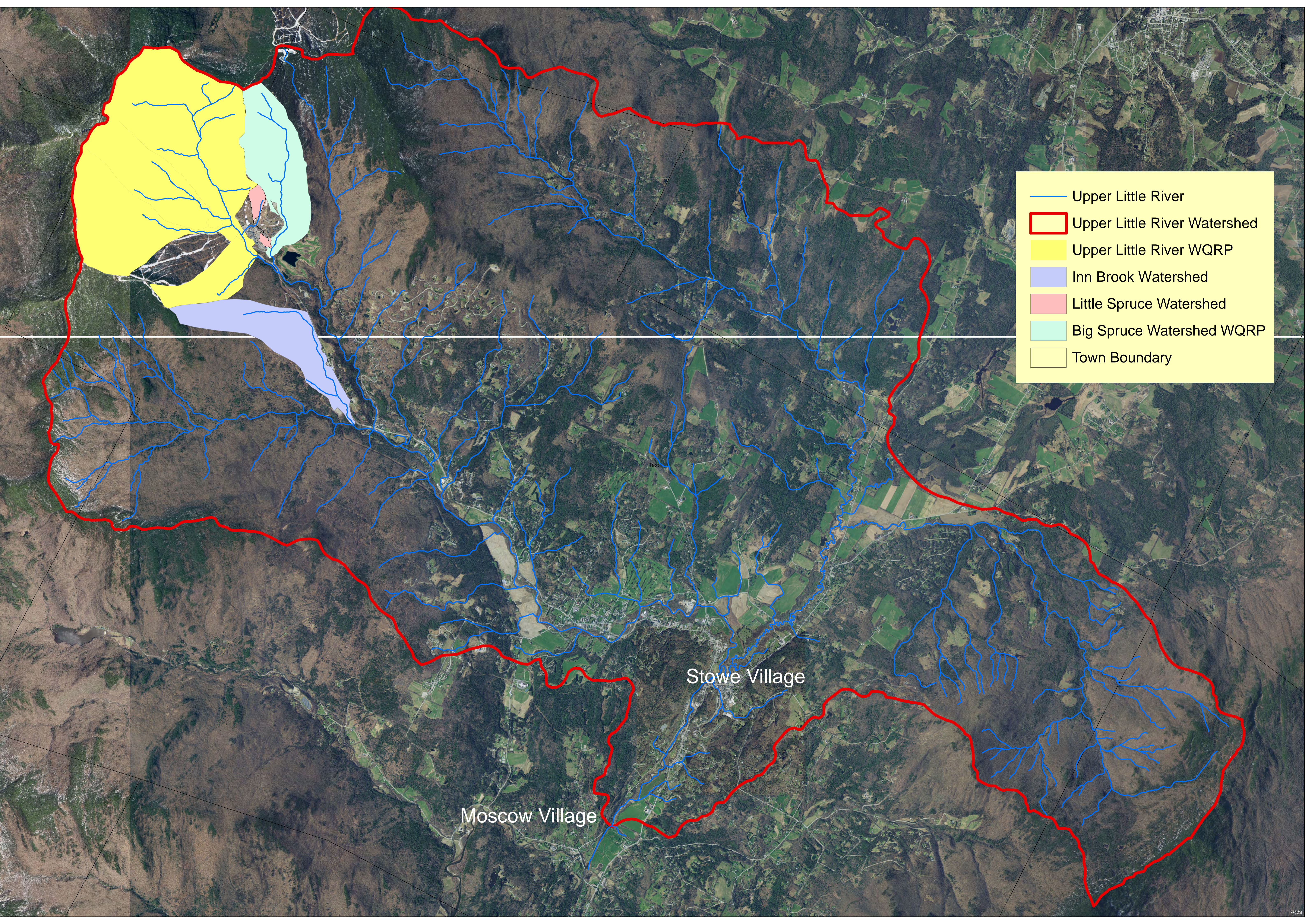


# Upper Little River, Stowe, Vermont

The Upper Little River in Stowe, Vermont has been found to be stressed as measured by the biological community of the brook. In the upper West Branch of the Little River around Stowe Mt Resort the stream is stressed by stormwater. In the lower West Branch the stream is lacking significant habitat. In the lower Little River below Moscow Village the stream is again stressed by stormwater runoff. The Upper Little River is also heavily used for recreation and swimming from Moscow to Bingham's Falls. There are at least 275 discharges to the river from the developed lands of Stowe from Mt. Mansfield down to Moscow. Under General Permit 3-9050 12 parcels in the watershed below Stowe Mt Resort will have to implement or improve their existing stormwater discharges by 2028. It is estimated that if the suggested retrofits were installed and the 12 parcels achieve compliance, the net reduction for all stormwater controls would be about 14% of the sediment load and 9.5% of the phosphorus load to the brook. The recommended course of action is to install a stormwater treatment structure on many of these discharges that controls the water quality volume and the channel protection volume. Maps showing the location of these discharges and other possible retrofit locations on private or public land is provided.

In the West Branch around Stowe Mt Resort the watersheds of Big Spruce Brook, Little Spruce Brook, Inn Brook and the Upper West Branch itself are considered impaired by sediment or iron and/or stressed by stormwater. Separate reports have been provided for the three smaller brooks. The 3 smaller brooks are redacted from this report. Both Big Spruce Brook and the Upper West Branch have water quality remediation plans (WQRP) in place are being implemented by Stowe Mt Resort. Addressing the larger discharges of stormwater to the river will reduce contamination, and stream channel erosion, and will help prevent the stream from becoming declared stormwater impaired on the state of Vermont's 303d list of impaired waters. It will also reduce trash, bacteria, sediment and phosphorus currently being discharged to the Winooski River and Lake Champlain.



- Upper Little River
- Upper Little River Watershed
- Upper Little River WQRP
- Inn Brook Watershed
- Little Spruce Watershed
- Big Spruce Watershed WQRP
- Town Boundary

Stowe Village

Moscow Village

Text



## Monitoring Site Summary - River/Stream

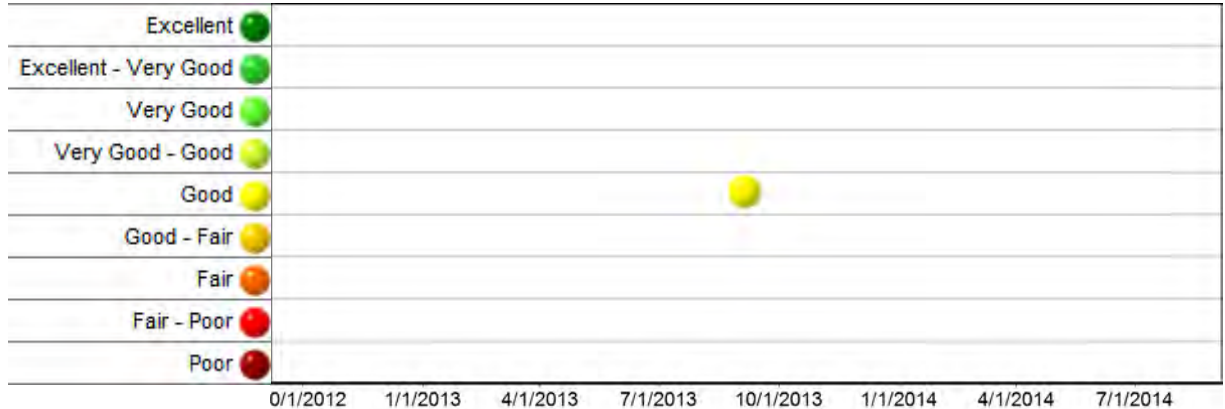
# Little River

River Mile: 7.1

Located just above Moscow Road bridge crossing 100m.  
Stowe, VT (44.43961, -72.71405)

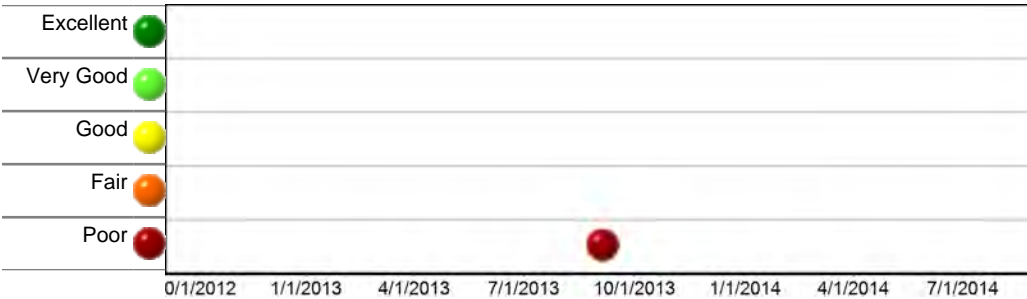
## Macroinvertebrate Assessment

Macroinvertebrate population Assessments are a measure of the biological integrity of the macroinvertebrate community and an indicator of the health of the aquatic biota. (For More Details)



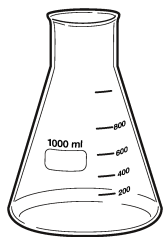
## Fish Assessment

Fish populations provide a measurement of the general health of the aquatic biota. Since fish occupy the top of the food web their population integrates the conditions of lower community types. (For More Details)



## Water Quality Measurements

Chemical and physical parameters provide a “snapshot” of current conditions and are used to detect changes in water quality and to make determinations about a waterbody and its watershed. (For More Details)



Characteristic	Description	Trend	Max	Mean	Min
Chloride (mg/L)	At elevated values mostly from deicing	●	20.0	20.0	20.0
Conductivity (umho/cm)		●	160.9	160.9	160.9
Nitrogen (mg/L)	Nutrient that may fuel algae blooms	●	3.6	3.6	3.6
pH	Acidity	●	7.4	7.4	7.4
Phosphorus (ug/L)	Nutrient that may fuel algae blooms	●	11.3	11.3	11.3
Turbidity (NTU)	Measure of suspended sediment	●	0.9	0.9	0.9

## Macroinvertebrate Site Summary

<b>Location:</b> Little River	<b>Location ID:</b> 502016
<b>Town:</b> Stowe	<b>Bio Site ID:</b> 493200000118
<b>Description:</b> Located adjacent to River Rd, approx .25 mile below Stowe WWTF, second riffle below bridge.	<b>WBID:</b> VT08-11
<b>Stream Type:</b> Medium High Gradient	

Date	Density	Richness	EPT Richness	PMA-O	B.I.	Oligo.	EPT/EPT + Chiro	PPCS-F	Community Assessment
8/30/2005	3988	62.0	32.0	74.1	4.23	0.10	0.58	0.51	Good
9/27/2010	1711	56.0	27.0	89.5	3.48	2.41	0.87	0.56	Ex-Vgood
9/23/2015	3104	62.0	33.0	68.9	4.22	1.29	0.92	0.59	Good
<b>Full Support</b>	≥ 300	≥ 30	≥ 18	≥ 45	≤ 5	≤ 12	≥ 0.45	≥ 0.4	
<b>Indeterminate</b>	≥ 250	≥ 28	≥ 16	≥ 40	≤ 5.15	≤ 14.5	≥ 0.43	≥ 0.35	
<b>Non-Support</b>	< 250	< 28	< 16	< 40	> 5.15	> 14.5	< 0.43	< 0.35	

\*Scoring Guidelines for Stream Type MHG and WQ Class B(2).

