



CASPIAN LAKE WATERSHED ACTION PLAN FINAL REPORT

VIRTUAL PUBLIC MEETING
Tuesday January 16th, 2024
5:00 - 6:30

Find the TEAMS Registration
Link on our webpage.

@ <https://www.vacd.org/conservation-districts/orleans-county/>

Caspian Lake Watershed Action Plan Final Report Presentation Webinar will be focused on presenting the final report for the Caspian Lake Watershed Action plan (LWAP). **The final report will include a high-level overview/synthesis of all the prior completed desktop and field assessments, recommendations and outcomes.**



Orleans County
Natural Resources
Conservation District



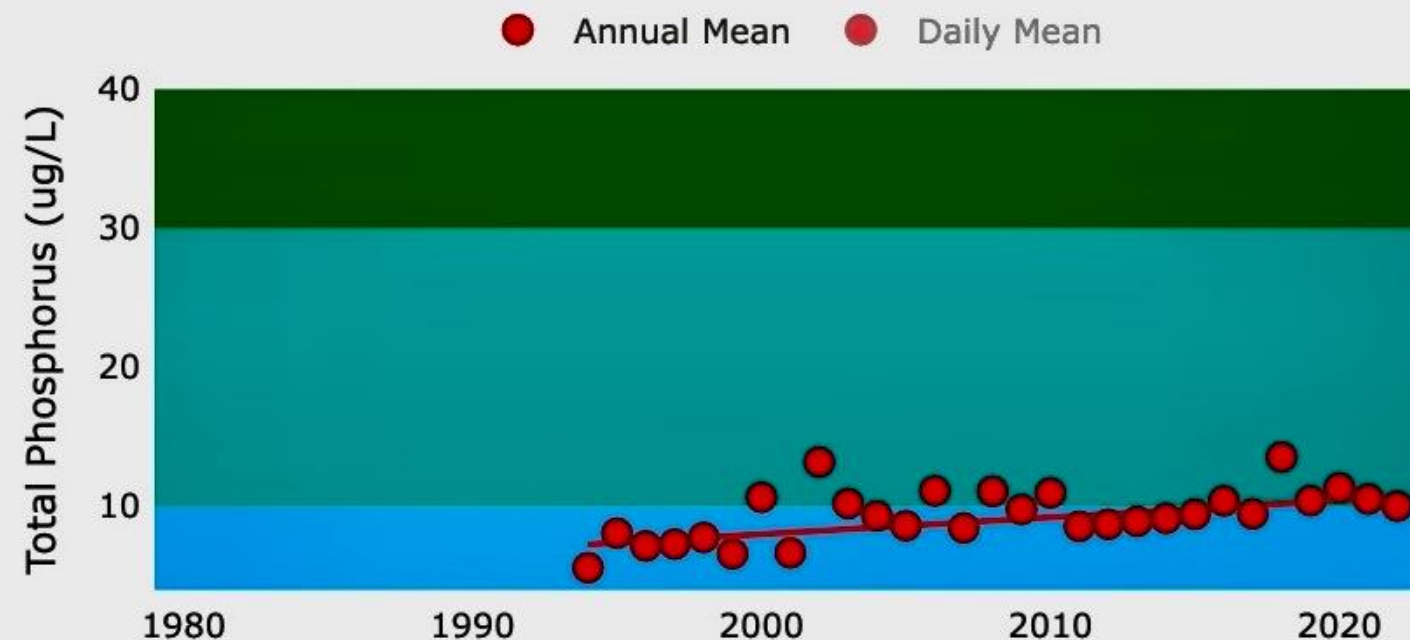
Greensboro
Association

Based on 30 years of water quality monitoring data, Caspian Lake is experiencing a significant increase in both summer and spring total phosphorus concentrations.

Caspian Lake also has highly disturbed shoreland conditions.

