

Caspian Lake Watershed Action Plan

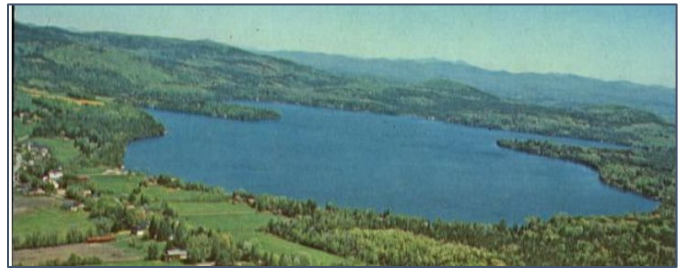
Orleans County Conservation District has a grant from the **Lake Champlain Basin Program** to lead, with the engagement of community members and other partners, the development of a **Lake Watershed Action Plan** for **Caspian Lake**.

What is a Lake Watershed Action Plan: An LWAP is an assessment and planning tool that identifies the greatest threats to water quality, wildlife habitat, and the overall health of the lake ecosystem. The process evaluates the shoreland, tributaries, drainage ditches, wetlands, hydrologically connected roads, and working landscapes to create a priority list of issues and projects. The result is a planning guide that prioritizes restoration and protection actions for the watershed. The plan is shared with the community and local partners for their input.

Why Caspian? While the lake is still exceptionally clean, based on 30 years of lake water quality monitoring data collected by the Greensboro Association, the lake is experiencing a significant increase in both spring and summer total phosphorus concentrations. The Vermont Department of Environmental Conservation (VT DEC) lists the lake as stressed. While the lake is still relatively healthy by Vermont standards, the mean phosphorus trend is increasing and the clarity and cleanliness of the water we enjoy in the lake's oligotrophic state will change if not addressed.

Project Schedule:

March 2022 Kick-off Meeting with Stakeholders
Fall 2022–2023 Field Assessments
August 2023 Stakeholder input meeting
September 2023 Fluidstate develop 30% designs
November 2023 Final plan presented to stakeholders



Core Assessment Areas

Streams

18 SGA Lite Reaches & 33 Sites Total
Priority Sites

LakeWise

87 Sites Total Priority Sites

Roads

11 Total Sites
57 MRGP Segments (18,200' – 3.45 miles)

Developed, Wetlands & Agricultural

10 Sites Total Priority Sites

For more information, please contact:

Sarah Damsell

District Manager, Orleans County NRCD

802-624-7008, sarah.damsell@vt.nacdnet.net

Over 152 sites assessed and 35 project for future upload to the VT Watershed database for project development.

Lakeshore 17 Prioritized

Streams 10 Sites Prioritized

Wetlands 3 Sites Prioritized

Roads 5 Sites Prioritized

Final Projects:

- 1) Wet005/ST-3 (Barr)
- 2) LS-25 (Gray)
- 3) LS-32 (Winship)
- 4) ST-7 (Clarke)
- 5) LS-29 (Elizabeth Armstrong)

As a part of the LWAP, the contractors will develop 30% conceptual designs for the top 5 projects, with landowner support.

Caspian LWAP Selected Priority Sites for 30% Engineering Designs

Caspian Lake – Lake & Watershed Action Plan
Field Assessment Summary Sheets **RANK: 7**

Site ID: Wet005		Project Type: Wetland
Location:	Lake Shore Rd and North Shore Rd	
Drainage Area (Acres)	151.04	
Impervious Managed (Acres)	0	
Sediment Reduction	Moderate	
Phosphorus Reduction (kg)	2.28	
Cost (\$)	\$18,756.00	

Caspian Lake – Lake & Watershed Action Plan
Field Assessment Summary Sheets **RANK: 2**

Site ID: ST-32		Project Type: Stream
Location:	914 Craftsbury Rd. – Perron Property	
Drainage Area (Acres)	29.79	
Impervious Managed (Acres)	0.11	
Sediment Reduction	Moderate	
Phosphorus Reduction (kg)	3.8	
Cost (\$)	\$10,821.00	

Caspian Lake – Lake & Watershed Action Plan
Field Assessment Summary Sheets **RANK: 15**

Site ID: LS-25		Project Type: Lakeshore
Location:	1109 CRAFTSBURY ROAD – Gray Family Partnership	
Drainage Area (Acres)	2.19	
Impervious Managed (Acres)	0.15	
Sediment Reduction (cu. Ft / year)	66.67	
Phosphorus Reduction (kg / year)	1.20	
Cost (\$)	\$12,000.00 Cost for shore stabilization only. Other costs unknown.	

Caspian Lake – Lake & Watershed Action Plan
Field Assessment Summary Sheets **RANK: 14**

Site ID: LS-32		Project Type: Lakeshore
Location:	91 MITCHELL PLACE – Winship	
Drainage Area (Acres)	1.15	
Impervious Managed (Acres)	0.12	
Sediment Reduction (cu. Ft / year)	55.00	
Phosphorus Reduction (kg / year)	1.21	
Cost (\$)	\$11,400.00	

Caspian Lake – Lake & Watershed Action Plan
Field Assessment Summary Sheets **RANK: 9**

Site ID: ST-7		Project Type: Stream
Location:	1970 Lake Shore Road – Clarke Property	
Drainage Area (Acres)	1.85	
Impervious Managed (Acres)	0.22	
Sediment Reduction	Low	
Phosphorus Reduction (kg)	1.63	
Cost (\$)	\$4,450.00	

Caspian Lake – Lake & Watershed Action Plan
Field Assessment Summary Sheets **RANK: 16**

Site ID: LS-29		Project Type: Lakeshore
Location:	155 MILLER ROAD – Armstrong-Newhouse	
Drainage Area (Acres)	3.26	
Impervious Managed (Acres)	0.26	
Sediment Reduction (cu. Ft / year)	Low	
Phosphorus Reduction (kg / year)	0.33	
Cost (\$)	\$3,600.00	