## Macroinvertebrate Site Summary

<b>Location:</b> West Branch Little River	<b>Location ID:</b> 502025
<b>Town:</b> Stowe	<b>Bio Site ID:</b> 493238000065
<b>Description:</b> Located immediately above the confluence with Pinnacle Brook. Above Bingham Falls.	<b>WBID:</b> VT08-12
<b>Stream Type:</b> Small High Gradient	

Date	Density	Richness	EPT Richness	PMA-O	B.I.	Oligo.	EPT/EPT + Chiro	PPCS-F	Community Assessment
9/14/2000	421	37.0	20.0	69.8	3.28	0.39	0.69	0.45	Good
9/4/2002	897	30.0	16.5	52.1	3.30	0.00	0.90	0.47	Good
9/9/2003	1478	25.0	11.0	40.9	4.24	42.90	0.71	0.27	F-Poor
10/11/2003	135	24.5	14.0	57.6	3.62	19.46	0.64	0.56	Fair
9/7/2004	275	37.0	20.0	57.7	3.35	5.12	0.88	0.44	G-Fair
11/19/2004	364	38.0	23.5	65.3	3.01	14.06	0.90	0.65	G-Fair
9/28/2005	399	47.0	26.0	82.3	1.70	3.51	0.90	0.51	Vgood
9/28/2005	201	37.0	25.0	80.2	1.62	4.98	0.87	0.52	Fair
9/28/2005	415	44.0	21.5	77.7	2.20	13.81	0.75	0.44	Vg-Good
10/10/2006	212	30.5	20.5	70.4	1.83	1.81	0.90	0.67	Fair
9/7/2007	626	27.0	16.0	80.7	2.04	1.76	0.91	0.59	G-Fair
9/12/2008	272	25.5	15.5	64.0	3.40	2.66	0.95	0.52	Fair
9/12/2008	302	34.0	19.0	73.2	2.89	1.66	0.91	0.60	Good
9/10/2009	593	29.0	17.5	74.7	2.46	0.00	0.90	0.52	Vg-Good
9/11/2009	695	45.0	27.0	76.6	2.83	1.73	0.87	0.59	Exc
9/27/2010	159	30.5	20.5	64.0	2.53	2.01	0.95	0.53	Fair
9/9/2011	266	40.0	23.0	69.7	3.45	1.88	0.92	0.62	G-Fair
9/21/2011	208	24.5	17.0	52.6	3.97	0.62	0.96	0.41	Fair
8/30/2012	936	40.3	24.3	71.5	2.71	1.04	0.84	0.49	Ex-Vgood
9/16/2012	341	34.5	22.0	73.1	2.47	1.18	0.83	0.45	Good
10/24/2012	590	42.0	29.0	60.5	1.70	3.56	0.93	0.29	G-Fair
9/19/2013	350	35.0	22.5	69.5	2.69	3.08	0.89	0.39	Good
9/22/2014	354	33.0	21.5	65.1	3.17	2.45	0.93	0.49	Good
9/25/2015	375	41.5	24.5	65.5	2.46	1.47	0.69	0.47	Vg-Good
9/23/2016	368	36.5	24.0	80.1	1.92	2.33	0.92	0.60	Vg-Good
9/21/2017	261	29.5	19.0	64.8	3.48	0.60	0.95	0.42	G-Fair
9/18/2018	367	51.0	31.0	74.4	2.92	6.81	0.89	0.55	Good
9/18/2018	240	30.0	19.5	71.1	1.70	5.02	0.96	0.61	Good

<b>9/12/2019</b>	687	38.5	19.0	79.2	1.88	4.46	0.88	0.43	Vg-Good
<b>9/12/2019</b>	434	36.0	18.5	72.6	1.92	8.47	0.85	0.45	Good
<b>9/12/2019</b>	561	37.3	18.3	75.9	1.90	6.46	0.87	0.44	
<b>9/9/2020</b>	679	29.0	19.0	74.6	1.29	0.49	0.96	0.47	Good
<b>Full Support</b>	≥ 300	≥ 27	≥ 16	≥ 45	≤ 4.5	≤ 12	≥ 0.45	≥ 0.4	
<b>Indeterminate</b>	≥ 250	≥ 26	≥ 15	≥ 40	≤ 4.65	≤ 14.5	≥ 0.43	≥ 0.35	
<b>Non-Support</b>	< 250	< 26	< 15	< 40	> 4.65	> 14.5	< 0.43	< 0.35	

\*Scoring Guidelines for Stream Type SHG and WQ Class B(2).

		Action List	Proposed or Existing Stormwater Treatment Practice	Permit Number	Watershed Area (Acres)	Percent Effective Impervious Area	Sediment Load with Current Reductions (lbs)	Priority Action Sediment Reduction Credit	Sediment Load with Priority Action (lbs)	Phosphorus Load with Current Reductions (lbs)	Priority Action Phosphorus Reduction Credit	Phosphorus Load with Priority Action (lbs)	Water Quality Volume (ft3)	Channel Protection Volume (ft3)	Estimated Basin Construction Cost	Estimated Other BMP Construction Cost	Cost of Sediment Removal Per Pound (based on annual sediment load)	Cost of Phosphorus Removal Per Pound (based on annual phosphorus load)	Assistance Program
1	Stowe	4	CB		3.84	53.7	2704		2704	7.51		7.51	6701	12173					CWIP, SRF, LCBP
2	Stowe		OF	3036-9010	2.38	20.2	654		654	1.92		1.92	1801	4433					CWIP, SRF, LCBP
3	Stowe		OF	3036-9010	2.52	21.6	731		731	2.14	5%	2.04	2013	4890					CWIP, SRF, LCBP
4	Stowe	4	CB	3365-9010	0.84	19.6	227		227	0.66		0.66	624	1544					CWIP, SRF, LCBP
5	Stowe	4	GS		0.53	72.3	487		487	1.35		1.35	1206	2033					CWIP, SRF, LCBP
6	Stowe	4	GS		0.84	14.3	197		197	0.55		0.55	488	1096					CWIP, SRF, LCBP
7	Stowe	4	EDMP	3365-9010	2.36	51.1	317		317	2.20		2.20	3931	6437					CWIP, SRF, LCBP
8	Stowe		CB		0.28	72.0	257		257	0.71		0.71	638	1015					CWIP, SRF, LCBP
9	Stowe	1 Swirl Separator inline in Inn parking lot	VS/CB		13.17	61.3	10455	80%	6273	29.04	5%	27.59	25910	38717		\$50,000	\$12	\$34,434	CWIP, SRF, LCBP
10	Stowe		GS/CB		0.15	28.7	60		60	0.17		0.17	149	309					CWIP, SRF, LCBP
11	Stowe	2 Infiltration or Bioretention at Maple St Park	IB/CB		10.56	32.9	4813	90%	481	13.37	90%	1.34	11927	19935					CWIP, SRF, LCBP
12	Stowe		CB		1.41	64.0	1165		1165	3.24		3.24	2887	4645					CWIP, SRF, LCBP
13	Stowe		CB		3.25	19.9	984		984	2.73		2.73	2440	5322					CWIP, SRF, LCBP
14	Stowe		OF		0.32	85.6	350		350	0.97		0.97	867	1327					CWIP, SRF, LCBP
15	Stowe		CB		0.42	30.8	181		181	0.50		0.50	448	749					CWIP, SRF, LCBP
16	Stowe		CB		0.13	74.0	125		125	0.35		0.35	309	491					CWIP, SRF, LCBP
17	Stowe		CB		1.03	63.5	843		843	2.34		2.34	2089	3364					CWIP, SRF, LCBP
18	Stowe		CB		0.59	56.8	434		434	1.20		1.20	1075	1747					CWIP, SRF, LCBP
19	Stowe		CB		1.92	56.9	1424		1424	3.96		3.96	3530	5735					CWIP, SRF, LCBP
20	Stowe	Swirl separator and dry wells for roofs, 1,4 (Combine with 21, 108)	VS/CB		0.51	83.5	538	80%	323	1.49	25%	1.12	1332	2090		\$75,000	\$1,524	\$200,869	CWIP, SRF, LCBP
21	Stowe	1 (Combine with 20, 108)	VS/DW/C B		0.14	85.7	151	80%	91	0.42	25%	0.31	374	585					CWIP, SRF, LCBP

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22	Stowe		CB		0.47	79.6	477		477	1.32		1.32	1182	1863					CWIP, SRF, LCBP
23	Stowe		CB		0.60	70.0	538		538	1.49		1.49	1333	2127					CWIP, SRF, LCBP
24	Stowe		CB		7.50	21.6	2418		2418	6.72		6.72	5992	9989					CWIP, SRF, LCBP
25	Stowe		CB		0.92	77.6	908		908	2.52		2.52	2249	3554					CWIP, SRF, LCBP
26	Stowe		CB		1.53	53.7	1073		1073	2.98		2.98	2660	4832					CWIP, SRF, LCBP
27	Stowe		CB		4.08	61.6	3247		3247	9.02		9.02	8046	12988					CWIP, SRF, LCBP
28	Stowe		GS		0.27	34.6	131		131	0.36		0.36	324	647					CWIP, SRF, LCBP
29	Stowe		OF		3.19	29.6	1332		1332	3.70		3.70	3300	6795					CWIP, SRF, LCBP
30	Stowe		CB		1.05	39.6	560	10%	504	1.56		1.56	1389	2704					CWIP, SRF, LCBP
31	Stowe		CB		0.28	64.2	235		235	0.65		0.65	582	1012					CWIP, SRF, LCBP
32	Stowe	1 Gravel Wetland (Combine with 119)	GW/CB/R S/POP	3714-9010	7.87	53.0	3283	80%	657	12.16	20%	9.73	13559	25901	\$102,369		\$911	\$42,100	CWIP, SRF, LCBP
33	Stowe	2 Combine with 43	IB or BRA		3.08	9.3	543	80%	109	1.51	40%	0.90	1346	3030					CWIP, SRF, LCBP
34	Stowe		CB		1.82	40.9	1001		1001	2.78		2.78	2481	4796					CWIP, SRF, LCBP
35	Stowe		CB		0.64	40.1	346		346	0.96		0.96	857	1664					CWIP, SRF, LCBP
36	Stowe		CB		2.72	45.7	1658		1658	4.60		4.60	4108	6775					CWIP, SRF, LCBP
37	Stowe		CB		0.07	79.1	67		67	0.19		0.19	165	260					CWIP, SRF, LCBP
38	Stowe		CB		0.01	94.8	16		16	0.04		0.04	40	61					CWIP, SRF, LCBP
39	Stowe		CB		1.66	60.8	1304		1304	3.62		3.62	3231	5220					CWIP, SRF, LCBP
40	Stowe		CB		0.16	78.0	159		159	0.44		0.44	394	623					CWIP, SRF, LCBP
41	Stowe		OF		0.52	97.3	630		630	1.75		1.75	1562	2409					CWIP, SRF, LCBP
42	Stowe		OF		0.67	64.5	555		555	1.54		1.54	1377	2391					CWIP, SRF, LCBP



		Action List	Proposed or Existing Stormwater Treatment Practice	Permit Number	Watershed Area (Acres)	Percent Effective Impervious Area	Sediment Load with Current Reductions (lbs)	Priority Action Sediment Reduction Credit	Sediment Load with Priority Action (lbs)	Phosphorus Load with Current Reductions (lbs)	Priority Action Phosphorus Reduction Credit	Phosphorus Load with Priority Action (lbs)	Water Quality Volume (ft3)	Channel Protection Volume (ft3)	Estimated Basin Construction Cost	Estimated Other BMP Construction Cost	Cost of Sediment Removal Per Pound (based on annual sediment load)	Cost of Phosphorus Removal Per Pound (based on annual phosphorus load)	Assistance Program
43	Stowe	2 Combine with 33	IB or BRA		1.88	36.0	926	80%	185	2.57	40%	1.54	2295	4554					CWIP, SRF, LCBP
44	Stowe	2 Combine with 77,78,79	IB	3247-9010	3.77	10.9	441	40%	264	1.63	20%	1.31	1820	4113					CWIP, SRF, LCBP
45	Stowe	4	SF	3445-9010	2.72	13.8	94		94	1.04		1.04	1552	4850					CWIP, SRF, LCBP
46	Stowe	4	CB	3445-9010	1.54	51.7	1046		1046	2.90		2.90	2591	4239					CWIP, SRF, LCBP
47	Stowe		CB		2.12	35.7	1036		1036	2.88		2.88	2566	5102					CWIP, SRF, LCBP
48	Stowe		CB		1.92	73.9	1807		1807	5.02		5.02	4478	7508					CWIP, SRF, LCBP
49	Stowe	4	SF	3445-9010	1.81	37.7	140		140	1.03		1.03	2306	5333					CWIP, SRF, LCBP
50	Stowe	4	OF		0.94	60.3	732		732	2.03		2.03	1813	3202					CWIP, SRF, LCBP
51	Stowe	4	OF		2.27	39.3	1205		1205	3.35		3.35	2987	5823					CWIP, SRF, LCBP
52	Stowe		OF		2.91	27.7	1146		1146	3.18		3.18	2839	5913					CWIP, SRF, LCBP
53	Stowe		DW		0.42	20.3	130		130	0.36		0.36	322	791					CWIP, SRF, LCBP
54	Stowe		GS		1.47	61.1	1162		1162	3.23		3.23	2879	5068					CWIP, SRF, LCBP
55	Stowe	4	DW		0.44	31.6	196		196	0.54		0.54	485	1077					CWIP, SRF, LCBP
56	Stowe	4	DW		0.52	47.3	325		325	0.90		0.90	805	1594					CWIP, SRF, LCBP
57	Stowe	4	OF		1.05	64.7	879		879	2.44		2.44	2179	3781					CWIP, SRF, LCBP
58	Stowe	4	WP	4225-9015	3.91	1.7	67		67	0.46		0.46	828	2407					CWIP, SRF, LCBP
59	Stowe	4	DW		0.45	67.9	394		394	1.10		1.10	978	1723					CWIP, SRF, LCBP
60	Stowe	4	OF		1.86	53.7	1305		1305	3.62		3.62	3234	5875					CWIP, SRF, LCBP
61	Stowe		GS		0.84	49.5	549		549	1.52		1.52	1360	2518					CWIP, SRF, LCBP
62	Stowe		GS		1.17	51.8	799		799	2.22		2.22	1979	3628					CWIP, SRF, LCBP
63	Stowe		DW		1.03	24.0	360		360	1.00		1.00	893	1902					CWIP, SRF, LCBP