Summer Phosphorus

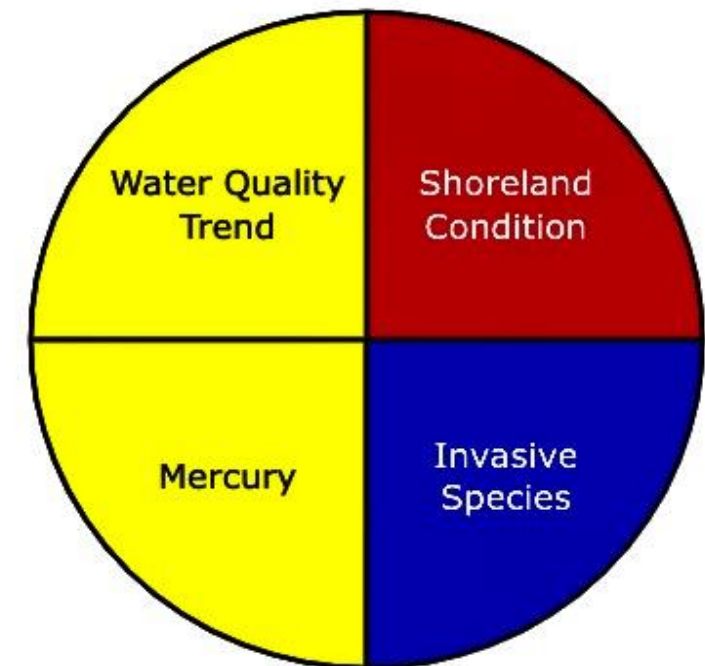
Trend: Highly Significantly Increasing (p-value = 0.0013)



Scores

Water Quality Data

Lake Information



Watershed:

Highly Disturbed

WQ Standards:

Stressed

WQ Standards Details

Stressed – Flow alteration

Color Scoring System

- Good Conditions
- Fair Conditions
- Poor Conditions
- Insufficient Data

[Learn How Lakes Are Scored](#)

AGENDA

- Welcome & Introductions - *Greensboro Lake Association - Stewards of the Greensboro Watersheds.*
- LWAP process, outcomes, and plan report goals - *Orleans County NRC*
- Review process to date, outcomes and recommendations
 - *Fluidstate Consulting*
- Q & As in between - *OCNRC*
- Next Steps - *OCNRC*
- Closing - *Stewards of the Greensboro Watersheds.*



Funded by:



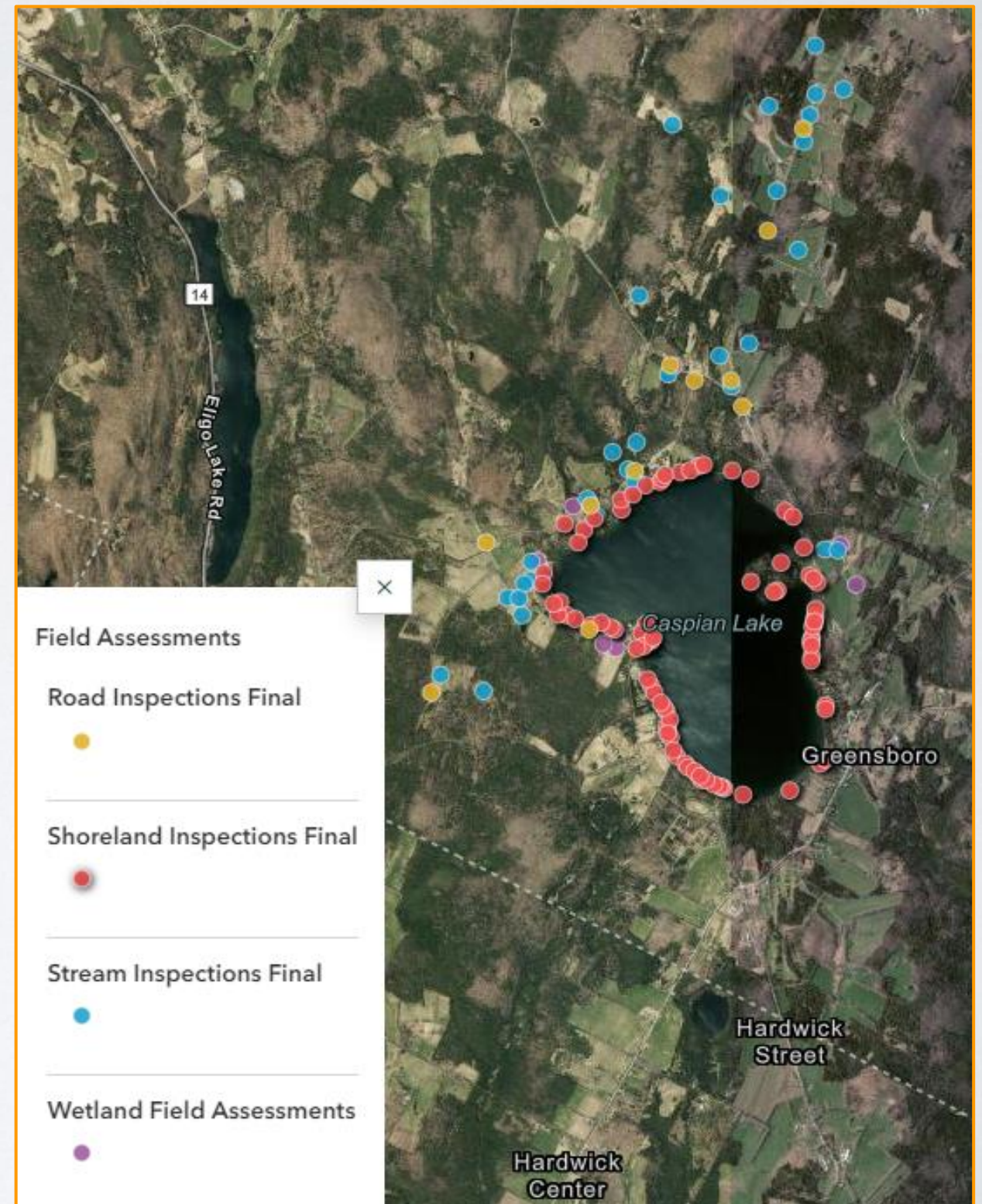
WHAT IS A LWAP?

