4

varies. vector survey needs lab space for identification. Pathology needs lab space for diagnostics, support for the nursery program, cooperative agreements with federal agencies require providing lab space for regulatory and quarantine follow-up, new programs coming on line in the next few years will need molecular and chemistry support

7/22/2014 4:39 PM View respondent's answers

Maintain Regulatory compliance in the pesticide feed and fertilizer industries. 7/22/2014 4:12 PM View respondent's answers

The Dairy Section's inspectors are required to collect monthly survailance samples from almost all dairy products producers in the state at least four out of every six months, every month if at all possible. This also includes a number of dairy farm raw milk samples that are not rountinely collected by a coop or milk handler since these operations are producer / dealer dairy farms connected to a processing operation. All plant water systems defined as potable must be collected and tested every six months or when a change to the system has been made. Dairy farm water systems are collected and tested every three years or when a change has been made. Dairy inspectors may also be required to collect samples pertaining to a customer compliant or other regulatory action requiring additional testing. It is imperative that the state dairy lab have flexiblity when additional sampling and analysis is required to be run.

7/20/2014 4:48 PM View respondent's answers

Sampling for the Grade A dairy program, BRT samples, water samples, quality control samples. I sample the farms and the dairy plants and the dairy lab runs the tests so the program is in compliance with the PMO requirements.

7/18/2014 4:09 PM View respondent's answers

I am an analyst at the lab. The Dairy Regulatory program which I serve uses our data to meet the Federal standards detailed in the Pasteurized Milk Ordinance. Samples originate from all corners of the state. Our molecular lab serves the needs of the Plant industry, Animal Health and ARMES programs. Again samples are obtained from all over the state and we have performed testing on samples from other states, such as NH

7/17/2014 8:52 AM View respondent's answers

The program provides consumer protection, equity in the marketplace, and economic development anywhere a transaction occurs that involves a weight or measure. The weights and measures (W&M)lab provides calibration services in legal metrology to the inspection program and private industry. It also advises the inspection program, industry, and consumers regarding laws, regulations, technical requirements, and best practices. If the W&M lab were not open, VT's W&M inspection program would need to contract with an out of state lab to have all test equipment/standards calibrated on a rotating annual schedule. This would require multiple out of state trips with trucks, large amount of hours, and significant cost to the Agency in testing fees. Having an instate lab also allows industry to utilize the services provided for a fee. This contributes to funding

Page 17 of 48

How choice of location of lab will affect the programs using it

the lab program. Many instate companies are pleased that they do not need to travel out of state for services as they recognize the cost involved to do so. The VT lab also provides services to many out of state companies. The lab is also utlized by program staff that includes the state apiarist/ag resource specialist for technical work on bees as well as periodic work that impacts the VT Maple indsutry.

7/16/2014 10:32 AM View respondent's answers

I bring finished and raw milk samples to be tested for bacteria, scc, components. I also bring water samples for bacteria analysis.

7/14/2014 2:56 PM View respondent's answers

We are the regulatory body for the Dairy Section that provides oversight of all milk processing, hauling, and dairy farms in VT. FDA requires specific laboratory test be run on all processors and farms on monthly basis. Dairy Section staff does sampling monthly to meet these requirements. All samples taken are run at our Dairy Lab. Without meeting these requirements, NO VT milk or milk products could be marketed outside the state.

7/14/2014 1:21 PM View respondent's answers

The Milk Quality Enhansement Program provides assistance to dairy farmers and milk processors to maintain, improve and enhance the quality of Vermont produced milk. The program uses the laboratory's milk culturing and somatic cell counting abilities (milk quality tests) to help determine the cause(s) of poor milk quality and to monitor the effects of a course of action to improve its quality.

7/14/2014 12:39 PM View respondent's answers

I work in the lab

7/14/2014 12:03 PM View respondent's answers

We are watching mosquitoes and mosquito-borne diseases in the state of Vermont, in order to warn people quickly of those viruses, transmitted by mosquitoes and can cause harm to human and domestic animals. We are working everyday in lab to identify mosquitoes and other insects, process them, and make them ready for virus detection and identification, will is carried out by Vermont Department of Health (VDH). Since we are working closely with VDH, and need to be in connection with the staff and their labs everyday, it is best for us to be located somewhere as close as possible. It makes all connections much easier. Currently several people should drive weekly between our lab in Berlin and VDH in Burlington. We waste much time and also pay carriers to quickly move our packages of sensitive biological materials to VDH in Burlington. Being around Burlington will lead to lots of saving in money and time.

7/14/2014 11:56 AM View respondent's answers

The meat and poultry inspection program runs an inspection program that is equal to the USDA FSIS meat inspection program. As part of the requirements of running the program, we do validation sampling at establishments that process meat and poultry. Currently, the microbiological sampling consists of E. coli O157:H7, Listeria monocytogenes, Salmonella, Campylobacter, non-O157H7 STEC, all run by the VT Dept of Health lab and one out-of-state lab. We also sample the water source in these establishments for potability. The ag lab runs these samples if we can get them to the lab from the establishments in the required sampling time frame. At the establishments that are too far away, we use the VT Dept of Health lab, and have the inspectors mail these water samples in in the provided mailing tubes. (we tried mailing the water samples to our ag lab, but the Post office would not actually read the address on the mailer, and always just send the mailing tubes to the VDH lab! It was discussed with the post master but was never resolved, so we just buy sample kits from VDH now for those establishments that are too far away from the lab). Additionally, the ag lab runs Protein/water/fat/ in ground samples for economic adulteration.

7/14/2014 11:05 AM View respondent's answers

Consumer Protection runs the Weights and Measures Lab. It is imperative to maintain this portion of the Agriculture Lab to support fair commerce in Vermont. It is also vitally important to keep the Weights and Measures lab in close proximity to the main office, as there is significant interaction between the office in Montpelier and our lab. Our lab tests and calibrates the test weights and measures used by service persons to ensure that all devices used in weighing and measuring in Vermont are accurate. We also test scales used by law enforcement and regulatory standards.

7/14/2014 10:59 AM View respondent's answers

My program uses the lab space to organize mosquito surveillance activities and identify mosquitoes using a climate controlled environment. It also provides some insect identification services to Pest Control Operators (PCOs) and sometimes to the public. It also does tick and exotic pest identifications.

7/14/2014 9:08 AM View respondent's answers

I work in the lab

7/14/2014 8:41 AM View respondent's answers

The purpose of the Lake Assessment Program is to monitor compliance of Vermont's inland lakes and ponds with the Clean Water Act. It is funded by the EPA performance partnership grant that the Watershed Management Division receives that requires that the status and trends of Vermont's inland lakes be monitored. In order to do this, water chemistry samples must be collected and processed in an EPA approved laboratory. Trend analysis is performed primarily using the 38 years of spring turnover data that has been collected as part of the spring Phosphorus monitoring. Consistency in method and laboratory used is critical for long term monitoring efforts like this. For determining status, the lake assessment program spends 2 days conducting a full assessment during the summer index period. This is when comprehensive data and is only done once every 10-20 years. Hence, the chemistry data collected during this visit is important to understanding the condition of a lake during its most productive and typically most popular time of year. Lakes that are going to be listed on the TMDL list or that have already been listed are monitored as part of this program. Consistent, reliable, high quality chemistry data is essential to all the functions of the lake assessment program. The program relies on the VTDEC laboratory for these services.

We do not interact with the lab presently.