		Action List	Proposed or Existing Stormwater Treatment Practice	Permit Number	Watershed Area (Acres)	Percent Effective Impervious Area	Sediment Load with Current Reductions (lbs)	Priority Action Sediment Reduction Credit	Sediment Load with Priority Action (lbs)	Phosphorus Load with Current Reductions (lbs)	Priority Action Phosphorus Reduction Credit	Phosphorus Load with Priority Action (lbs)	Water Quality Volume (ft <sup>3</sup> )	Channel Protection Volume (ft <sup>3</sup> )	Estimated Basin Construction Cost	Estimated Other BMP Construction Cost	Cost of Sediment Removal Per Pound (based on annual sediment load)	Cost of Phosphorus Removal Per Pound (based on annual phosphorus load)	Assistance Program
64	Stowe		DW		1.00	34.7	476		476	1.32		1.32	1180	2556					CWIP, SRF, LCBP
65	Stowe		DW		0.29	22.8	97		97	0.27		0.27	241	578					CWIP, SRF, LCBP
66	Stowe		DW		0.20	54.8	142		142	0.39		0.39	352	665					CWIP, SRF, LCBP
67	Stowe		DW		0.38	41.5	210		210	0.58		0.58	519	1070					CWIP, SRF, LCBP
68	Stowe		DW		0.44	20.8	138		138	0.38		0.38	343	839					CWIP, SRF, LCBP
69	Stowe		DW		0.76	26.3	286		286	0.80		0.80	710	1650					CWIP, SRF, LCBP
70	Stowe		DW		0.34	20.3	104		104	0.29		0.29	258	636					CWIP, SRF, LCBP
71	Stowe		DW		0.45	9.9	82		82	0.23		0.23	204	550					CWIP, SRF, LCBP
72	Stowe		OF		3.72	37.8	1914		1914	5.32		5.32	4743	9321					CWIP, SRF, LCBP
73	Stowe		OF		7.39	0.0	487		487	1.35		1.35	1208	2					CWIP, SRF, LCBP
74	Stowe		OF		2.11	51.8	1437		1437	3.99		3.99	3562	6527					CWIP, SRF, LCBP
75	Stowe		DW		1.29	10.0	238		238	0.66		0.66	591	1592					CWIP, SRF, LCBP
76	Stowe		OF		4.86	31.6	2140		2140	5.94		5.94	5304	10794					CWIP, SRF, LCBP
77	Stowe	2 (Combine with 44,78,79)	IB/OF		0.74	65.0	624	80%	125	1.73	40%	1.04	1546	2679					CWIP, SRF, LCBP
78	Stowe	2 (Combine with 44,77,79)	IB/CB		1.50	45.5	911	80%	182	2.53	40%	1.52	2257	3723					CWIP, SRF, LCBP
79	Stowe	2 (Combine with 44,77,78)	IB/CB		2.93	45.7	1780	80%	356	4.94	40%	2.97	4411	7275					CWIP, SRF, LCBP
80	Stowe		GS		1.49	32.5	672		672	1.87		1.87	1666	3373					CWIP, SRF, LCBP
81	Stowe		OF/CB		2.18	31.2	953		953	2.65		2.65	2362	4817					CWIP, SRF, LCBP
82	Stowe	1 Bioretention at Swimming Hole	IB/DW/P OP/CB/G S		15.11	21.1	4775	80%	955	13.26	40%	7.96	11834	25645	\$248,520		\$65	\$46,840	CWIP, SRF, LCBP
83	Stowe		WP		1.36	16.9	363		363	1.01		1.01	899	2288					CWIP, SRF, LCBP
84	Stowe		CB		4.48	26.0	1679		1679	4.66		4.66	4160	8751					CWIP, SRF, LCBP

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85	Stowe		WP		1.31	62.6	1058		1058	2.94		2.94	2621	4744					CWIP, SRF, LCBP
86	Stowe		CB		0.15	2.4	14		14	0.04		0.04	36	61					CWIP, SRF, LCBP
87	Stowe		CB		0.82	63.2	668		668	1.86		1.86	1656	2668					CWIP, SRF, LCBP
88	Stowe		CB		0.26	55.9	189		189	0.52		0.52	468	842					CWIP, SRF, LCBP
89	Stowe		GS		0.41	99.4	517		517	1.44		1.44	1280	1980					CWIP, SRF, LCBP
90	Stowe		OF		1.78	52.6	1231		1231	3.42		3.42	3052	5572					CWIP, SRF, LCBP
91	Stowe	4	CB	3365-9010	0.16	51.7	97		97	0.28		0.28	267	490					CWIP, SRF, LCBP
92	Stowe	4	CB	3365-9010	0.16	70.8	129		129	0.38		0.38	354	601					CWIP, SRF, LCBP
93	Stowe		OF/GS		0.66	46.4	404		404	1.12		1.12	1002	1885					CWIP, SRF, LCBP
94	Stowe		OF		3.24	45.7	1970		1970	5.47		5.47	4883	9213					CWIP, SRF, LCBP
95	Stowe		CF	5456-9015	4.83	24.4	344		344	2.86		2.86	4257	10072					CWIP, SRF, LCBP
96	Stowe		CB		2.08	20.7	648		648	1.80		1.80	1607	3490					CWIP, SRF, LCBP
97	Stowe		CB		0.76	74.0	721		721	2.00		2.00	1786	2836					CWIP, SRF, LCBP
98	Stowe		CB		0.67	64.9	560		560	1.56		1.56	1389	2408					CWIP, SRF, LCBP
99	Stowe		OF		2.41	29.0	987		987	2.74		2.74	2446	5053					CWIP, SRF, LCBP
100	Stowe		OF		0.34	31.9	149		149	0.41		0.41	369	750		10000			CWIP, SRF, LCBP
101	Stowe		OF		0.18	80.0	184		184	0.51		0.51	457	720		10000			CWIP, SRF, LCBP
102	Stowe	4	GS		0.16	50.3	109		109	0.30		0.30	270	499					CWIP, SRF, LCBP
103	Stowe		OF		0.87	15.3	215		215	0.60		0.60	534	1193		10000			CWIP, SRF, LCBP
104	Stowe		GS		1.22	17.2	330		330	0.92		0.92	817	1809		10000			CWIP, SRF, LCBP
105	Stowe		OF		1.87	42.8	1071		1071	2.98		2.98	2654	5080					CWIP, SRF, LCBP

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106	Stowe	4	EDMP	3365-9015	3.63	9.1	126		126	0.87		0.87	1560	5235					CWIP, SRF, LCBP
107	Stowe	1,4	DW/GS/ GS	5682-INDS	5.38	34.9	1547	50%	774	5.73	70%	1.72	6391	12764					CWIP, SRF, LCBP
108	Stowe	1,4 (Combine with 20,21)	SB/ST		1.34	71.7	1224	80%	735	3.40	25%	2.55	3034	4832					CWIP, SRF, LCBP
109	Stowe		OF		1.34	33.6	622		622	1.73		1.73	1541	3099					CWIP, SRF, LCBP
110	Stowe		CB		0.98	89.9	1105		1105	3.07		3.07	2738	4202	\$32,852				CWIP, SRF, LCBP
111	Stowe		CB		0.19	85.2	207		207	0.57		0.57	512	783					CWIP, SRF, LCBP
112	Stowe		GS		0.69	38.1	359		359	1.00		1.00	891	1748					CWIP, SRF, LCBP
113	Stowe		GS		0.57	11.7	115		115	0.32		0.32	286	450					CWIP, SRF, LCBP
114	Stowe		DW		0.12	28.3	49		49	0.14		0.14	122	278					CWIP, SRF, LCBP
115	Stowe		OF		2.53	22.9	851		851	2.36		2.36	2109	4522					CWIP, SRF, LCBP
116	Stowe		OF		2.61	23.4	897		897	2.49		2.49	2223	4749					CWIP, SRF, LCBP
117	Stowe		OF		2.84	12.5	609		609	1.69		1.69	1510	3407					CWIP, SRF, LCBP
118	Stowe		OF		10.37	13.6	2352		2352	6.53		6.53	5829	13115					CWIP, SRF, LCBP
119	Stowe	1 (Combine with 32)	EDMP- IB/CB		2.98	25.3	1090	80%	218	3.03	40%	1.82	2701	5709					CWIP, SRF, LCBP
120	Stowe		OF		1.47	14.1	343		343	0.95		0.95	850	1909	\$8,911				CWIP, SRF, LCBP
121	Stowe	4	EDMP	3365-9015	3.92	2.9	79		79	0.55		0.55	977	3209					CWIP, SRF, LCBP
122	Stowe	4	CB/EDP/ GS/OF/S F	3929-9015.A1, WQRP	900.28	0.0	35873		35873	132.86		132.86	147352	5645					CWIP, SRF, LCBP
123	Stowe	4	CB/EDP/ GS	3929-9010.R, WQRP	2.03	33.7	190		190	1.58		1.58	2343	18545					CWIP, SRF, LCBP
124	Stowe	4	OF	WQRP	379.42	0.1	25614		25614	71.15		71.15	63127	22973					CWIP, SRF, LCBP
125	Stowe	4	OF		514.16	0.1	34631		34631	96.20		96.20	85349	38179					CWIP, SRF, LCBP
126	Stowe	4	OF/GS/ CB/EDP	3929-9010.R, WQRP	204.84	0.2	8368		8368	30.99		30.99	34373	17061					CWIP, SRF, LCBP

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127 Stowe	4		OF/GS/CB/EDP	3929-9010.R, WQRP	66.2	0.3	2772		2772	10.3		10.3	11384.3	17061.5					CWIP, SRF, LCBP
128 Stowe	4		CB/SF/CR/WP	3929-9015.A1	3.8	2.3	71		71	0.6		0.6	871.3	2747.4					CWIP, SRF, LCBP
129 Stowe	4		CB/SF/CR/WP	3929-9015.A1	2.0	5.9	54		54	0.4		0.4	661.0	2284.0					CWIP, SRF, LCBP
130 Stowe	4		CB/GS	3929-9015.A1	0.2	8.7	38	40%	23	0.1	30%	0.1	94.3	317.8					CWIP, SRF, LCBP
131 Stowe	4		CB/GS/BRA/VS/WP	3929-9015.2	81.7	9.3	2895		2895	24.1		24.1	35669.4	119351.8					CWIP, SRF, LCBP
132 Stowe	4		CB/WP	3929-9010.R	15.9	17.4	872		872	7.3		7.3	10743.2	31809.4					CWIP, SRF, LCBP
136 Stowe			OF		3.1	12.5	669		669	1.9		1.9	1649.4	0.0					CWIP, SRF, LCBP
137 Stowe			2WP/OF		34.8	1.9	3081		3081	8.6		8.6	7592.6	11699.1					CWIP, SRF, LCBP
138 Stowe			GS/CR	6512-9015	1.6	7.7	51		51	0.4		0.4	629.5	1708.0					CWIP, SRF, LCBP
139 Stowe			CB/GS		1.2	0.0	80		80	0.2		0.2	198.4	0.0					CWIP, SRF, LCBP
140 Stowe			EDP/OF/CB		1.1	49.1	138		138	1.1		1.1	1695.5	0.0					CWIP, SRF, LCBP
141 Stowe			CB/OF		16.5	2.2	1531		1531	4.3		4.3	3773.7	0.0					CWIP, SRF, LCBP
142 Stowe			CB/OF		7.2	1.3	592		592	1.6		1.6	1458.2	0.0					CWIP, SRF, LCBP
143 Stowe			OF		3.6	41.2	1984		1984	5.5		5.5	4889.5	0.0					CWIP, SRF, LCBP
144 Stowe			GS/OF		47.0	0.8	3555		3555	9.9		9.9	8761.3	0.0					CWIP, SRF, LCBP
145 Stowe			GS/OF		59.5	1.0	4634		4634	12.9		12.9	11420.9	13025.2					CWIP, SRF, LCBP
146 Stowe			GS/OF		57.6	2.9	5789		5789	16.1		16.1	14268.4	25884.8					CWIP, SRF, LCBP

