Base Lodge Tributary, Dover, Vermont

Base Lodge Tributary of the North Branch of the Deerfield River at Mt Snow in Dorset, Vermont has been found to be stressed by stormwater water quality as measured by the biological community and habitat of the stream. In addition the North Branch has been designated on the Vermont 303d list as impaired for bacteria. There are numerious discharges to the stream from the developed lands around the Mt Snow base lodge and ski trails. The tributary is also barren of vegetation and rootstock that would be resistant to high stream flows such as Red Osier Dogwood and River Willow. Many of the discharges already have stormwater controls in place. The recommended course of action is to install a stormwater treatment structure that controls both the water quality volume and the channel protection volume from two parking areas. A map showing the location of the discharges and a possible retrofit location on private land is provided.

Plantings of riparian species in the brook channel would help reduce high velocity runoff and retain soils.

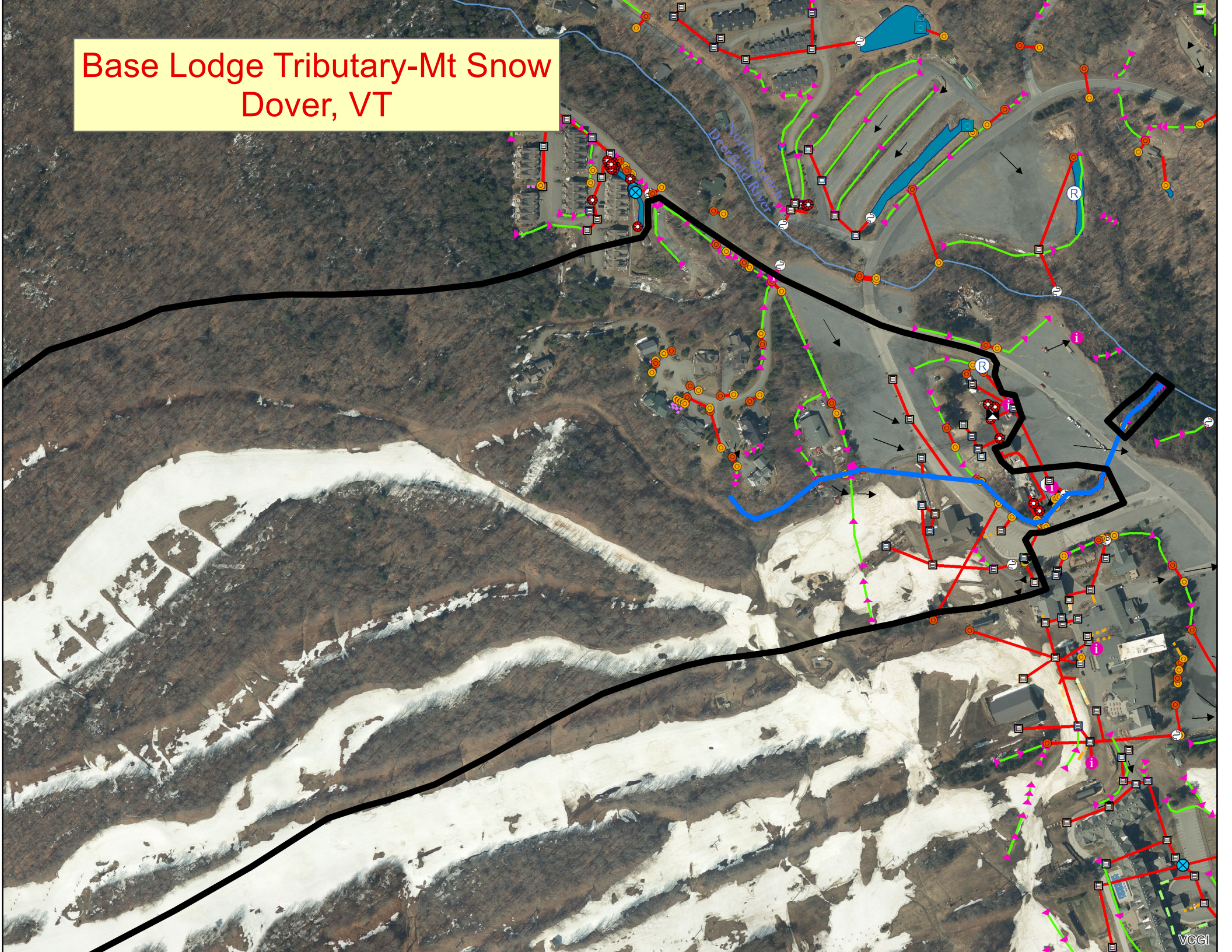
Addressing the large discharges of stormwater to the brook will reduce contamination and stream channel erosion and will help prevent the stream from becoming declared stormwater impaired on the state of Vermont's 303d list of impaired waters. It will also reduce baceria and nitrogen which are currently being discharged to the North Branch of the Deerfield River and the Connecticut River.