6/9/2014 1:40 PM View respondent's answers

The Forest Biology Laboratory supports the FPR mission of maintaining healthy and productive forests throughout the state. Our activities include • Providing information, identification, diagnoses and recommendations for insects and diseases to foresters, land managers and landowners, maple syrup producers and Christmas tree growers, pest control operators, landscapers, the general public, and others. • Monitoring native pest species through annual survey and detection procedures such as pheromone and sticky traps and ground surveys, and maintaining historical records on native pests. • Tracking and addressing newly arriving species, such as deer ticks, emerald ash borer, Asian longhorned beetle and others. • Maintaining Vermont entomological records and collections, contributing to state and regional faunal lists, and promoting access to collected data, cataloged references and curated specimens. • Observing and recording state-wide phenological events that help determine long-term climatic trends. These lab functions enable us to integrate and implement strategies for sustaining forest health. We anticipate reinstating our forest pathology position and capabilities in the next 10 years.

6/6/2014 9:57 AM View respondent's answers

Page 19 of 48 How choice of location of lab will affect the programs using it

The Fish Health Lab's mission is to protect Vermont's wild fish populations as well as fish in commercial and state fish hatcheries by preventing the introduction and/or spread of serious fish pathogens and diseases in Vermont. The fish health lab provides state of the art disease diagnostic and fish health inspection services, conducting annual fish health inspections at 5 state fish culture facilities as well as private fish hatcheries located throughout the state. Additionally, the lab provides diagnostic investigations and diagnosis of fish disease outbreaks when they occur on state and/or commercial fish culture facilities. By monitoring an individual fish culture facility's disease status, professionals can isolate fish disease outbreaks and prevent their spread into other fish culture facilities or State waters. The fish health lab conducts fish health testing on Vermont's wild populations of fish as well as fish kill investigations. The Fish Health Lab is a cooperative partner with the U.S. Fish and Wildlife Service assisting with the National Wild Fish Health Survey. This program serves as a surveillance program to guide management decisions involving fish movement and passage. Fish health results of laboratory testing are used to manage intra and interstate movement of fish including fish to be stocked into public waters. The lab's services allow the state to partner through the Northeast Fish Health Committee in following the New England Fish Health Guidelines and the Northeast Fish Health Importation Guidance for managing fish health.

6/5/2014 2:58 PM View respondent's answers

The AQCD Air Monitoring Section performs criteria and air toxics monitoring for the State of Vermont. The lab serves the AQCD by providing analytical analysis (GS/MS, HPLC,ICP/MS) for samples collected for VOC, Carbonyl, and Metals toxics pollutants The lab also will provide a properly designed weighing room to weight sampled filter masses, and provide a operational lab space to calibrate, reference, and repair instrumentation. It is imperative to have properly designed hoods, compressed air, vacuum, and DI water for our activities. Other AQCD sections use the space if calibrations for field equipment are required. 6/3/2014 1:16 PM View respondent's answers

Our program provides information, identification and diagnoses of insects and diseases to foresters, land managers and landowners, maple syrup producers and Christmas tree growers, pest control operators, landscapers, the general public, and others. We monitor native pest species through annual survey and detection procedures such as pheromone and sticky traps and ground surveys, and maintain historical records on native pests. We monitor and address newly arriving species (such as deer ticks, emerald ash borer and others). We maintain Vermont entomological records and collections, contribute to state and regional faunal lists, and promote access to collected data, cataloged references and curated specimens. We monitor state-wide phenological events that help determine long-term climatic trends.

5/29/2014 4:22 PM View respondent's answers

To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health for the benefit of this and future generations. The laboratory has provided the necessary space and equipment to perform metals analysis in water and soil samples, organics analysis of air samples and organics analysis of pesticides and herbicides in household and water samples.

5/29/2014 2:05 PM View respondent's answers

At the Elizabeth Mine Superfund Site, we will be responsible to perform operation and maintenance, which includes periodic monitoring of surface waters and monitoring wells to ensure the corrective action is protective of human health and the environment.

5/29/2014 8:56 AM View respondent's answers

The only time we would use the lab services is in the event of a coliform hit at a state park. Generally park staff or their hired consultants take care of delivering samples to a lab.

5/29/2014 7:43 AM View respondent's answers

I work at the Lab.

5/28/2014 2:30 PM View respondent's answers

Page 20 of 48 How choice of location of lab will affect the programs using it

Analyzing samples collected by various programs. 5/28/2014 2:13 PM View respondent's answers

Our Program is responsible for semi-annual monitoring of three closed landfills. We occasionally take nonroutine samples from other open or closed landfills, illegal dumpsites, and other waste management facilities. 5/28/2014 1:57 PM View respondent's answers

The Fish Health Lab's mission is to protect Vermont's wild fish populations as well as fish in commercial and state fish hatcheries by preventing the introduction and/or spread of serious fish pathogens and diseases in Vermont. The fish health lab provides state of the art disease diagnostic and fish health inspection services, conducting annual fish health inspections at 5 state fish culture facilities as well as private fish hatcheries located throughout the state. Additionally, the lab provides diagnostic investigations and diagnosis of fish disease outbreaks when they occur on state and/or commercial fish culture facilities. By monitoring an individual fish culture facility's disease status, professionals can isolate fish disease outbreaks and prevent their spread into other fish culture facilities or State waters. The fish health lab conducts fish health testing on Vermont's wild populations of fish as well as fish kill investigations. The Fish Health Lab is a cooperative partner with the U.S. Fish and Wildlife Service assisting with the National Wild Fish Health Survey. This program serves as a surveillance program to guide management decisions involving fish movement and passage. Fish health results of laboratory testing are used to manage intra and interstate movement of fish including fish to be stocked into public waters. The lab's services allow the state to partner through the Northeast Fish Health Committee in following the New England Fish Health Guidelines and the Northeast Fish Health Importation Guidance for managing fish health.

5/28/2014 1:10 PM View respondent's answers

The Acid Lakes program monitors the acidity of Vermont's sensitive lakes to determine if the Federal Clean Air Act (and its amendments) are effective. Due to the low level concentrations of chemicals being measured and the long term trend detection, it is essential to maintain a high quality and consistent analysis at a certified laboratory. The most important chemical parameters have short "holding times", so they require immediate submission for analysis. Due to this program and others in New England, the EPA has demonstrated the on going effectiveness of clean air regulations, and linked them to the health of waterbodies. This information has also helped Vermont and other states win lawsuits against polluters in the Ohio River Valley.

5/28/2014 1:00 PM View respondent's answers

I am an environmental scientist who works in the Forest Biology portion of the laboratory. I seldom do field work, but most often work in the lab preparing sampling equipment and supplies for those of our group who do the field work. During the summer months Forest Health personnel deploy traps for various forest insect pests e.g. forest tent caterpillar, spruce budworm, saddled prominent, Asian longhorned beetle and emerald ash borer. I identify the target and some non target species caught in these traps, and prepare some of the insects for inclusion in our permanent reference collection The Forest Biology Lab maintains a reference collection of mostly Vermont insects. During the colder months I work to clean and revamp the collection which still has not been restored to pre-Irene condition. A laboratory is essential to my work.

5/28/2014 11:45 AM View respondent's answers

ERP's mission takes action to accelerate the reduction of sediment and nutrient pollution, such as algae bloom-causing phosphorus, from uncontrolled runoff into Vermont's streams and rivers, lakes and ponds and wetlands. The ERP provides leadership, financial resources, technical and educational assistance, and a sustained commitment to ensure that Vermont achieves and maintains high water quality standards, healthy and naturally stable rivers, well functioning wetlands, floodplains, and river corridors that can protect against flood impacts, and clean and well-buffered lakes. A lab helps ERP achieve that mission by providing reliable water quality data when documenting current conditions and changes in conditions that could be attributed to land use management and/or land treatment practices.