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147 Stowe	1	Bioretention with underdrain in field	BRA/CB/GS	3500-9010.RA1	6.8	5.0	857	80%	171	2.4	40%	1.4	2112.0	5585.3	\$11,151		\$16	\$11,712	CWIP, SRF, LCBP
166 Stowe	1,4	Modify outlet of pond to meet requirements	MOD/CB/WP		3.5	71.2	2265	50%	1133	7.6	25%	5.7	7975.3	12055.9	\$42,108		\$37	\$12,923	CWIP, SRF, LCBP
167 Stowe	4		GS/OF		2.3	34.4	1115	40%	669	3.1	30%	2.2	2749.0	5504.5					CWIP, SRF, LCBP
168 Stowe	4		CB/GS		0.7	31.7	300	40%	180	0.8	30%	0.6	738.5	1235.2					CWIP, SRF, LCBP
169 Stowe			CB/GS		1.7	19.1	501		501	1.4		1.4	1235.3	2708.0					CWIP, SRF, LCBP
170 Stowe	1,4	Bioretention with underdrain in field	BRA/CB/GS		5.8	3.0	590	40%	354	1.6	20%	1.3	1454.1	2684.7	\$3,839		\$16	\$11,712	CWIP, SRF, LCBP
171 Stowe			CB/GS		1.4	4.2	158		158	0.4		0.4	389.8	788.7					CWIP, SRF, LCBP
172 Stowe	4		CB/GS/WP		34.7	0.7	1821		1821	6.1		6.1	6411.5	9124.4					CWIP, SRF, LCBP
173 Stowe	4		GS		1.0	2.6	95	40%	57	0.3	30%	0.2	233.7	410.9					CWIP, SRF, LCBP
174 Stowe	4		CB/GS/WP		6.1	8.2	705		705	2.4		2.4	2482.8	5550.5					CWIP, SRF, LCBP
175 Stowe	4		CB/GS/WP		1.3	1.7	80		80	0.3		0.3	281.1	568.0					CWIP, SRF, LCBP
176 Stowe	4		CB/GS/WP		1.0	8.6	122		122	0.4		0.4	428.7	1162.3					CWIP, SRF, LCBP
177 Stowe	4		GS/WP		1.1	11.4	152		152	0.5		0.5	533.6	1425.7					CWIP, SRF, LCBP
178 Stowe	4		OF/WP		3.1	7.8	349		349	1.2		1.2	1228.0	2735.2					CWIP, SRF, LCBP
179 Stowe	4		OF		4.7	8.4	777	40%	466	2.2	30%	1.5	1916.0	4291.2					CWIP, SRF, LCBP
180 Stowe			OF		55.6	0.3	3860		3860	10.7		10.7	9513.2	5100.4					CWIP, SRF, LCBP
181 Stowe			OF		0.8	14.8	199		199	0.6		0.6	490.2	0.0					CWIP, SRF, LCBP
182 Stowe			OF		8.3	2.6	808		808	2.2		2.2	1991.5	0.0					CWIP, SRF, LCBP
183 Stowe	4		GS/OF		878.0	0.7	65032		65032	180.6		180.6	160274.9	146931.3					CWIP, SRF, LCBP

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184 Stowe			GS/OF		22.6	0.0	1498		1498	4.2		4.2	3692.4	7305.9					CWIP, SRF, LCBP
185 Stowe			CB/OF		10.5	7.1	1586		1586	4.4		4.4	3908.6	8629.1					CWIP, SRF, LCBP
186 Stowe	4		GS/OF/CB/CR	7759-9015	111.5	0.4	1580		1580	13.2		13.2	19472.2	20141.9					CWIP, SRF, LCBP
187 Stowe	4		OF		14.5	0.6	1067	40%	640	3.0	30%	2.1	2630.4	0.0					CWIP, SRF, LCBP
188 Stowe	4		GS/WP	3463-9015.T	17.0	3.5	367		367	3.1		3.1	4517.5	15208.3					CWIP, SRF, LCBP
189 Stowe	4		GS/WP	3463-9015.T	2.3	1.7	40		40	0.3		0.3	488.9	1442.4					CWIP, SRF, LCBP
190 Stowe	4		GS	3463-9015.T	3.4	0.6	50		50	0.4		0.4	619.1	1255.6					CWIP, SRF, LCBP
191 Stowe	4		GS/WP	3463-9015.T	14.6	6.0	404		404	3.4		3.4	4981.7	17206.2					CWIP, SRF, LCBP
192 Stowe	4		GS	3463-9015.T	7.5	1.5	127		127	1.1		1.1	1559.6	4445.0					CWIP, SRF, LCBP
193 Stowe	4		GS	3463-9015.T	67.0	0.3	938		938	7.8		7.8	11561.8	17951.4					CWIP, SRF, LCBP
194 Stowe	4		GS/WP	3463-9015.T	17.8	0.3	248		248	2.1		2.1	3051.1	4580.1					CWIP, SRF, LCBP
195 Stowe	4		GS/CR	3463-9050	18.4	0.2	255		255	2.1		2.1	3138.3	4399.4					CWIP, SRF, LCBP
196 Stowe			OF		25.8	3.9	2907		2907	8.1		8.1	7165.5	14208.7					CWIP, SRF, LCBP
197 Stowe			CB		2.4	52.1	1654		1654	4.6		4.6	4076.1	0.0					CWIP, SRF, LCBP
198 Stowe			2WP/IB/CB/GS		16.8	2.3	316		316	4.4	40%	2.6	3888.7	0.0					CWIP, SRF, LCBP
199 Stowe	4		BRA/GS/SWPP	7242-9015	17.6	9.2	618		618	5.2		5.2	7617.5	0.0					CWIP, SRF, LCBP
200 Stowe			OF		25.5	8.8	4367		4367	12.1		12.1	10762.0	0.0					CWIP, SRF, LCBP
201 Stowe			CB/GS/OF		4.8	17.0	1300		1300	3.6		3.6	3203.8	0.0					CWIP, SRF, LCBP
202 Stowe			CB/GS/OF		17.0	12.8	3705		3705	10.3		10.3	9131.2	0.0					CWIP, SRF, LCBP
203 Stowe			GS		1.5	17.9	407		407	1.1		1.1	1001.9	0.0					CWIP, SRF, LCBP
204 Stowe			OF		0.6	84.3	666		666	1.8		1.8	1640.3	0.0					CWIP, SRF, LCBP

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205 Stowe			GS		46.3	1.6	3978		3978	11.1		11.1	9804.4	14347.5					CWIP, SRF, LCBP
206 Stowe			WP/GS/CB	4155-9015	3.2	19.9	196		196	1.6		1.6	2410.0	6879.6					CWIP, SRF, LCBP
207 Stowe	4		GS/OF		410.0	0.3	28690	40%	17214	79.7	30%	55.8	70708.2	41773.1					CWIP, SRF, LCBP
208 Stowe			GS/WP/OF		81.0	1.8	4995		4995	16.8		16.8	17587.2	36767.6					CWIP, SRF, LCBP
209 Stowe			OF		0.8	56.3	626		626	1.7		1.7	1543.0	0.0					CWIP, SRF, LCBP
210 Stowe			IB/CB	Act 250	1.9	6.6	55		55	0.5		0.5	682.9	2351.2					CWIP, SRF, LCBP
211 Stowe			CB/IB(2)	Act 250	2.7	2.1	49		49	0.4		0.4	603.5	1859.2					CWIP, SRF, LCBP
212 Stowe			GS/CB		3.8	20.1	1153		1153	3.2		3.2	2842.1	0.0					CWIP, SRF, LCBP
213 Stowe			CB		2.2	11.3	436		436	1.2		1.2	1074.2	0.0					CWIP, SRF, LCBP
214 Stowe			CB/GS		3.5	14.0	816		816	2.3		2.3	2010.3	0.0					CWIP, SRF, LCBP
215 Stowe			PP/GS/OF	7524-INDS	63.9	0.0	850		850	11.8	40%	7.1	10473.6	0.0					CWIP, SRF, LCBP
216 Stowe			PP/GS/OF	7524-INDS	13.5	0.4	192		192	2.7	40%	1.6	2371.1	0.0					CWIP, SRF, LCBP
217 Stowe	4		EDP/OF/CB	4311-9010	5.4	8.6	181		181	2.5	40%	1.5	2232.5	0.0					CWIP, SRF, LCBP
218 Stowe	4		CB/WP/GS	4311-9010	29.6	11.7	1220		1220	17.0	40%	10.2	15039.0	0.0					CWIP, SRF, LCBP
219 Stowe			GS/WP	3490-9050	5.5	4.6	134		134	1.1		1.1	1646.8	0.0					CWIP, SRF, LCBP
220 Stowe			GS	3490-9050	7.1	7.1	216		216	1.8		1.8	2656.3	0.0					CWIP, SRF, LCBP
221 Stowe			GS/SB	3490-9050	2.6	3.6	57		57	0.5		0.5	707.8	0.0					CWIP, SRF, LCBP
222 Stowe			EDMP/CB/GS	3490-9015.1	14.3	1.2	232		232	1.9		1.9	2855.5	0.0					CWIP, SRF, LCBP
223 Stowe			GS	3490-9050	40.1	0.0	535		535	4.5		4.5	6598.1	0.0					CWIP, SRF, LCBP
224 Stowe			OF/GS		2.4	9.7	439		439	1.2		1.2	1081.3	2438.4					CWIP, SRF, LCBP
225 Stowe			GS		4.9	6.4	700		700	1.9		1.9	1724.5	0.0					CWIP, SRF, LCBP



Watershed Number	Action List #	Proposed Action	Proposed or Existing Stormwater Treatment Practice	Permit Number	Watershed Area (Acres)	Percent Effective Impervious Area	Sediment Load with Current Reductions (lbs.)	Priority Action Sediment Reduction Credit	Sediment Load with Priority Action (lbs.)	Phosphorus Load with Current Reductions (lbs.)	Priority Action Phosphorus or Nitrogen Reduction Credit	Phosphorus Load with Priority Action (lbs.)	Water Quality Volume (ft <sup>3</sup> )	Channel Protection Volume (ft <sup>3</sup> )	Estimated Basin Construction Cost	Estimated Other BMP Construction Cost	Cost of Sediment Removal Per Pound (based on annual sediment load)	Cost of Phosphorus or Nitrogen Removal Per Pound (based on annual nutrient load)	Assistance Program
226 Stowe			GS		1.9	6.0	261		261	0.7		0.7	644.0	0.0					CWIP, SRF, LCBP
227 Stowe			GS/WP	6836-9015	5.5	4.3	129		129	1.1		1.1	1585.0	5434.3					CWIP, SRF, LCBP
228 Stowe			GS	6836-9015	78.1	0.0	1038		1038	8.6		8.6	12785.1	4134.2					CWIP, SRF, LCBP
229 Stowe			GS	6836-9015	2.8	0.2	38		38	0.3		0.3	463.7	537.0					CWIP, SRF, LCBP
230 Stowe			GS/CB	5021-9010	58.5	1.3	3339		3339	11.3		11.3	11756.0	0.0					CWIP, SRF, LCBP
231 Stowe	4		GS/CB/EDP	3929-INDS.T, WQRP	8.2	0.0	108		108	0.9		0.9	1333.6	24211.6					CWIP, SRF, LCBP
232 Stowe	4		CB		0.3	89.4	382	40%	229	1.1	30%	0.7	942.6	1467.6					CWIP, SRF, LCBP
233 Stowe	4		CB		0.7	26.9	263	40%	158	0.7	30%	0.5	649.1	0.0					CWIP, SRF, LCBP
235 Stowe			CB/GS		2.0	14.6	486		486	1.3		1.3	1197.7	2684.7					CWIP, SRF, LCBP
236 Stowe			GS/OF		78.5	3.4	8416		8416	23.4		23.4	20743.0	39729.8					CWIP, SRF, LCBP
237 Stowe			GS/OF		17.1	1.8	1502		1502	4.2		4.2	3701.4	5614.1					CWIP, SRF, LCBP
238 Stowe			GS/SB		1.1	48.5	425		425	1.6		1.6	1745.0	3246.9					CWIP, SRF, LCBP
239 Stowe			GS/WP		36.2	1.2	2041		2041	6.9		6.9	7186.4	9085.8					CWIP, SRF, LCBP
240 Stowe			GS/OF		19.3	1.0	1514		1514	4.2		4.2	3730.7	4363.1					CWIP, SRF, LCBP
241 Stowe			GS/WP		5.4	4.3	444		444	1.5		1.5	1562.6	3168.3					CWIP, SRF, LCBP
242 Stowe			GS		10.1	2.6	977		977	2.7		2.7	2408.0	4199.8					CWIP, SRF, LCBP
243 Stowe			OF		69.8	0.0	4649		4649	12.9		12.9	11456.7	1393.0					CWIP, SRF, LCBP
244 Stowe			GS		5.9	1.6	504		504	1.4		1.4	1242.2	1800.6					CWIP, SRF, LCBP
245 Stowe			GS/OF		31.1	1.6	2653		2653	7.4		7.4	6537.6	9417.5					CWIP, SRF, LCBP
246 Stowe			GS/OF		20.9	4.2	2431		2431	6.8		6.8	5991.3	12081.6					CWIP, SRF, LCBP
247 Stowe			GS/WP/OF		242.1	0.8	12764		12764	43.1		43.1	44941.2	44745.8					CWIP, SRF, LCBP



Watershed Number	Action List #	Proposed Action	Proposed or Existing Stormwater Treatment Practice	Permit Number	Watershed Area (Acres)	Percent Effective Impervious Area	Sediment Load with Current Reductions (lbs.)	Priority Action Sediment Reduction Credit	Sediment Load with Priority Action (lbs.)	Phosphorus Load with Current Reductions (lbs.)	Priority Action Phosphorus or Nitrogen Reduction Credit	Phosphorus Load with Priority Action (lbs.)	Water Quality Volume (ft <sup>3</sup> )	Channel Protection Volume (ft <sup>3</sup> )	Estimated Basin Construction Cost	Estimated Other BMP Construction Cost	Cost of Sediment Removal Per Pound (based on annual sediment load)	Cost of Phosphorus or Nitrogen Removal Per Pound (based on annual nutrient load)	Assistance Program	
							Big Spruce Watershed													
272 Stowe					4.1	0.0	54		54	0.5		0.5	669.7	5467.4						CWIP, SRF, LCBP
273 Stowe					1.8	0.0	24		24	0.2		0.2	294.0	1872.5						CWIP, SRF, LCBP

# *Target Maps*

*Showing Priority Action List  
Drainage Areas*

*And Potential Retrofit Locations*

# Stowe: Action List Drainage Area 1

Potential to clean existing wetland/wetpond and to clean the catchbasins draining to the outfall.