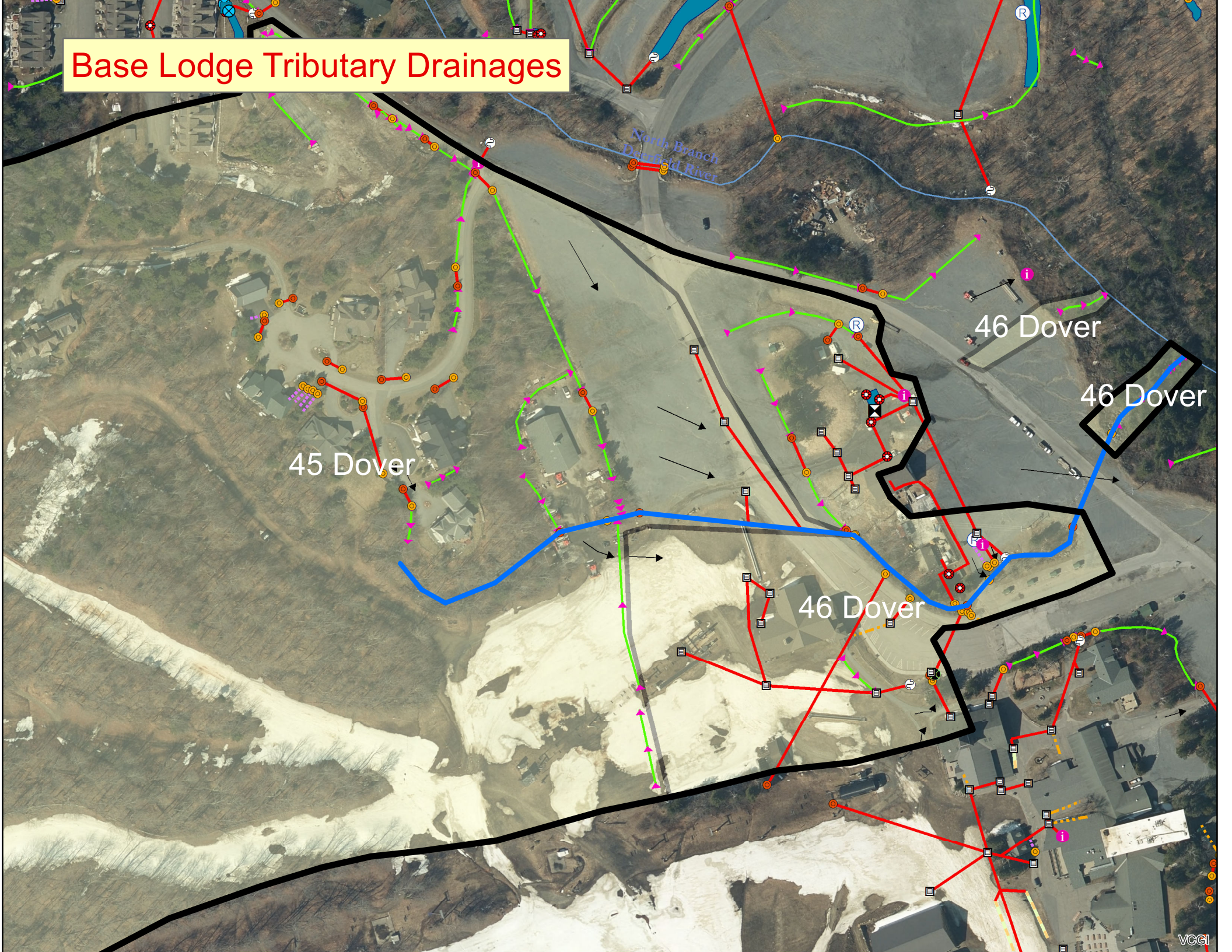
Macroinvertebrate Site Summary

Location:	Baselodge Trib	**Location ID:**	502491
Town:	Dover	**Bio Site ID:**	651413000001
Description:	Located above parking lot/road culverted portion of tributary, below Mount Snow base lodge.	**WBID:**	VT12-05
Stream Type:	Small High Gradient		

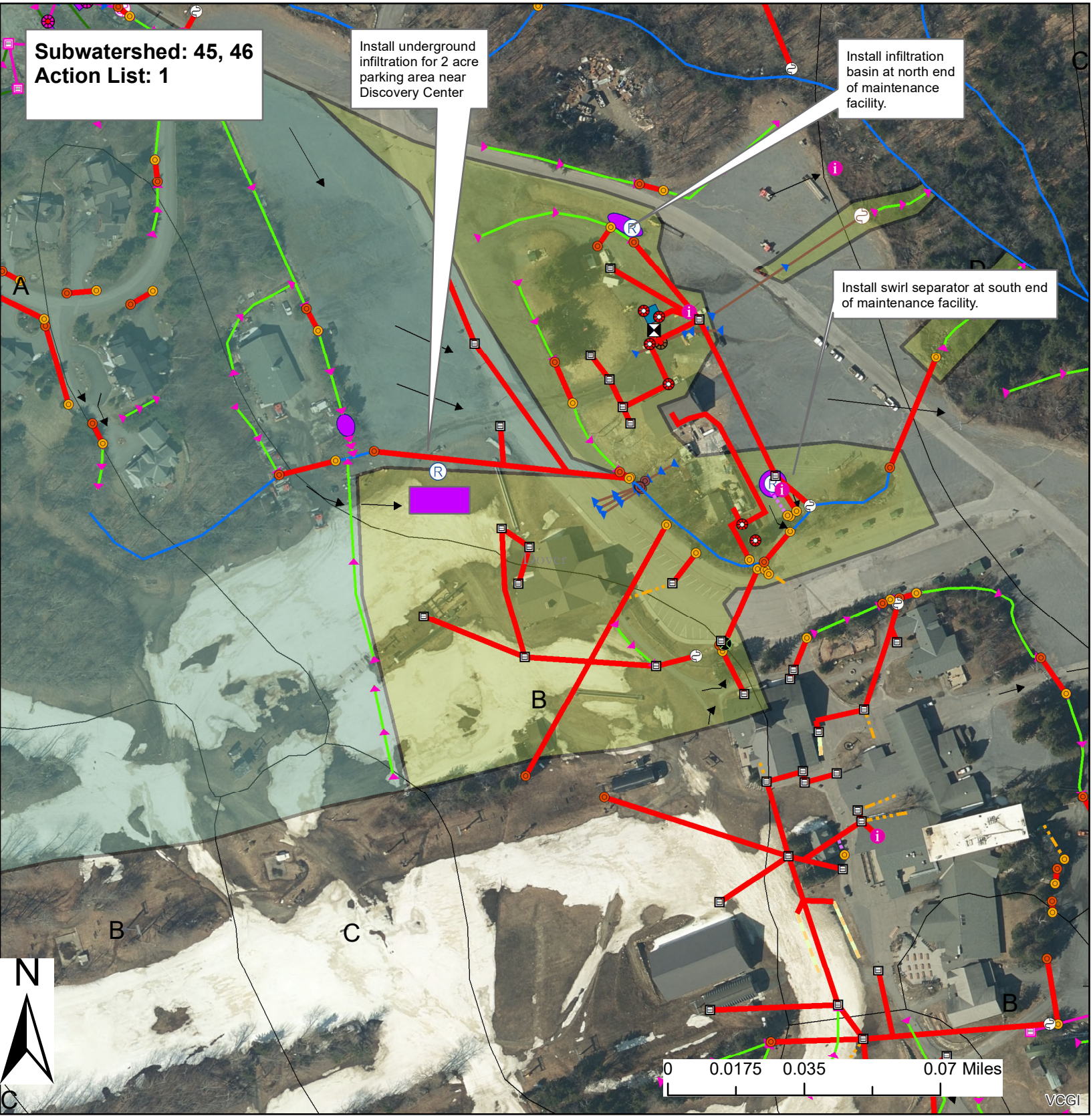
Date	Density	Richness	EPT Richness	PMA-O	B.I.	Oligo.	EPT/EPT + Chiro	PPCS-F	Community Assessment
9/29/2004	109	31.0	18.0	77.7	2.53	0.92	0.83	0.71	Fair
Full Support	≥ 300	≥ 27	≥ 16	≥ 45	≤ 4.5	≤ 12	≥ 0.45	≥ 0.4	
Indeterminate	≥ 250	≥ 26	≥ 15	≥ 40	≤ 4.65	≤ 14.5	≥ 0.43	≥ 0.35	
Non-Support	< 250	< 26	< 15	< 40	> 4.65	> 14.5	< 0.43	< 0.35	