5/28/2014 11:41 AM View respondent's answers

The Wastewater Management Program is responsible for monitoring the influent and effluent from NPDES and State permitted facilities discharging to waters of the State. Samples are collected from Municipal, industrial and pre-treatment facilities to ensure the integrity of the self monitoring program. That is, we select specific facilities to sample based on history, complaints, suspected upsets etc. to determine that analytical results of permitted parameters are within specified acceptable limits. We also evaluate the laboratory techniques and methods at each of the facilities and inspect the physical structures and equipment. Another important aspect of the program is training of wastewater operators and laboratory technicians. It is imperative that analyses are performed correctly to ensure the integrity of the NPDES program. Pre Irene there was a very impressive (built with federally funds) training room within the DEC laboratory. Twenty to thirty analysts were trained annually to perform all NPDES permitted parameters. Proper equipment, methods and techniques were demonstrated with sufficient instruments to allow important Hands-On training.

5/28/2014 9:25 AM View respondent's answers

The purpose of the wetland monitoring program is to assess the condition of wetlands across the state, develop biocriteria to evaluate degradation related to human disturbance, and track changes of wetland communities sensitive to the effects of climate change. The lab processes our water samples and provides us with QA/QC services specific to the laboratory. We also use the lab for plant identification, storing our herbarium and field gear. Currently we have no space for our processing and storing of plant vouchers, herbarium storage, and gear storage. The space in Dewey is too small for us and we do not have a designated spot because everything was mixed up in the move and Alan Quackenbush (past Program Mananger) didn't have the time to make sure we ended up with space. We have space in Berlin, but this is very inconvenient and not adequate for plant processing and storing our herbarium materials.

5/28/2014 8:45 AM View respondent's answers

CED exists to investigate alleged violations of Vermont environmental rules, regulations, and statutes and to correct and/or prosecute any violations that are found. The lab analyzes samples that are collected by CED in the course of investigations and by virtue of the test results provides evidence in regards to the guilt or innocence of the involved respondents and the severity of the problems being investigated.

5/27/2014 4:37 PM View respondent's answers

Local watershed groups from southeastern VT send water samples to the lab for processing. These range from Brattleboro, Cavendish, Woodstock and Killington.

5/27/2014 3:58 PM View respondent's answers

The Vermont Lay Monitoring Program has been tracking the long-term nutrient enrichment of Vermont lakes and ponds since 1979. Utilizing a network of volunteers throughout the state, more than 92 lakes and 40 stations on Lake Champlain have been sampled weekly through the summer months as part of the program throughout this 35 year history. These volunteers are trained by Lay Monitoring Program staff and the program operates under an EPA approved Quality Assurance Project Plan. Each season, Lay Monitors collectively donate more than 800 hours of their time to make hundreds of sampling trips. The DEC laboratory plays a critical role, processing approximately 2,500 samples for total phosphorus and chl-a each year. These results are summarized in a program report produced annually and are accessible by the general public through an online data portal.

5/27/2014 3:37 PM View respondent's answers

The water chemistry lab runs water quality samples from nutrients to metals, that are stressors to aquatic life. The Biomonitoring sections uses this information to help document what wq stressors are most significant and could be limiting to the aquatic biota.

5/27/2014 3:31 PM View respondent's answers

The Planning section has taken on the responsibility for sampling tributaries to Lake Memphremagog as is necessary for the development of a Phosphorus TMDL for the Lake. The sampling allows for an estimate of current phosphorus loading and will allow for tracking future changes in loading due to implementation of projects in the basin. Also included in this " sampling program" are samples that have been taken to help address other discrete water quality issues such as the Ticklenaked Pond Phosphorus TMDL where water samples were key to identifying phosphorus source areas in this phosphorus impaired lakes watershed. 5/27/2014 3:23 PM View respondent's answers

Water quality monitoring of Lake Champlain. All of our nutrients, metals and dissolved oxygen samples are analyzed here.

5/27/2014 3:07 PM View respondent's answers

Our program requires responsible parties to hire consultants to conduct necessary work, which usually involves sampling and analysis. This analysis needs to be done in a lab.

5/27/2014 2:54 PM View respondent's answers

Our program provides state oversight on the cleanup of properties contaminated with hazardous materials. Over the years our program delivered numerous samples to the lab including samples collected from private drinking water wells, as well as groundwater samples from state lead sites. Confidence in the lab's ability to properly analyze samples eroded a number of years ago, in part due to samples not being run within the required hold times. It would be nice to see the lab return to the days when we delivered a large number of samples for analysis.

5/27/2014 2:41 PM View respondent's answers

ANR and AAFM programs have a diversity of reasons they use the laboratory and they are articulated in the text under Figure 10.



Total		47
No	59.57%	28
Yes	40.43%	19
Answer Choices	Responses	

Figure 2.

Q4

Forty percent of respondents have their official work station in Montpelier (Figure 11). Slightly more than half of the ANR respondents (57%) have their official workstation in Montpelier. AAFM respondents are spread out across the state. Locations of respondents not based in Montpelier are shown under Figure 12.



В	er	1	Π

7/22/2014 4:40 PM View respondent's answers

Shaftsbury, Vermont

7/20/2014 4:49 PM View respondent's answers

Shrewsbury

7/18/2014 4:10 PM View respondent's answers

Burlington

7/17/2014 8:52 AM View respondent's answers

My work is divided between the Berlin location and the field. There are 6 other Consumer Protection Specialists stationed around the state.

7/16/2014 10:32 AM View respondent's answers

Home Westmore

7/14/2014 2:57 PM View respondent's answers

Orwell, VT

7/14/2014 1:22 PM View respondent's answers

New Haven, Vermont

7/14/2014 12:40 PM View respondent's answers

UVM

7/14/2014 12:04 PM View respondent's answers

Berlin

7/14/2014 11:56 AM View respondent's answers

the admin staff are in Montpelier. The field staff (who take the samples) have their homes as their work station, but the samples are taken at the various establishments around the state. 7/14/2014 11:06 AM View respondent's answers

Berlin, VT

7/14/2014 9:08 AM View respondent's answers

Burlington

7/14/2014 8:42 AM View respondent's answers

Page 25 of 48 How choice of location of lab will affect the programs using it

Essex Junction 6/6/2014 9:57 AM	View respondent's answers
Burlington 5/30/2014 3:09 PM	View respondent's answers
UVM 5/30/2014 7:55 AM	View respondent's answers
Essex Junction 5/29/2014 4:23 PM	View respondent's answers
Hills Building, Unive 5/29/2014 2:08 PM	view respondent's answers
Burlington 5/28/2014 2:30 PM	View respondent's answers
UVM Laboratory 5/28/2014 2:14 PM	View respondent's answers
UVM Hills Building,	Burlington, VT
5/28/2014 1:10 PM	View respondent's answers
	a shared desk at National Life. Comment on question #6: I must be where the lab is. If it pelier (my home) than Essex Junction is, I may not be able to continue to work in my View respondent's answers
Essex Office 5/28/2014 8:45 AM	View respondent's answers
Seven (7) investiga	tors located around the state with two (2) being in Montpelier. View respondent's answers
Springfield 5/27/2014 3:59 PM	View respondent's answers
J/2/12014 J.JJ FM	

The 43% of ANR respondents that do not have their work station in Montpelier cited various locations across the state. 13% (n=4) of these were located in Essex, 20% (n=6) in Burlington, 3% (n=1) in Springfield, 3% (n=1) in St. Johnsbury and one respondent responded for 5 investigators located around the state and two located in Montpelier. Of the 21 AAFM respondents, their official work stations were Montpelier (n=2), Burlington (n=3), Shrewsbury (n=1), Westmore (n=1), Orwell (n=1), New Haven (n=1), Shaftsbury (n=2), and Berlin (n=4) and there were 6 respondents who did not note their work station location (Figure 12).