### Legend

**Point Data**

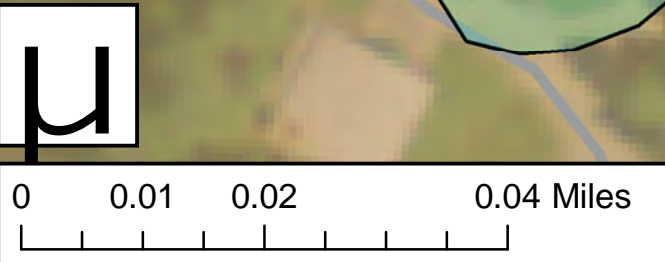
- Potential Retrofit Site
- Catch basin
- Dry Well (DW)
- Grate/Curb Inlet
- Drop Inlet (DI)
- Storm Manhole
- Outfall

**Line Data**

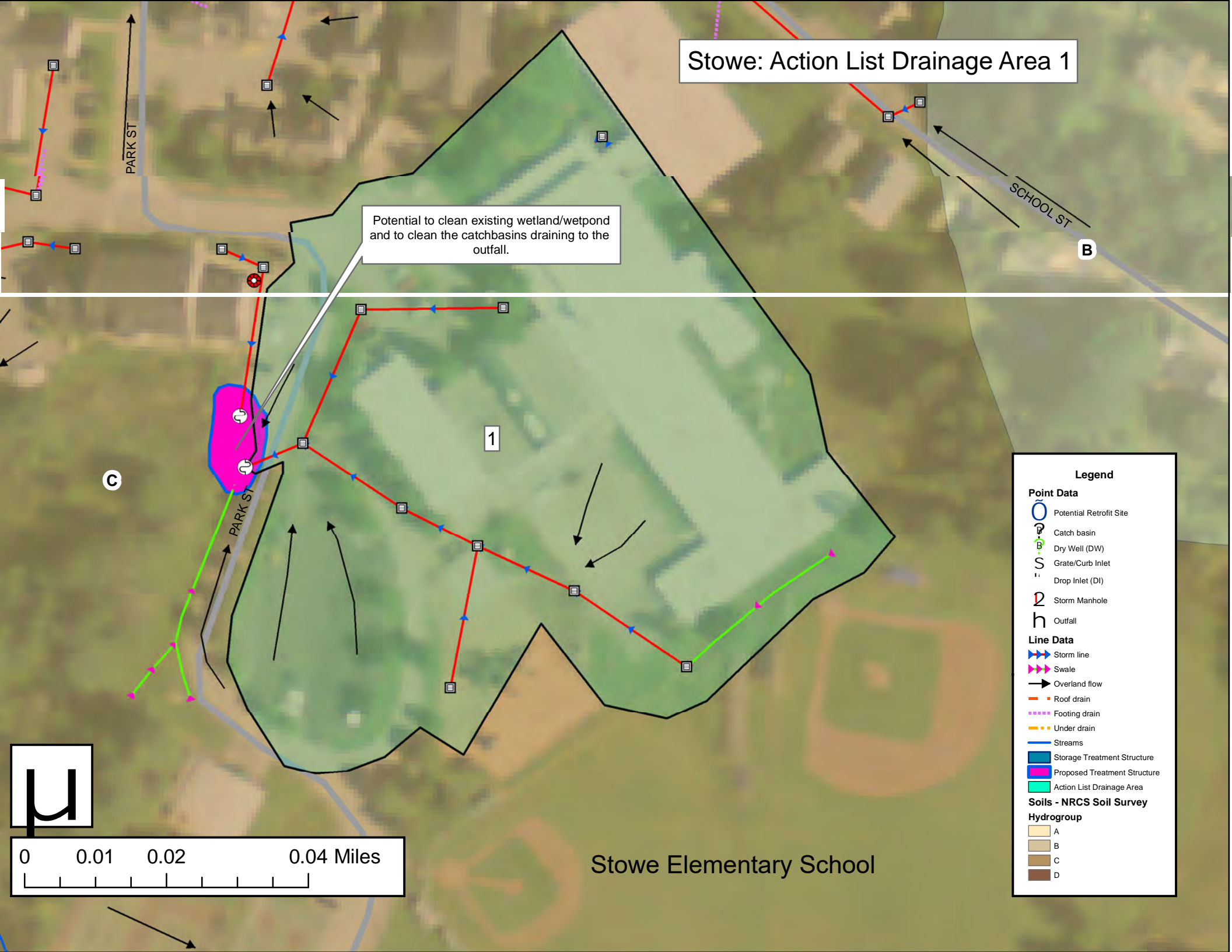
- Storm line
- Swale
- Overland flow
- Roof drain
- Footing drain
- Under drain
- Streams
- Storage Treatment Structure
- Proposed Treatment Structure
- Action List Drainage Area

**Soils - NRCS Soil Survey Hydrogroup**

- A
- B
- C
- D



Stowe Elementary School



# Stowe: Action List Drainage Area 9

Recommend catchbasin cleaning (system includes stream), with potential for catchbasin inserts

### Legend

**Point Data**

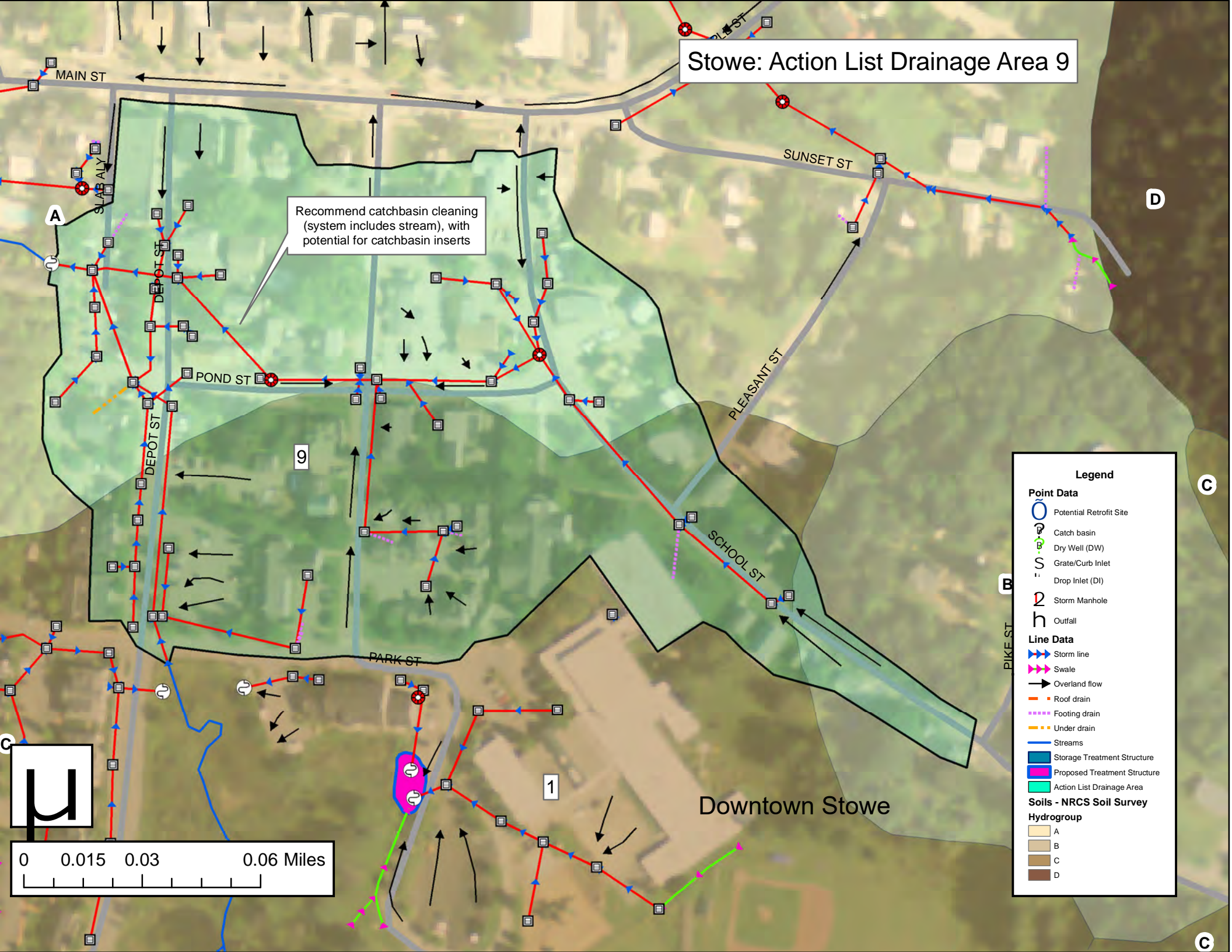
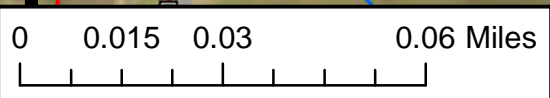
- Potential Retrofit Site
- Catch basin
- Dry Well (DW)
- Grate/Curb Inlet
- Drop Inlet (DI)
- Storm Manhole
- Outfall

**Line Data**

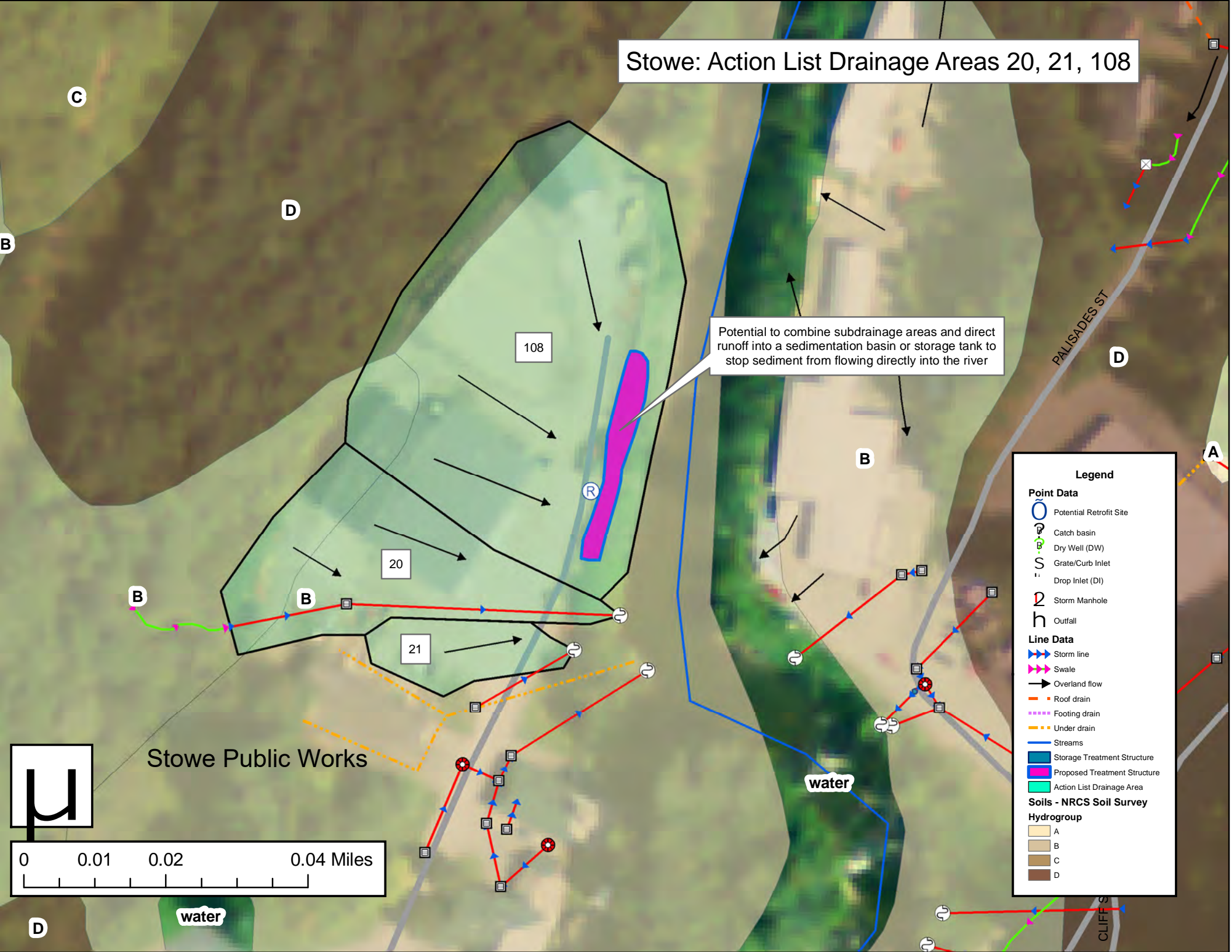
- Storm line
- Swale
- Overland flow
- Roof drain
- Footing drain
- Under drain
- Streams
- Storage Treatment Structure
- Proposed Treatment Structure
- Action List Drainage Area