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


Base Lodge Tributary-Mt Snow
Dover, VT
North Branch
Deerfield River
VCGI


Base Lodge Tributary Drainages
North Branch Deerfield River
46 Dover
46 Dover
45 Dover
46 Dover
VCGI

Watershed Number	Action List #	Proposed Action	Proposed or Existing Stormwater Treatment Practice	Permit Number	Watershed Area (Acres)	Current BMP Sediment Reduction Credit	Sediment Load with Current Reductions (lbs.)	Priority Action Sediment Reduction Credit	Sediment Load with Priority Action (lbs.)	Projected Nitrogen Load (lbs.)	Current BMP Nitrogen or Phosphorus Reduction Credit	Nitrogen or Phosphorus Load with Current Reductions (lbs.)	Nitrogen or Phosphorus Load with Priority Action (lbs.)	Estimated Basin Construction Cost	Estimated Other BMP Construction Cost	Cost of Sediment Removal Per Pound (based on annual sediment load)	Cost of Nitrogen or Phosphorus Removal Per Pound (based on annual nutrient load)	Assistance Program
Base Lodge Trib Dover																		
45 Dover	**1**	Install underground infiltration for 2 acre parking area near Discovery Center	IG/GS/CB		135.03	25%	10903	0%	10903	90.86	0.00	90.86	68.25	$48,868		$21	$2,497	CWIP,SRF,LISF
46 Dover	**1**	Install infiltration basin at north end of maintenance facility and swirl separator at south end	IB/VS/GS/CB	5228-INDS	8.38	0%	5808	50%	2904	48.40	0.00	48.40	24	$157,000		$54	$6,488	CWIP,SRF,LISF

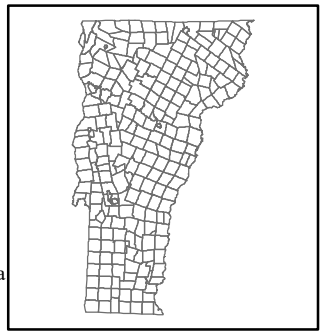


Dover, VT

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.



VERMONT

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: 10/15/2021
Data Sources: VTRANS Roads data, VT Hydrography data set, DEC Stormwater database, NRCS soils survery
Imagery Source: VCGI Best Available Imagery