Figure 4.

Thirty-eight percent of respondents said the location of the lab would affect their use of it. Thirteen percent said maybe it would affect their use of the lab and 49% said it would not affect their use of the laboratory (Figure 12).

In 6 bullets, describe why lab location will be important to you? If your work station is not Montpelier, be sure to clearly articulate where your work station is and which laboratory location or distance you are talking about.

Answered: 44 Skipped: 7

An	swer Choices		Responses	1917 - 201
7	Bullet 1	Responses	100.00%	44
4	Bullet 2	Responses	68.18%	30
÷	Bullet 3	Responses	56.82%	25
-	Bullet 4	Responses	40.91%	18
•	Bullet 5	Responses	27.27%	12
	Bullet 6	Responses	22.73%	10

Figure 5.

Q7

Numerous reasons were articulated about why the location of the lab is important to the respondent. Users talked about how the location in proximity to Montpelier would affect their efficiency and access to colleagues and lab personnel. Lab employees talked about opportunities that locating the lab in Burlington might bring for lab collaborations with UVM (Figure 13 Bullets).

Bullet 1	Responses	100.00%	44

Export -

7/22/2014 4:41 PM	View respondent's answers
windshield time	
7/22/2014 4:12 PM	View respondent's answers
work with Healhth d	
7/22/2014 2:18 PM	View respondent's answers
central vermont is t	he key to controlling mileage when delivering samples after collection for analysis
7/20/2014 4:52 PM	View respondent's answers
Long sample route	starting from Shrewsbury.
7/18/2014 4:15 PM	View respondent's answers
Increased Collabor	ation with University of Vermont
7/17/2014 9:09 AM	View respondent's answers
Travel distance for	
7/16/2014 10:32 AM	View respondent's answers
where are the locat	ions
7/14/2014 2:58 PM	View respondent's answers
access to parking	
7/14/2014 1:26 PM	View respondent's answers
	was more convenient, for me, than Burlington site because it is more centerally
located. 7/14/2014 12:48 PM	View respondent's answers
1/14/2014 12.40 PM	view respondent's answers
A central VT locatio	on would be convenient for me as I live in Barre
7/14/2014 12:05 PM	View respondent's answers
I work in Berlin lab. (Burlington). As we	Location is very important, because our job is highly linked with labs in VDH are closer to VDH, our jobs as well as the duties of many staff in VDH will be easier
	View respondent's answers
location is importer	nt bc of expense of travel (time/milage) by field staff to the lab to deliver samples
	View respondent's answers
111201111120100	THE INPOLENCE STREET
Need to be close for	or interactive work
7/14/2014 11:02 AM	View respondent's answers
I live on the eastern	n side of Vermont and already commune 1 hour to work by car every day.
7/14/2014 9:13 AM	View respondent's answers
at the Labortarory	
or the caportaroly	

7/14/2014 7:03 AM View respondent's answers

 Location directly affects my efficiency. I drive long distances to sample lakes using Montpol 	elier as my
start and end point.	

7/1/2014 9:46 AM View respondent's answers

The location is not important to these programs. 6/9/2014 1:41 PM View respondent's answers

Our lab is temporarily located in the Essex Junction State complex. 6/6/2014 9:59 AM View respondent's answers

A laboratory location within 15 minute drive from Montpelier would be most conveniant to accompilish needed task.

6/5/2014 3:00 PM View respondent's answers

Proximity to NL for those whose duty station is NL (ie potentially 4 of 7 employees)

6/3/2014 1:27 PM View respondent's answers

work efficiency

6/3/2014 9:33 AM View respondent's answers

Burlington

5/30/2014 3:09 PM View respondent's answers

Proximity to other lab personnel

5/29/2014 4:24 PM View respondent's answers

Hills Building, University of Vermont, Burlington. 5/29/2014 2:09 PM View respondent's answers

Given the number of anticipated sampling events per year at Elizabeth Mine and the fact that the samples have a six months holding time, lab location is not critical.

5/29/2014 8:58 AM View respondent's answers

Its not

5/29/2014 7:45 AM View respondent's answers

Lab staff - believe Chittenden County best siting for growth of the Lab. 5/28/2014 2:31 PM View respondent's answers

work in laboratory in Hills Agricultural Bldg., UVM campus

5/28/2014 2:14 PM View respondent's answers

Location is important as a matter of convenience in picking up sampling containers or dropping off samples

5/28/2014 1:59 PM View respondent's answers

current work station is temporary lab space at UVM, Burlington, VT - commute to new lab needs to be less than 1 hour from home

5/28/2014 1:24 PM View respondent's answers

Half my time is associated with laboratory work, half with office work. Office and Lab need to be colocated.

5/28/2014 1:08 PM View respondent's answers

My home is Montpelier, but my work station - the lab - is in Essex Junction. 5/28/2014 12:01 PM View respondent's answers

ease of access - ie near I-89 exit

5/28/2014 11:45 AM View respondent's answers

hold times for specific samples (E. Coli 6 hrs etc.) 5/28/2014 9:26 AM View respondent's answers

My office is in Essex, so a work station at the new lab would be beneficial for using to process water samples, process wetland plants vouchers for QA/QC purposes, and store our herbarium materials, field gear and identification guides.

5/28/2014 8:48 AM View respondent's answers

sample holding times can be exceeded if travel time is too high - samples coming from literally anywhere in the state

5/27/2014 5:01 PM View respondent's answers

Partner organizations must cover the cost of mileage for the round-trip to the lab from as far away as Brattleboro. For volunteer groups distance is and will be cost prohibitive to the success of the program. 5/27/2014 4:01 PM View respondent's answers

A central location (Waterbury/Montpelier) is critical due to: 5/27/2014 3:37 PM View respondent's answers

I often spend time at both the lab and office 5/27/2014 3:35 PM View respondent's answers

From St J the laboratory loacation is a key factor in the time it takes to get samples to the lab. The difference between an hour drive to the lab (montpelier area) and an hour and 45 minutes often makes the difference in being able to take and drop off samples on one day.

5/27/2014 3:31 PM View respondent's answers

We drop off samples at the lab after every sampling event.

5/27/2014 3:09 PM View respondent's answers

the location of the state lab has no impact on my job.

5/27/2014 2:55 PM View respondent's answers

convenient location would make it easier to drop off samples but this is not as critical as having a fully functioning lab