**Soils - NRCS Soil Survey Hydrogroup**

- A
- B
- C
- D



# Stowe: Action List Drainage Areas 20, 21, 108



Potential to combine subdrainage areas and direct runoff into a sedimentation basin or storage tank to stop sediment from flowing directly into the river

**Legend**

**Point Data**

- Potential Retrofit Site
- Catch basin
- Dry Well (DW)
- Grate/Curb Inlet
- Drop Inlet (DI)
- Storm Manhole
- Outfall

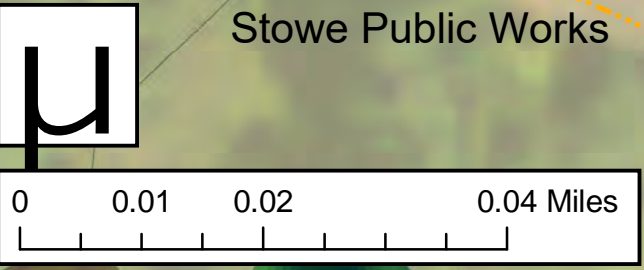
**Line Data**

- Storm line
- Swale
- Overland flow
- Roof drain
- Footing drain
- Under drain
- Streams
- Storage Treatment Structure
- Proposed Treatment Structure
- Action List Drainage Area

**Soils - NRCS Soil Survey**

**Hydrogroup**

- A
- B
- C
- D



C  
D  
B  
B  
B  
B  
D  
D  
D

PALISADES ST

CLIFFS

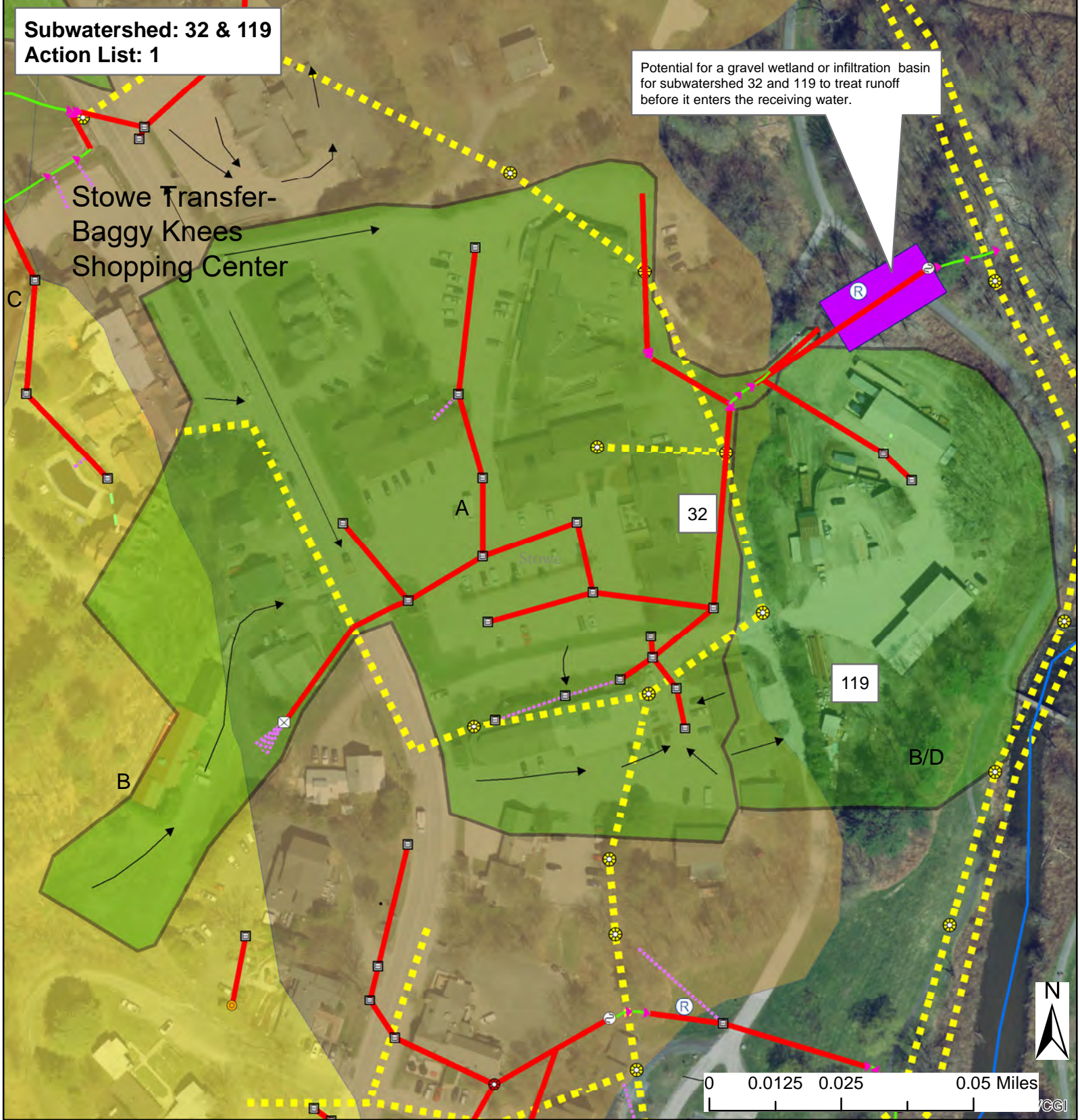
water

water

**Subwatershed: 32 & 119**  
**Action List: 1**

Potential for a gravel wetland or infiltration basin for subwatershed 32 and 119 to treat runoff before it enters the receiving water.

Stowe Transfer-Baggy Knees Shopping Center

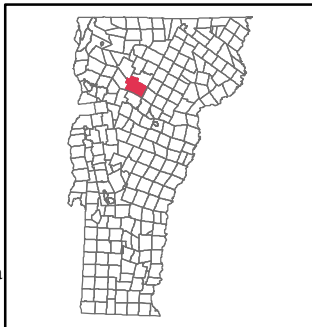


## Stowe, VT

DEC Stormwater Infrastructure Mapping Project

This map shows high priority subwatersheds which are ranked by connectedness, percent of impervious cover, field observations, and potential retrofit measures and locations.

The data shown on this map is only as accurate as the available sources and field observations allowed and should be used as a basic planning level tool only.



### Stormwater points

- Pipe Cross (not connected)
- Catchbasin
- Dry Well
- Drop Inlet
- Grate/Curb Inlet
- Yard drain
- CB tied to sanitary sewer
- Junction Box
- Stormwater Manhole
- Outfall
- Culvert inlet
- Culvert outlet
- Control Structure
- Treatment feature (see notes)
- Retrofit
- Unknown Point
- Information Point

### Stormwater line

- Storm line
- Storm line (old Sanitary line)
- Tunnel (storm)
- Combined sewer
- Sanitary line
- Swale
- Footing drain
- Under drain
- Roof drain
- Infiltration pipe
- French drain
- Trench drain
- Emergency spillway
- Stream
- Overland flow

### NRCS - Soils

- A
- B
- C
- D

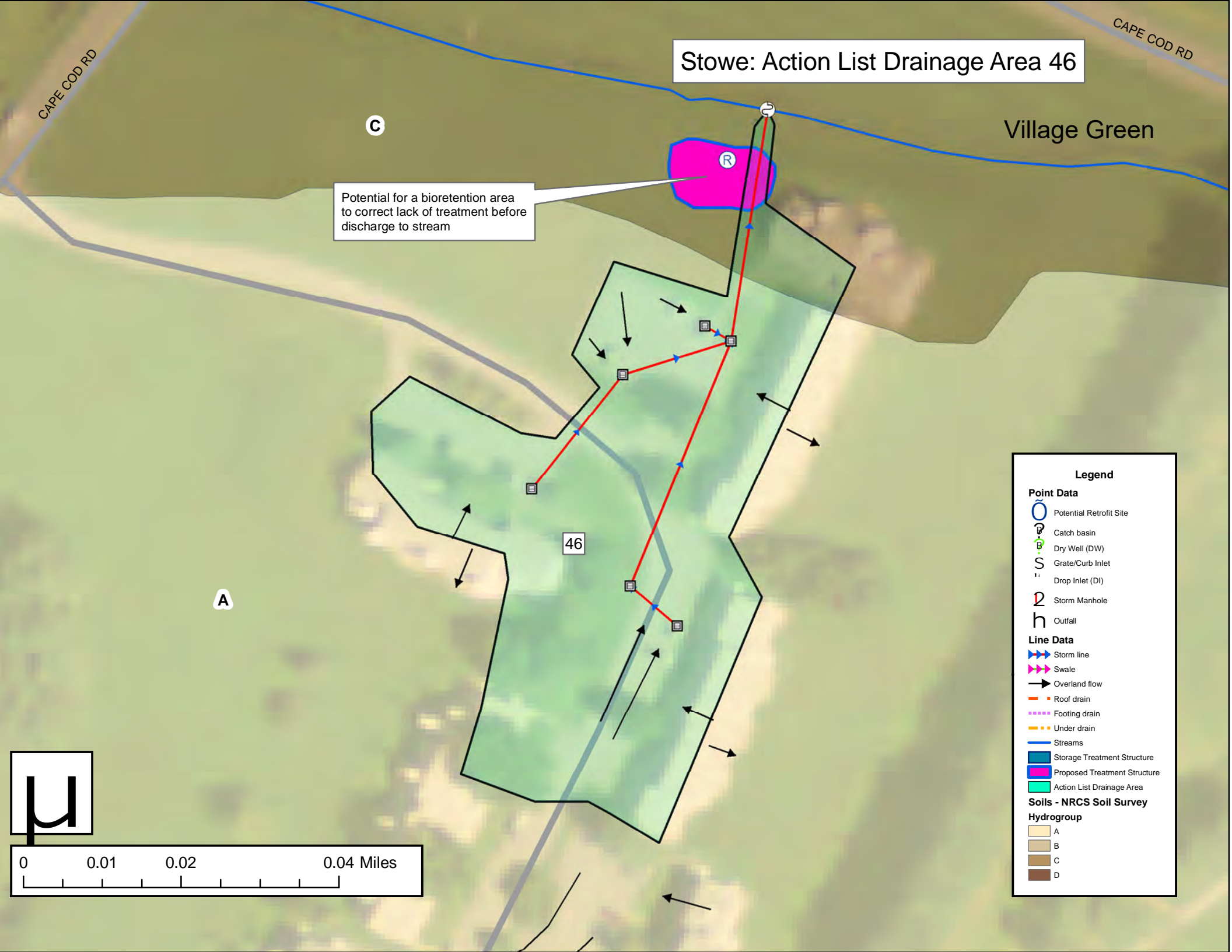
### SubwatershedID

- Priority Subwatershed
- Stormwater Treatment Area
- Potential Stormwater Treatment Area

Creator: Jim Pease, David Ainley  
 DEC - WID - Clean Water Initiative Program  
 Plotted Date: 1/31/2022  
 Data Sources: VTRANS Roads data, VT Hydrography data set, DEC Stormwater database, NRCS soils survey  
 Imagery Source: VCGI Best Available Imagery



# Stowe: Action List Drainage Area 46



Potential for a bioretention area to correct lack of treatment before discharge to stream

**Legend**

**Point Data**

- Potential Retrofit Site
- Catch basin
- Dry Well (DW)
- Grate/Curb Inlet
- Drop Inlet (DI)
- Storm Manhole
- Outfall

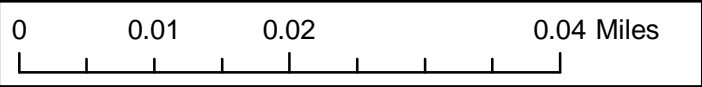
**Line Data**

- Storm line
- Swale
- Overland flow
- Roof drain
- Footing drain
- Under drain
- Streams
- Storage Treatment Structure
- Proposed Treatment Structure
- Action List Drainage Area

**Soils - NRCS Soil Survey**

**Hydrogroup**

- A
- B
- C
- D



# Stowe: Action List Drainage Area 82

The Swimming Hole

Potential to add additional pocket pond at the Swimming Hole

**Legend**

**Point Data**

- Potential Retrofit Site
- Catch basin
- Dry Well (DW)
- Gate/Curb Inlet
- Drop Inlet (DI)
- Storm Manhole
- Outfall

**Line Data**

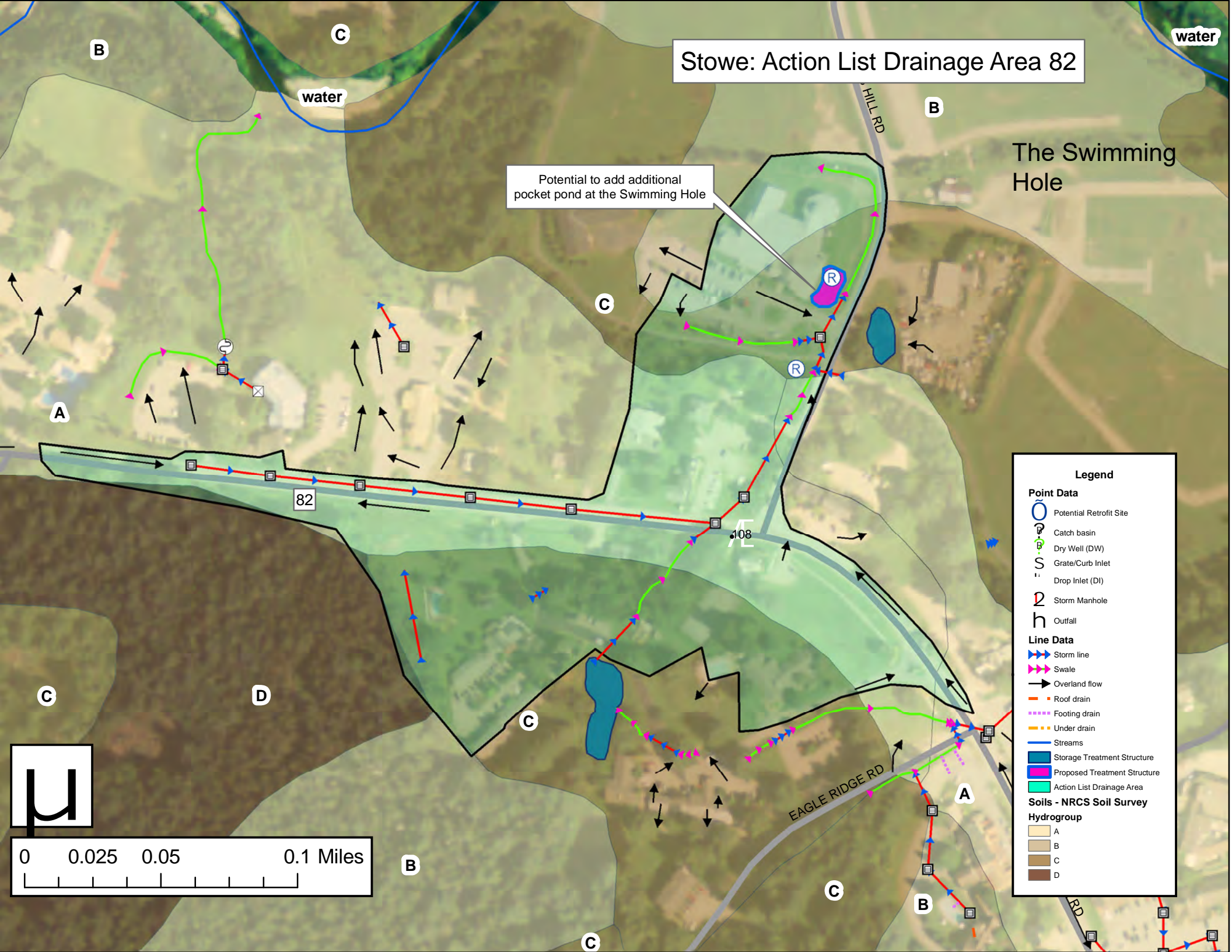
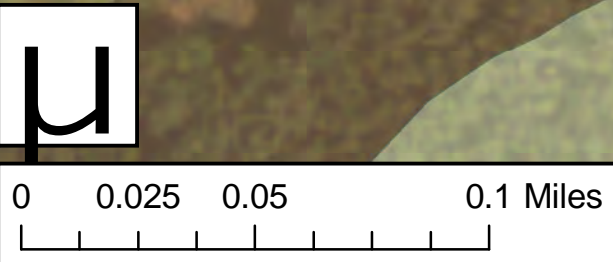
- Storm line
- Swale
- Overland flow
- Roof drain
- Footing drain
- Under drain
- Streams

**Structures**

- Storage Treatment Structure
- Proposed Treatment Structure

**Soils - NRCS Soil Survey Hydrogroup**

- A
- B
- C
- D



# Stowe: Action List Drainage Area 107

Jackson Arena

Potential to clean existing wetland/wetpond downstream of subwatershed and to clean the buffer strip along stream, as well as to let it grow instead of keeping it mowed

C

A

PARK ST

107

C

C

B

**Legend**

**Point Data**

- Potential Retrofit Site
- Catch basin
- Dry Well (DW)
- Grate/Curb Inlet
- Drop Inlet (DI)
- Storm Manhole
- Outfall

**Line Data**

- Storm line
- Swale
- Overland flow
- Roof drain
- Footing drain
- Under drain
- Streams
- Storage Treatment Structure
- Proposed Treatment Structure
- Action List Drainage Area

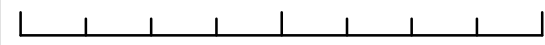
**Soils - NRCS Soil Survey**

**Hydrogroup**

- A
- B
- C
- D

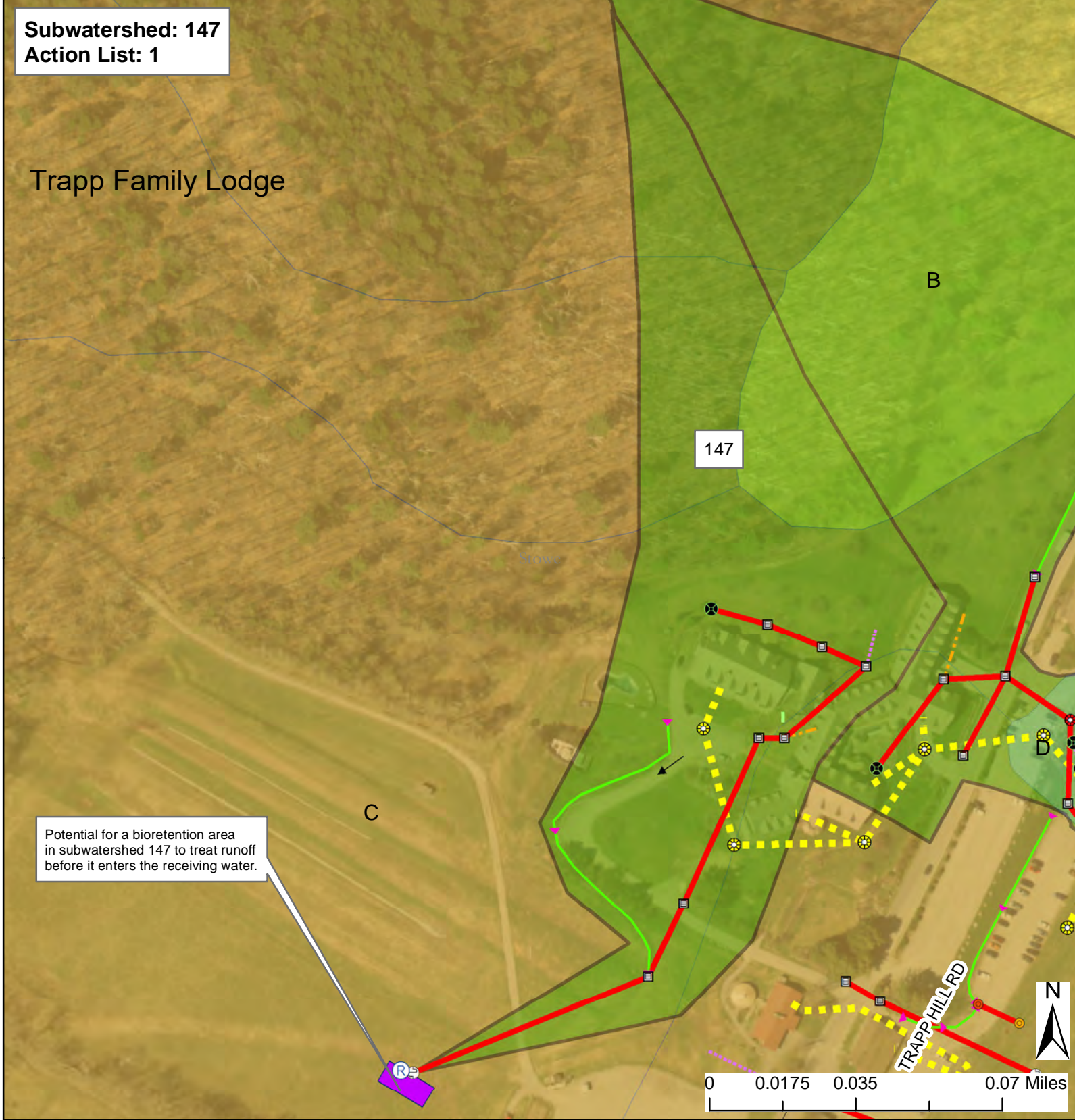


0 0.015 0.03 0.06 Miles



**Subwatershed: 147**  
**Action List: 1**

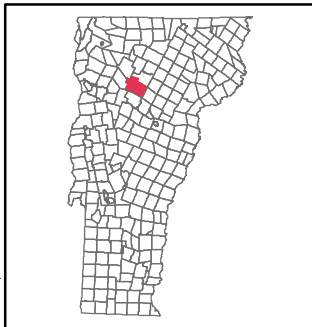
Trapp Family Lodge



Potential for a bioretention area in subwatershed 147 to treat runoff before it enters the receiving water.

### Stowe, VT

DEC Stormwater Infrastructure Mapping Project



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The data shown on this map is only as accurate as the available sources and field observations allowed and should be used as a basic planning level tool only.

- Stormwater points**
- Pipe Cross (not connected)
  - Catchbasin
  - Dry Well
  - Drop Inlet
  - Grate/Curb Inlet
  - Yard drain
  - CB tied to sanitary sewer
  - Junction Box
  - Stormwater Manhole
  - Outfall
  - Culvert inlet
  - Culvert outlet
  - Control Structure
  - Treatment feature (see notes)
  - Retrofit
  - Unknown Point
  - Information Point

- Stormwater line**
- Storm line
  - Storm line (old Sanitary line)
  - Tunnel (storm)
  - Combined sewer
  - Sanitary line
  - Swale
  - Footing drain
  - Under drain
  - Roof drain
  - Infiltration pipe
  - French drain
  - Trench drain
  - Emergency spillway
  - Stream
  - Overland flow

- NRCS - Soils**
- A
  - B
  - C
  - D

- SubwatershedID**
- Priority Subwatershed
  - Stormwater Treatment Area
  - Potential Stormwater Treatment Area

Creator: Jim Pease, David Ainley  
 DEC - WID - Clean Water Initiative Program  
 Plotted Date: 9/20/2021  
 Data Sources: VTRANS Roads data, VT Hydrography data set, DEC Stormwater database, NRCS soils survey  
 Imagery Source: VCGI Best Available Imagery



**Subwatershed: 152**  
**Action List: 1**

Trapp Family Lodge

152

BALSAM DR

TRAPP HILL RD

PASTURE DR

Potential for a bioretention area in subwatershed 152 to treat runoff before it enters the receiving water.

0 0.0175 0.035 0.07 Miles



### Stowe, VT

DEC Stormwater Infrastructure Mapping Project



This map shows high priority subwatersheds which are ranked by connectedness, percent of impervious cover, field observations, and potential retrofit measures and locations.

The data shown on this map is only as accurate as the available sources and field observations allowed and should be used as a basic planning level tool only.