5/27/2014 2:42 PM View respondent's answers

a a sa a sa a sa a lila b
30

2000

A D D D D

D

D

D

000

/22/2014 4:41 PM	View respondent's answers
would be nice to a /22/2014 4:12 PM	affiliate with a learning institutiion View respondent's answers
ny work station is t nd cost effective	Shaftsbury and my work area is the whole state of vermont, so central vermont is time
/20/2014 4:52 PM	View respondent's answers
ime limit for samp /18/2014 4:15 PM	les to arrive at dairy lab in Burlington. View respondent's answers
creased Collabor	ation with the VT DOH lab
/17/2014 9:09 AM	View respondent's answers
entral VT location /16/2014 10:32 AM	works well for program and staff. View respondent's answers
entral to all users	
/14/2014 1:26 PM	View respondent's answers
/14/2014 12:00 PM	ge of work stations of field staff, a central location in the state is most convenient
-	equires direct input from our portion of the lab. View respondent's answers
	ot consider a longer commute as a viable work option. View respondent's answers
	s for samples I take or the public or EPA has interest in me taking are short. Distance
	y to sample needed parameters and deliver them within their hold time. View respondent's answers
vill affect my abilit 7/1/2014 9:46 AM	
vill affect my abilit 7/1/2014 9:46 AM Regardless of loca 6/6/2014 9:59 AM	View respondent's answers tion, a priority is to share laboratory facilities and interactions with other scientists.
vill affect my abilit /1/2014 9:46 AM Regardless of loca //6/2014 9:59 AM Convience - easy	View respondent's answers tion, a priority is to share laboratory facilities and interactions with other scientists. View respondent's answers
vill affect my abilit //1/2014 9:46 AM Regardless of loca //6/2014 9:59 AM Convience - easy //3/2014 1:27 PM uel conservation	View respondent's answers ation, a priority is to share laboratory facilities and interactions with other scientists. View respondent's answers access to workspace, bench chemist, other programs. View respondent's answers
vill affect my abilit 7/1/2014 9:46 AM Regardless of loca 6/6/2014 9:59 AM Convience - easy 6/3/2014 1:27 PM uel conservation	View respondent's answers ation, a priority is to share laboratory facilities and interactions with other scientists. View respondent's answers access to workspace, bench chemist, other programs.
vill affect my abilit 7/1/2014 9:46 AM Regardless of loca 6/6/2014 9:59 AM Convience - easy a 6/3/2014 1:27 PM uel conservation 6/3/2014 9:33 AM can walk to work	View respondent's answers ation, a priority is to share laboratory facilities and interactions with other scientists. View respondent's answers access to workspace, bench chemist, other programs. View respondent's answers View respondent's answers
vill affect my abilit 7/1/2014 9:46 AM Regardless of loca 6/6/2014 9:59 AM Convience - easy is 6/3/2014 1:27 PM uel conservation 6/3/2014 9:33 AM can walk to work 6/30/2014 3:09 PM	View respondent's answers ation, a priority is to share laboratory facilities and interactions with other scientists. View respondent's answers access to workspace, bench chemist, other programs. View respondent's answers

Page 32 of 48

Its not

5/29/2014 7:45 AM View respondent's answers

Location may be important when consulting with lab staff, e.g., analytical methods, lab capabilities, and expertise in chemistry.

5/28/2014 1:59 PM View respondent's answers

3 of 5 state Fish culture facitities which are when the bulk of samples are collected are on the western rte 7 corridor of the state.

5/28/2014 1:24 PM View respondent's answers

If the lab and office is not co-located, my productivity will drop by 25-30% or over time will increase by the same factor.

5/28/2014 1:08 PM View respondent's answers

The new lab would need to be accessible by public transportation. 5/28/2014 12:01 PM View respondent's answers

centrally located - for our clients who collect & deliver samples 5/28/2014 11:45 AM View respondent's answers

availability of State vehicle

5/28/2014 9:26 AM View respondent's answers

If the lab is in close proximity to both Montpelier and Essex, this will make the delivery of samples easier, especially if it is close to a main access road.

View respondent's answers 5/28/2014 8:48 AM

the logistics of getting samples physically to the lab within the holding time period 5/27/2014 5:01 PM View respondent's answers

Statewide network of lakes sampled

5/27/2014 3:37 PM View respondent's answers

By co locating all biological functions in one lab reference materials and lab supplies can be easily shared 5/27/2014 3:35 PM View respondent's answers

There are many people who travel from St Johnsbury to Montpelier daily and so the lab location close to national life will determine the ability of these individuals being able to devliver samples further reducting total milage and time involved

5/27/2014 3:31 PM View respondent's answers

A lab that isn't between Montpelier and the Champlain Valley would be out of the way. 5/27/2014 3:09 PM View respondent's answers

- Bullet 3	Responses	56.82%	25

Page 33 of 48 How choice of location of lab will affect the programs using it

	a resonable commute foe all three of our lab chemists
7/20/2014 4:52 PM	View respondent's answers
Would be better to	have dairy lab back in a more central location.
7/18/2014 4:15 PM	View respondent's answers
Access to Professi	onal development through coursework at the University of Vermont
7/17/2014 9:09 AM	View respondent's answers
Centrally located for	or cutomers.
7/16/2014 10:32 AM	View respondent's answers
within reasonable of	commute for staff
7/14/2014 1:26 PM	View respondent's answers
Lots of time will be	saved, because we should often commute between Berlin and Burlington.
	View respondent's answers
I am considering W	aterbury, Berlin or around montpelier as centrally located
7/14/2014 11:35 AM	
	rally located, and is working very well.
7/14/2014 11:02 AM	rally located, and is working very well. View respondent's answers ility is able to provide better accomodations that the lab I presently use, it may not
7/14/2014 11:02 AM Unless the new fac make sense to mov	View respondent's answers ility is able to provide better accomodations that the lab I presently use, it may not re.
7/14/2014 11:02 AM Unless the new fac make sense to mov	View respondent's answers ility is able to provide better accomodations that the lab I presently use, it may not
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab.	View respondent's answers ility is able to provide better accomodations that the lab I presently use, it may not re.
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should	View respondent's answers ility is able to provide better accomodations that the lab I presently use, it may not view respondent's answers he instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab.
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t	View respondent's answers illity is able to provide better accomodations that the lab I presently use, it may not ve. View respondent's answers the instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t 6/6/2014 9:59 AM	View respondent's answers ility is able to provide better accomodations that the lab I presently use, it may not re. View respondent's answers the instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees hroughout the state.
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t 6/6/2014 9:59 AM	View respondent's answers Illity is able to provide better accomodations that the lab I presently use, it may not ve. View respondent's answers The instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees hroughout the state. View respondent's answers
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t 6/6/2014 9:59 AM Producitvity- Less t 6/3/2014 1:27 PM	View respondent's answers Ility is able to provide better accomodations that the lab I presently use, it may not ve. View respondent's answers The instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees hroughout the state. View respondent's answers ravel time, access to Division and Department programs.
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t 6/6/2014 9:59 AM Producitvity- Less t 6/3/2014 1:27 PM global responsibility	View respondent's answers Illty is able to provide better accomodations that the lab I presently use, it may not view respondent's answers The instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees hroughout the state. View respondent's answers ravel time, access to Division and Department programs. View respondent's answers
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t 6/6/2014 9:59 AM Producitvity- Less t 6/3/2014 1:27 PM global responsibility 6/3/2014 9:33 AM	View respondent's answers Illty is able to provide better accomodations that the lab I presently use, it may not ve. View respondent's answers The instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees hroughout the state. View respondent's answers ravel time, access to Division and Department programs. View respondent's answers y of an "environemnetal " agency
7/14/2014 11:02 AM Unless the new fac make sense to mov 7/14/2014 9:13 AM 3. While I uses son processed in a lab. 7/1/2014 9:46 AM The options should but for users from t 6/6/2014 9:59 AM Producitvity- Less t 6/3/2014 1:27 PM	View respondent's answers Illty is able to provide better accomodations that the lab I presently use, it may not ve. View respondent's answers The instrumentation in the field to take readings real time, some samples must be I may have to reduce those samples if I don't have the time to get them to the lab. View respondent's answers be accessible in terms of parking and public transportation, not only for lab employees hroughout the state. View respondent's answers ravel time, access to Division and Department programs. View respondent's answers y of an "environemnetal " agency

close proximity to UVM provides interns, seasonal employees and collaboration between UVM and F&W dept.