- Stormwater points**
- Pipe Cross (not connected)
  - Catchbasin
  - Dry Well
  - Drop Inlet
  - Grate/Curb Inlet
  - Yard drain
  - CB tied to sanitary sewer
  - Junction Box
  - Stormwater Manhole
  - Outfall
  - Culvert inlet
  - Culvert outlet
  - Control Structure
  - Treatment feature (see notes)
  - Retrofit
  - Unknown Point
  - Information Point

- Stormwater line**
- Storm line
  - Storm line (old Sanitary line)
  - Tunnel (storm)
  - Combined sewer
  - Sanitary line
  - Swale
  - Footing drain
  - Under drain
  - Roof drain
  - Infiltration pipe
  - French drain
  - Trench drain
  - Emergency spillway
  - Stream
  - Overland flow

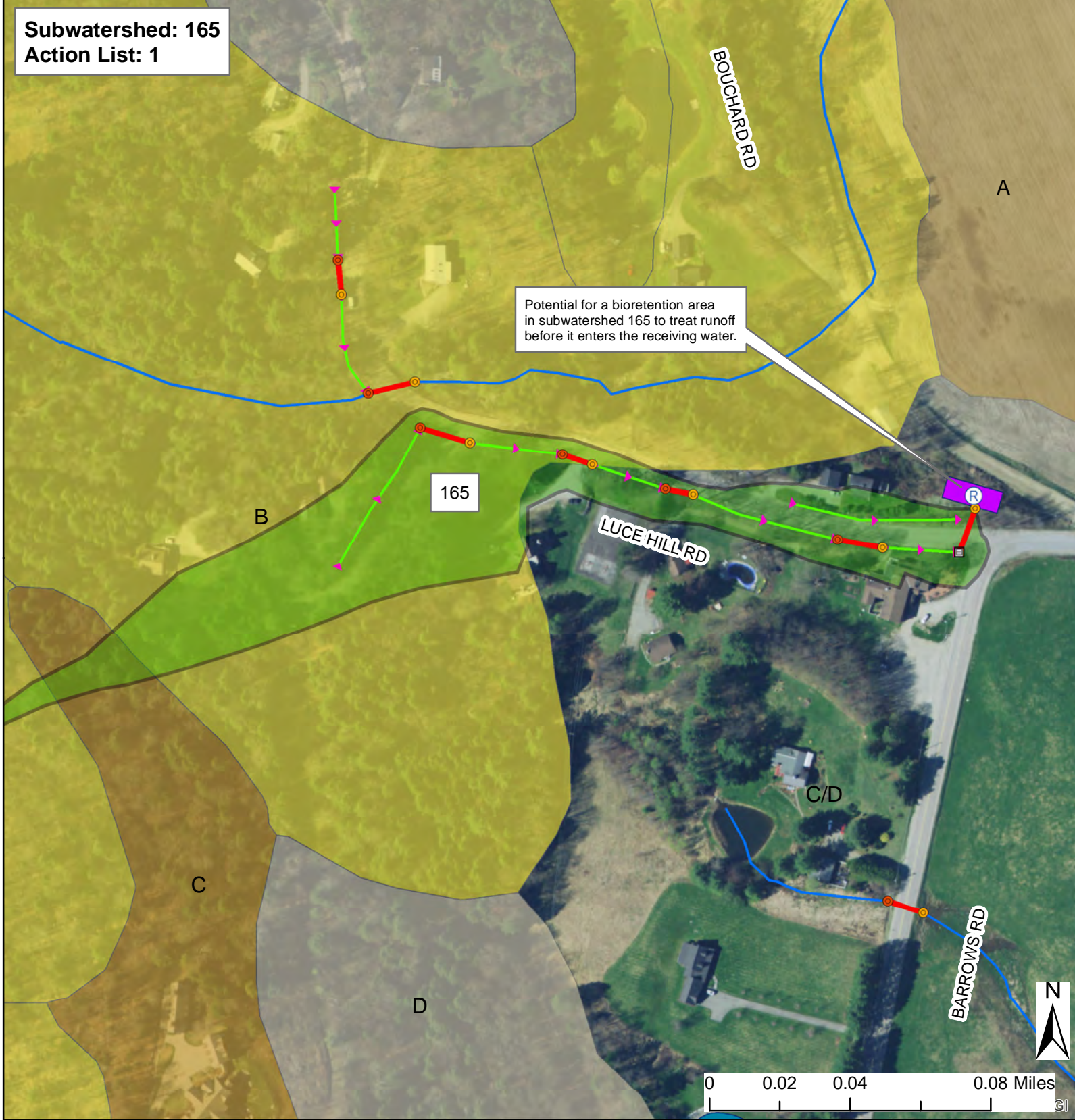
- NRCS - Soils**
- A
  - B
  - C
  - D

- SubwatershedID**
- Priority Subwatershed
  - Stormwater Treatment Area
  - Potential Stormwater Treatment Area

Creator: Jim Pease, David Ainley  
 DEC - WID - Clean Water Initiative Program  
 Plotted Date: 9/20/2021  
 Data Sources: VTRANS Roads data, VT Hydrography data set, DEC Stormwater database, NRCS soils survey  
 Imagery Source: VCGI Best Available Imagery



**Subwatershed: 165**  
**Action List: 1**

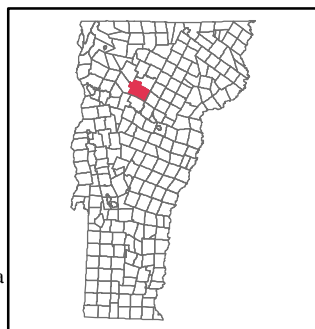


## Stowe, VT

DEC Stormwater Infrastructure Mapping Project

This map shows high priority subwatersheds which are ranked by connectedness, percent of impervious cover, field observations, and potential retrofit measures and locations.

The data shown on this map is only as accurate as the available sources and field observations allowed and should be used as a basic planning level tool only.



### Stormwater points

- Pipe Cross (not connected)
- Catchbasin
- Dry Well
- Drop Inlet
- Grate/Curb Inlet
- Yard drain
- CB tied to sanitary sewer
- Junction Box
- Stormwater Manhole
- Outfall
- Culvert inlet
- Culvert outlet
- Control Structure
- Treatment feature (see notes)
- Retrofit
- Unknown Point
- Information Point

### Stormwater line

- Storm line
- Storm line (old Sanitary line)
- Tunnel (storm)
- Combined sewer
- Sanitary line
- Swale
- Footing drain
- Under drain
- Roof drain
- Infiltration pipe
- French drain
- Trench drain
- Emergency spillway
- Stream
- Overland flow

### NRCS - Soils

- A
- B
- C
- D

### SubwatershedID

- Priority Subwatershed
- Stormwater Treatment Area
- Potential Stormwater Treatment Area

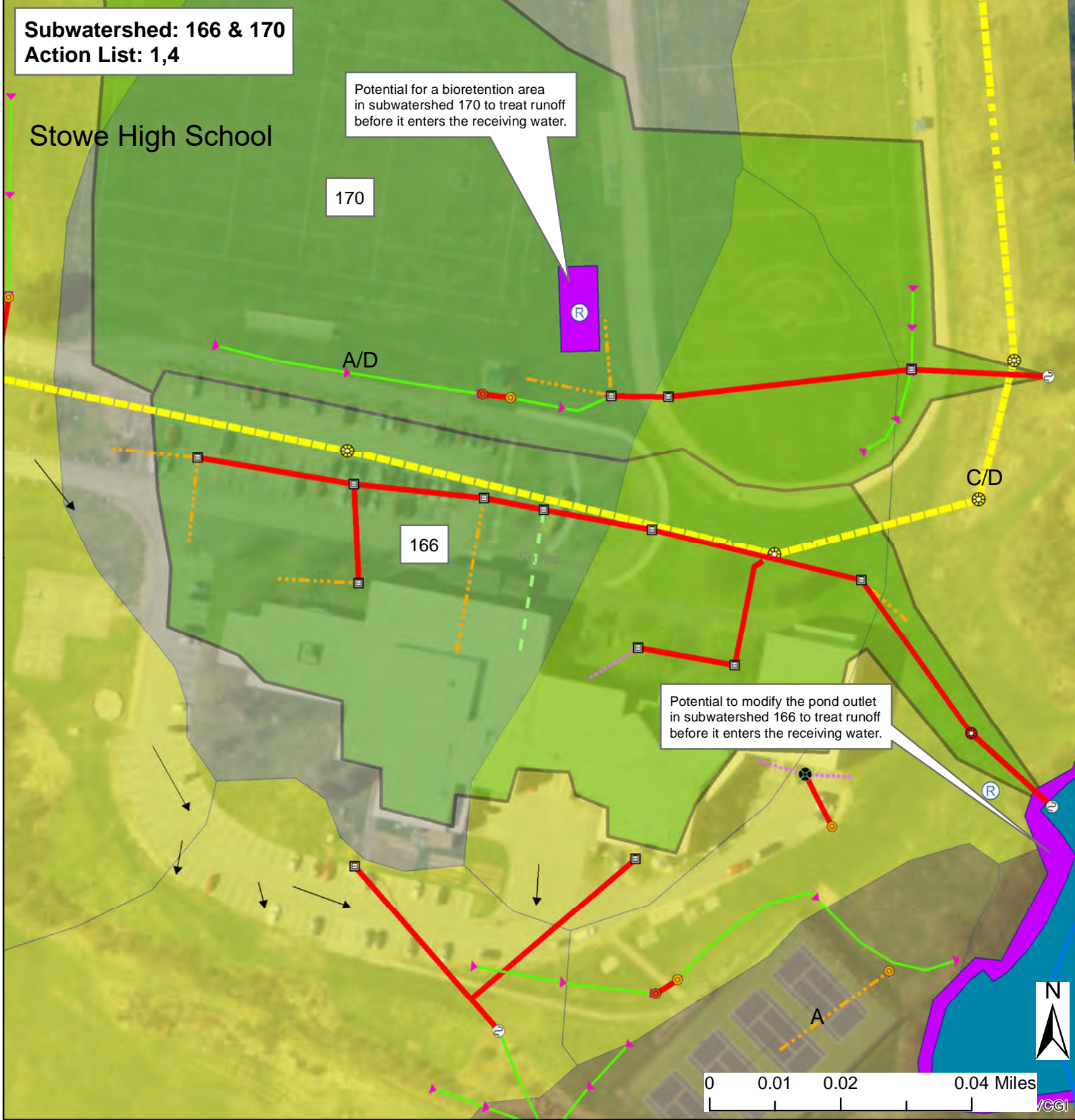
Creator: Jim Pease, David Ainley  
 DEC - WID - Clean Water Initiative Program  
 Plotted Date: 9/20/2021  
 Data Sources: VTRANS Roads data, VT Hydrography data set, DEC Stormwater database, NRCS soils survey  
 Imagery Source: VCGI Best Available Imagery

**Subwatershed: 166 & 170**  
**Action List: 1,4**

Stowe High School

Potential for a bioretention area in subwatershed 170 to treat runoff before it enters the receiving water.

Potential to modify the pond outlet in subwatershed 166 to treat runoff before it enters the receiving water.

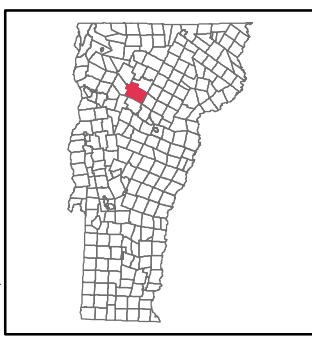


**Stowe, VT**

DEC Stormwater Infrastructure Mapping Project

This map shows high priority subwatersheds which are ranked by connectedness, percent of impervious cover, field observations, and potential retrofit measures and locations.

The data shown on this map is only as accurate as the available sources and field observations allowed and should be used as a basic planning level tool only.



<p><b>Stormwater points</b></p> <ul style="list-style-type: none"> <li> Pipe Cross (not connected)</li> <li> Catchbasin</li> <li> Dry Well</li> <li> Drop Inlet</li> <li> Grate/Curb Inlet</li> <li> Yard drain</li> <li> CB tied to sanitary sewer</li> <li> Junction Box</li> <li> Stormwater Manhole</li> <li> Outfall</li> <li> Culvert inlet</li> <li> Culvert outlet</li> <li> Control Structure</li> <li> Treatment feature (see notes)</li> <li> Retrofit</li> <li> Unknown Point</li> <li> Information Point</li> </ul>	<p><b>Stormwater line</b></p> <ul style="list-style-type: none"> <li> Storm line</li> <li> Storm line (old Sanitary line)</li> <li> Tunnel (storm)</li> <li> Combined sewer</li> <li> Sanitary line</li> <li> Swale</li> <li> Footing drain</li> <li> Under drain</li> <li> Roof drain</li> <li> Infiltration pipe</li> <li> French drain</li> <li> Trench drain</li> <li> Emergency spillway</li> <li> Stream</li> <li> Overland flow</li> </ul>	<p><b>NRCS - Soils</b></p> <table border="0"> <tr> <td> A</td> <td> C</td> </tr> <tr> <td> A/D</td> <td> C/D</td> </tr> <tr> <td> B</td> <td> D</td> </tr> </table>	A	C	A/D	C/D	B	D	<p><b>SubwatershedID</b></p> <ul style="list-style-type: none"> <li> Priority Subwatershed</li> <li> Stormwater Treatment Area</li> <li> Potential Stormwater Treatment Area</li> </ul>
A	C								
A/D	C/D								
B	D								

Creator: Jim Pease, David Ainley  
 DEC - WID - Clean Water Initiative Program  
 Plotted Date: 9/20/2021  
 Data Sources: VTRANS Roads data, VT Hydrography data set, DEC Stormwater database, NRCS soils survey  
 Imagery Source: VCGI Best Available Imagery