5/28/2014 1:24 PM View respondent's answers

The farther the lab is from the office, the more my productivity will drop. 5/28/2014 1:08 PM View respondent's answers

If the lab were closer to Montpelier, I would be willing to work more hours... 5/28/2014 12:01 PM View respondent's answers

close to National Life bldg - helps with being able to help lab personnel 5/28/2014 11:45 AM View respondent's answers

travel time (inspection in Bennington, sample delivered in time for prep and analysis to Burlington-tough) 5/28/2014 9:26 AM View respondent's answers

If the lab is too far from Essex we will end up having two spaces instead of one to be more time efficient. 5/28/2014 8:48 AM View respondent's answers

a centrally located lab is the most beneficial to the unit as a whole - otherwise some region will be adversely impacted

5/27/2014 5:01 PM View respondent's answers

High frequency of visits to lab (at least twice a week) in order for samples to be processed within hold times

5/27/2014 3:37 PM View respondent's answers

We are water oriented and Forest and parks and Ag entomologist are more terrestrial oriented so expertise can be shared

5/27/2014 3:35 PM View respondent's answers

With E. coli samplign in particular there is a limited hold time and so the location of the lab when sampling from St Johnsbury becomes even more inportant and limits the number and location of E. coli samples that can be practically taken on a given day from distant portions of the Northeast Kindgom.

5/27/2014 3:31 PM View respondent's answers

 Bı	zlk	et.	4

Responses

40.91%

Increased revenue to Burlington	by acting as a contract lab for UVM researchers - drastically increased since we move
7/17/2014 9:09 AM	View respondent's answers
Close proximity to (Montpelier).	Montpelier desired for easy/efficient access to both lab and program center
7/16/2014 10:32 AM	View respondent's answers
longterm location	
7/14/2014 1:26 PM	View respondent's answers
The option to be a Burlington lab mor	ble to mail in samples would be a wonderful alternative for our situation, and make the e of an option
7/14/2014 11:35 AM	View respondent's answers
We would like the portions of the Ag	Weights and Measures lab left in Berlin, as our function is different than the other lab.
7/14/2014 11:02 AM	View respondent's answers
	on of the lab is close to the geographic center of the state, a shift away from this center, culty surveying the entire state.
7/14/2014 9:13 AM	View respondent's answers
4. Direct, in persor data discarded du samples after all la	n communication with laboratory chemists and administration folks results in less sample e to miscommunication. The further from Montpelier the lab is, the more I bring in ab staff have left.
7/1/2014 9:46 AM	View respondent's answers
We provide servic	es for FPR staff from five district offices.
6/6/2014 9:59 AM	View respondent's answers
Logistical program	planning considerations minimized.
6/3/2014 1:27 PM	View respondent's answers
climate chamge	
6/3/2014 9:33 AM	View respondent's answers
Its not	the second se
5/29/2014 7:45 AM	View respondent's answers

5/28/2014 1:24 PM View respondent's answers

Lab, office, field equipment and boat storage in a single location would be the only sensible solution. 5/28/2014 1:08 PM View respondent's answers

By riding the bus, my time away from home is 13 hours. My paid time is 8 hours. A long day. 5/28/2014 12:01 PM View respondent's answers

commercial labs allow late delivery. State lab workers leave at 4:00!! 5/28/2014 9:26 AM· View respondent's answers

Greatest efficiency when office, equipment storage, and lab are co-located, or located within a short drive 5/27/2014 3:37 PM View respondent's answers

It is most important to have the biology lab very near Mont office space since I spend about 1/2 time in each setting

5/27/2014 3:35 PM View respondent's answers

There are also the logistics of getting bottles and prelogs from the lab which can add extra tribs to the lab 5/27/2014 3:31 PM View respondent's answers

 Bullet 5	Responses	27.27%	12

Greater Access to skilled labor pool in Chittenden County to replace the large number of employees retiring in the next 4 years

7/17/2014 9:09 AM View respondent's answers

Locating lab considerable distance from Montpelier and program managers lessens communication. 7/16/2014 10:32 AM View respondent's answers

easy building access

7/14/2014 1:26 PM View respondent's answers

Presently parking and storage facility is perfect for what my program does.

7/14/2014 9:13 AM View respondent's answers

My field days are 12 hours long, not counting sample delivery time. I am in the field 5-6 months out of the year.

7/1/2014 9:46 AM View respondent's answers

Commuting distance for the majority of lab staff should be considered. 6/6/2014 9:59 AM View respondent's answers

Commuting distance for current employees scheduled to have duty station changed 6/3/2014 1:27 PM View respondent's answers

Its not

5/29/2014 7:45 AM View respondent's answers

services needed to house this type and scope of building exist in Chittenden county in and around the Burlington area

5/28/2014 1:24 PM View respondent's answers

Those collecting the samples need to have easy access and communication with chemists in order to insure high quality data.

5/28/2014 1:08 PM View respondent's answers

Page 37 of 48 How choice of location of lab will affect the programs using it

A closer lab would enable a quick car trip to work for unexpected assignments 5/28/2014 12:01 PM View respondent's answers

central location for training

5/28/2014 9:26 AM View respondent's answers

 Bullet 6

Responses 22.73%

10

Easy access to I-89 and Route 7 corridor

7/17/2014 9:09 AM View respondent's answers

Locating lab considerable distance from Montpelier isolates staff from their own Agency/Program. 7/16/2014 10:32 AM View respondent's answers

parking for piossible meetings

7/14/2014 1:26 PM View respondent's answers

6. There is an interest in reducing the amount of overtime state employees work. The further the lab is moved from Montpelier, the more overtime I will need to work in order to do my job. 7/1/2014 9:46 AM View respondent's answers

Proximity to Montpelier headquarters may be important. 6/6/2014 9:59 AM View respondent's answers

Financial considerations to program.

6/3/2014 1:27 PM View respondent's answers

Its not

5/29/2014 7:45 AM View respondent's answers

need to consolodate the 2 "pieces" of the Fish Health Lab into 1 building - currently part is in Roxbury with the main lab in Burlington

5/28/2014 1:24 PM View respondent's answers

A typical day involves back and forth between office and lab work, hence the need for it to be co-located 5/28/2014 1:08 PM View respondent's answers

A lab farther away than Essex is now may cause me to look for another job. 5/28/2014 12:01 PM View respondent's answers



Figure 6.

Interpreting the results presented as average ranking for ranked questions, as in the figure Survey Monkey used in Figure 14 is not terribly helpful in this case. The highest ranking any one of the sites could have gotten was 10, with 10 being most desirable. Waterbury, 'Property owned by state within 5 miles of Montpelier', and 'Property not owned by the state in Montpelier' all ranked similarly (ranks 3.00, 2.87 and 2.37 respectively). The least preferred location was Burlington with a rank of 1.77. Note, interpretation of this question and its answer can be confusing. Respondents ranks were that 1 = most preferred and 4 = least preferred, whereas the analysis done by Survey Monkey uses 'average rank', where the higher the average rank, the more popular that response was (Figure 14).

A better way to look at the results is in the tabular form in Figure 15.



Answered: 43 Skipped: 8

Customize

Export -

	*	1 -	2 -	3	4	Total -	Average Ranking
	Property not owned by state in Montpelier	20.93% 9	11.63% 5	51.16% 22	16.28% 7	43	2.37
*	Waterbury: 103 South Main Street, Waterbury, roughly 13 miles from Montpelier	25.58% 11	48.84% 21	25.58% 11	0.00%	43	3 00
4	Property owned by state in Berlin or other location within roughly five miles of Montpelier	37.21% 16	30.23% 13	13.95% 6	18.60% 8	43	2.86
	Site in Burlington, roughly 38 mites from Montpelier	16.28% 7	9.30% 4 +	9.30%	65.12% 28	43	1.77

Figure 7.

08

Property owned by the state in Berlin or other location within 5 miles of Montpelier had the largest proportion of respondents, 37%, rank that location as their first choice. Roughly a quarter of respondents (26%) ranked Waterbury as their first choice. Twenty-one percent of respondents ranked property not owned by the state in Montpelier as their most preferred site. Only 16% of respondents chose Burlington. If you combine the results from Montpelier and Berlin, 58% of respondents chose a site within 5 miles of Montpelier as their number one preference. The vast majority of respondents, 84%, chose Montpelier, Berlin or Waterbury as their first choice.

Waterbury ranked highest as folks second best site (49%). Site not owned by the state in Montpelier ranked highest as folks third best site (51%). The choice with the highest percentage consensus of all was the 65% of respondents that ranked Burlington as their least preferred site (Figure 15).



Total

Comments (12)

Figure 8.

Twenty-one percent of respondents said that the location of the lab would affect their demand for the lab's services (Figure 16). It should be noted that at least one ANR user of the lab no longer uses the lab

Page 41 of 48 How choice of location of lab will affect the programs using it

service since the lab was moved to Burlington. The state parks take weekly *E. coli* samples at their swim beaches throughout the state and prior to Irene they sent samples to the VTDEC lab in Waterbury. They no longer use the lab. The park program did not take this survey. Comments received show that programs will investigate other options like buying in situ meters, using other types of data, contracting with private labs more conveniently located and scale back some parameters altogether if the lab is not located in central Vermont, with at least one program contracting in Massachusetts now. Other comments show that some programs have to take their samples regardless and don't have wiggle room to change, so they simply have to figure out the logistics of how to get to wherever the lab ends up.

Comments

Dairy testing program is federally mandated. Sample load will be constant, no matter the location. 7/17/2014 9:12 AM View respondent's answers

Location farther away from central VT will reduce out of state customers. Several customers from NH utilize our services. Locating the facility 40 miles farther north west will likely encourage these companies to seek services closer to their place of business such as the Maine or Mass. labs. 7/16/2014 10:32 AM View respondent's answers

Question doesn't apply to me 7/14/2014 12:07 PM View respondent's answers

We are working closely with VDH, and need to be in connection with the staff and their labs everyday, therefore it is best for us to be located somewhere as close as possible to Burlington. It makes all connections much easier. Currently several people should drive weekly between our lab in Berlin and VDH in Burlington. We waste much time and also pay carriers to quickly move our packages of sensitive biological materials to VDH in Burlington. Being around Burlington will lead to lots of saving in money and time. If not right in Burlington, at least as close as possible.

7/14/2014 12:04 PM View respondent's answers

Since I would not be able to get some samples to the lab within their hold time anymore, I would take fewer of them or stop taking them altogether regardless of the need. One example is turbidity samples. We have clear standards for turbidity in our Vermont Water Quality Standards and they are important to our understanding of lake compliance with the Clean Water Act. These samples are also important for enforcement cases to determine if a discharge is a violation or not. I would investigate the use of in situ meters and evaluate the cost of purchasing and maintaining those instruments with the cost we currently pay for those services with the lab. I would invest more time and energy into using biological indices of lake health rather than chemical ones. As a major user of the chemistry lab services, the lab will need to take into account that these services may no longer be purchased and it may affect the budget they were anticipating would sustain the lab on an annual basis.

7/1/2014 9:46 AM View respondent's answers

Working from Montpelier and currently having the lab in Burlington is not ideal, but we work around it. There are numerous staff who will in or near Burlington that can, and do, act as couriers going to or from work. Again, it would be more advantageous to locate the lab closer to Montpelier, but no reasonable distance will negatively influence our usage.

5/28/2014 2:03 PM View respondent's answers

We are obligated by an agreement with the EPA to collect certain parameters at certain locations, so we will be submitting the same number of samples regardless. 5/28/2014 1:20 PM View respondent's answers

Not Applicable

5/28/2014 12:04 PM View respondent's answers

Demand for lab services if located on non-state owned property in Montpelier would probably not differ when compared to #1 and #2. Demand for lab services if located in Burlington would decline if located in Burlington since such location is convenient to people & projects in northwestern VT. 5/28/2014 11:48 AM View respondent's answers

It is very difficult to perform a full facility inspection, collect samples and drive to deliver samples to the DEC lab by 4:00. Commercial laboratories provide late delivery, lab delivery services at convenient locations throughout the State and other conveniences such as sample bottle delivery (I am referring to the clean, preserved sample bottles for sample collection). It is much more convenient to utilize these services than to be confined to limited services provided by the State lab.

5/28/2014 9:26 AM View respondent's answers

Site 4 may result in the use of outside labs because of logistical issues. 5 of 7 investigators have easy access to Montpelier - only 2 have easy access to Burlington

5/27/2014 5:05 PM View respondent's answers

The greater the distance the less participation from partner groups due to cost of travel. With the lab currently in Burlington it is near useless to programs in southern VT. Alternative lab services have been arranged and samples are not going to Massachusetts to be processed.

5/27/2014 4:04 PM View respondent's answers

Q10

Please add any other information relevant to the siting of the lab that you think would be helpful to BGS, the administration and legislature as they choose a site to build a joint Agency of Natural Resources and Agency of Agriculture laboratory

Answered: 16 Skipped: 14

Figure 9.

Export -

the decision to site the lab should be based on program needs and the availability/utility of properties first, and not on the personal wishes, biases, or beliefs of executive branch employees.

7/22/2014 4:43 PM View respondent's answers

adequate parking for sample delivery would be nice for a change and time effective compared to the three spots we are allowed currently at the UVM campus, often they are being used by non-agency vehicles 7/20/2014 4:55 PM View respondent's answers

Burlington is the prime site for the lab. Easy access to the University of Vermont and the VT DOH lab. Greater access to skilled labor force to replace outgoing scientists. Directly off of I-89 and Route 7 corridors. Convenient access to University of Vermont for professional development. Existing VT DOH lab sample courier services could be utilized by ANR and AG field staff to reduce mileage costs. 7/17/2014 9:19 AM View respondent's answers

A central location in VT in the Berlin to Waterbury corridor would work well for our program. Such a location would be beneficial for program staff and customer travel and allow close proximity to the program managers located in Montpelier. It would be helpful in terms of communication between staff and managers as well as team building on an Agency level.

7/16/2014 10:33 AM View respondent's answers

It was nice of UVM to provide a space but the parking and access are very limiting factors in Burlington. It would be nice to see the jobs placed back into the pre-Irene areas. 7/14/2014 1:30 PM View respondent's answers

Access to the widest range of individuals (both state employees and private citizens utilizing the lab) is critical. This access should include reliable mail/fedex/ups/currier services.

7/14/2014 11:38 AM View respondent's answers

Weights and Measures requires a different type of lab, and is very well suited to its' present location. 7/14/2014 11:04 AM View respondent's answers

I very strongly urge BGS to co-house the laboratory with ANR's field operations center as close to National Life as possible. The reason to do this would be to make the work ANR does more efficient and to encourage inter and intra departmental partnerships. ANR currently (and imminently with the Annex) leases a lot of substandard space for all aspects of its field operations. Some of this space is located in flood plains, putting ANR's property in harms way and in a place where it may end up harming the environment if it were to be washed away. If BGS were to factor in what ANR spends annually on this substandard space and add it to this project, it could result in an even better facility that aids ANR in accomplishing its mission. It would also keep ANR from housing its equipment in flood plains, a place it encourages the public not to house its infrastructure. I urge you to please consider incorporating this into the planning for the laboratory. Thank you!

In my years of service to the state, I've found that the ability to interact with colleagues is extremely important to me and to my work.

6/6/2014 10:00 AM View respondent's answers

UVM and the DEC should be collaborating more. Were doing the same exact stuff, a building over, but we're not collaborating at all. Why is that? It would be a lot more cost effective, wouldn't it? 5/30/2014 3:11 PM View respondent's answers

With the heavy employee turnover in the laboratory over the past 10 years it may be desirable to be in the Burlington area with regard to a qualified and ample applicant pool.

5/29/2014 2:12 PM View respondent's answers

From my perspective, I have no clear preference between the locations, except that the Burlington Location is clearly my fourth choice.

5/29/2014 9:04 AM View respondent's answers

The SLAM report that the State contracted to have done by a professional group that looked at absolutely everything in re: to feasibility of having the Lab(s) and where best sited, the SLAM report noted that for future growth of services and expertise the new Lab would be best sited in Chittenden county and preferably affiliated with the new DOH Lab and/or UVM. I agree 100%. I think the discussion of where the new lab building should be sited, should be based on where the lab has the best chance of growing into a high-quality regional Lab and increase the services it provides to all clients (existing and new), attracting new clients and thus more revenue to the State coffers and developing more expertise. I know UVM is building a new STEM building on campus, not sure if that has been explored to collaborate with UVM and add space in this new construction for the State Lab, or add a wing onto the new DOH Lab, which I understand has already been deemed too small. I truly think that if the new DEC/AAFM Lab can be located in Chittenden County this would be the best possible area to have the highest quality, multi-service Lab 10-20 years from now. As a tax payer, I hope BGS explores the possibility of adding on to the new DOH Lab as this would solve DOH's issue of needing more space (even though they haven't moved in yet!), and also create a new Lab for DEC/AAFM (maybe there are permit or space issues). I would think the cost would be less(?) as some infrastructure is already there that can be shared with the new DEC/AAFM Lab. I agree with the SLAM report that collaboration and proximity to UVM and DOH Lab can only be beneficial to the new DEC/AAFM Lab in the future. Already being on UVM campus has it's benefits, the Dept. of F & W Lab biologist noted that UVM staff are processing some samples for free that F & W do not have the equipment for, it's much easier attracting interns, etc. DEC Lab staff have been interacting with UVM staff & faculty re: sampling & analysis. I think if we leave Chittenden County, the new DEC/AAFM Lab will not grow into a multi-faceted facility, but only offer a narrow range of analyses that current clients need. One question I found interesting in this survey was, "if the

Lab was not near Montpelier, would you continue to use it?" I found this interesting as I understand that the private labs that offer the services needed are also located in Chittenden County or out-of-State. 5/29/2014 7:31 AM View respondent's answers

I feel in order to position the laboratory for the future, it would need to be located near a large education institution and metropolitan area. if not located near a metropolitan area, then you are catering to current clients and not new clients who would use the laboratory in other ways, therefore, limiting growth. If transportation of samples is going to be an issue, then certainly a scheduled courier service could be implemented adding to efficiencies.

5/28/2014 2:28 PM View respondent's answers

Really do not see why it needs to be put in central Vermont. The wealth of services, population, expertise, ability to collaborate and network with individuals closely associated with an environmental lab would be on or near the University of Vermont.

5/28/2014 1:38 PM View respondent's answers

A joint lab is a great move. However, unless it serves the State's mission to protect waters, fish health, monitor air pollution and animal health, it will not be effective. Making such an investment should be for the long term, maximizing personnel efficiency, at least matching what we had in Waterbury. 5/28/2014 1:24 PM View respondent's answers The joint nature of this future lab is important. At the old lab my supervisor and I at the FPR Forest Biology Lab frequently consulted with and shared reference material with DEC and AG employees. We all miss that. 5/28/2014 12:08 PM View respondent's answers

A central location for wastewater laboratory technician training is essential to providing adequate training. 5/28/2014 9:26 AM View respondent's answers

I think the siting should exist somewhere between Montpelier and Burlington near 89. This would most likely be the most economical based on where people live, work and travel to. Waterbury was really a very central location for everyone and still is.

5/28/2014 8:53 AM View respondent's answers

colocation of ANR resources is the most efficient 5/27/2014 5:06 PM View respondent's answers

If this is to be a facility useful to the ENTIRE state then even Berlin is too far north. A more central location such as the Randolph region would be more useful. Therefore Berlin is by far the best option of those on the table.

5/27/2014 4:07 PM View respondent's answers

Water Quality sampling allows our program to target projects where sources of phosphorus or other pollutants are coming from based on DIRECT measurements of pollution levels. A laboratory location far to the East of Montpelier adds significant travel time for those based in the northeast, Southeast or Central locations in the state which would reduce our ability to continue water sampling efforts at a level essential for targeting cost efficient pollution reduction efforts.

5/27/2014 3:44 PM View respondent's answers

The very best and site would be the lower parking area at National Life. National Life should be approached to sell this piece of land or lease to state. It makes all the difference in the world to be on same campus. National Life should be approached by the State the governor if need be, as we have leased a huge amount of space from NL.

5/27/2014 3:38 PM View respondent's answers

Appendix A – Original Survey

Dear AAFM / ANR Laboratory Users,

For the last two years, leadership and staff from the Agency of Natural Resources and Agency of Agriculture, Food and Markets have worked collaboratively on a comprehensive strategic planning process to plan for the future of our laboratory.

In the coming months, the Department of Buildings and General Services will be working with us to finalize the selection of possible locations for the siting of the new combined AAFM / ANR Laboratory Facility. In order to assist BGS' decision-making process, staff are being requested to complete a survey which is intended to document some of the operational costs associated with one of four possible facility locations, each incrementally further from our base of operations in Montpelier. Please note that one of the location choices, "a site within a one-mile radius of National Life," is included as a control location. BGS has made it clear to ANR and AAFM that no such site has to date been identified, and the likelihood of securing such a site is negligible. Nonetheless, the location is included as an option to frame operational costs against the scenario which existed when ANR and AAFM were co-located at the lab building in Waterbury.

Please direct appropriate staff in your programs to complete the survey. This includes staff who are currently or are likely to use the facility for specific, unique program areas. Given the goal to capture operational costs, we want to avoid the possibility of double-counting vehicle trips that may be combined among staff within individual projects. Therefore, for those that work within a specific sampling program, the response should be filed on behalf of the program, not necessarily the individual staff member.

Please ask staff members to complete the survey by Friday June 6, so that feedback can be delivered to BGS by the middle of June. This will provide ample time for BGS to incorporate the input along with all other factors they must consider and include when they present the final set of options to the Legislature.

Thank you in advance for taking the opportunity to provide this important input.

- 1) What Agency, Department, Division and Section do you work in?
- Please estimate the maximum number of trips to the lab your program makes each year? A trip is considered a single visit to the lab. Use the number of trips that best reflects your program's need.
- 3) In 250 words or less, describe what the purpose of your program is and how a lab helps you accomplish that mission.
- 4) Is your official work station in Montpelier?
- 5) If No, where is your official work station?
- 6) Will the location of the lab influence your use of it?
- 7) In 6 bullets, describe why lab location will be important to you? If your work station is not
 Montpelier, be sure to clearly articulate where your work station is and which laboratory location or distance you are talking about.
- The Legislature has identified the 4 options below for BGS to consider to site a future joint ANR/AAG laboratory. Please rank the following lab locations, in order of most preferred (1) to least preferred (4)

- 9) If your program currently or pre-Irene, spent money for the analytical chemistry services rendered by the lab, will your demand for these services (and thereby payment) vary depending on the location of the lab? If you answered yes, please explain how your demand for lab services would change if the lab were located at your third and fourth preferences, respectively.
- 10) Please add any other information relevant to the siting of the lab that you think would be helpful to BGS, the administration and legislature as they choose a site to build a joint Agency of Natural Resources and Agency of Agriculture laboratory