Tool - *Assessment and planning tool* that identifies the greatest threats (stressors & conditions)* to the lake ecosystem.

**including stormwater runoff, sedimentation & nutrients, erosion, invasive species, habitat loss*

Process - 2-year process of field assessments of shorelines, roadways & streams, *community input and prioritization*

Report – LWAP Final Report is a guide for community planning and project development.



PROCESS

January 2022 – Desktop review of the watershed conditions and resources.

March 2022 - Kick-off Meeting

Sept 2022 - EPA Approved Quality Assurance Plan

Fall 2022 – Fall 2023
Field Assessments

August 2023 – Public Meeting Present priority areas & recommendations;
Gather community input

November 2023 - 30% designs

January 2024 - Plan completed & presented to stakeholders.



Orleans County NRCD and Partners Caspian Lake LWAP Public Meeting			
Caspian Lake Watershed Action Plan (LWAP) Feedback Survey Results			
Event Date: August 30, 2023			
Event Location: Greensboro VT in the Caspian Watershed at Fellowship Hall in the Church			
Event intent: review the assessment work completed and the list of prioritized restoration projects that emerged out of a year of field assessments and gather community input.			
# in Attendance: 44 members of the public plus organizers			
# of Completed Surveys: 29			
65% of audience completed a survey			

4. Rate the following barriers to adopting water quality improvements. (A significant Barrier) 15 (Not a barrier to implementation)	Average BEFORE EVENT	Average AFTER EVENT	% increase
Cost	2.88	3.18	10%
Understanding/Knowledge of How to do it	2.65	3.36	27%
Time/Labor Capacity	2.22	2.84	28%
Value or Importance to my property	3.40	3.84	13%
I don't believe that suggested changes will make a difference	2.89	3.27	13%

Outcomes:

- **6 internal stakeholder meetings**
3 Town of Greensboro, 4 Stewards of Greensboro, 4 OCNRCD, and 4 VTDEC staff.
- **1 new program** launched—
Streamwise
- Community engagement - **3 public meetings, 3 press releases & Planning 1 new Caspian Lake Kiosk.**
- Extensive data review of previous studies and planning efforts,
- Desktop and field assessment of nearly **170 sites**
- **17 Lakewise** Assessments
 - **1 project development** grant with stakeholders on the town beach.
 - **1 project implementation** grant completed.
- **34 sites** were chosen for prioritization to eliminate over **148 pounds of phosphorus** from entering Caspian Lake.
- Worked with **5 landowners** on preliminary project plans
- **1 Final report** for guiding individual and community accomplishment for water quality improvements.





Next Steps

1. Conservation District can work with the town and interested landowners on plan adoption and water quality projects.

A. Assessments and Project Development

- Continue to conduct **Lakewise and StreamWise Assessments** with interested landowners.

Landowners interested Lakewise and Streamwise assessments

- Reach out to TVDEC, Alison Marchione, for an assessment **OR** Stew Arnold, Greensboro Lake Association
- Reach out to Jed Feffer, Stewards of the Greensboro Watersheds

B. Secure funding for 100% design and implementation on priority projects.

C. Work with interested landowners and partners to complete (5) 100% designs on priority projects.

FUNDING OPPORTUNITIES

PROJECT PHASE

Project
Development

Design

Implementation

Operations &
Maintenance

Clean Water Service Provider Formula Grants

NRCC/WUV Design/Implementation Block Grants

WUV Woody Buffer Block Grants

NRCC/WUV
Project
Development
Block Grants

DEC Watershed Enhancement Grants

VT NRCD Trees for Streams Program

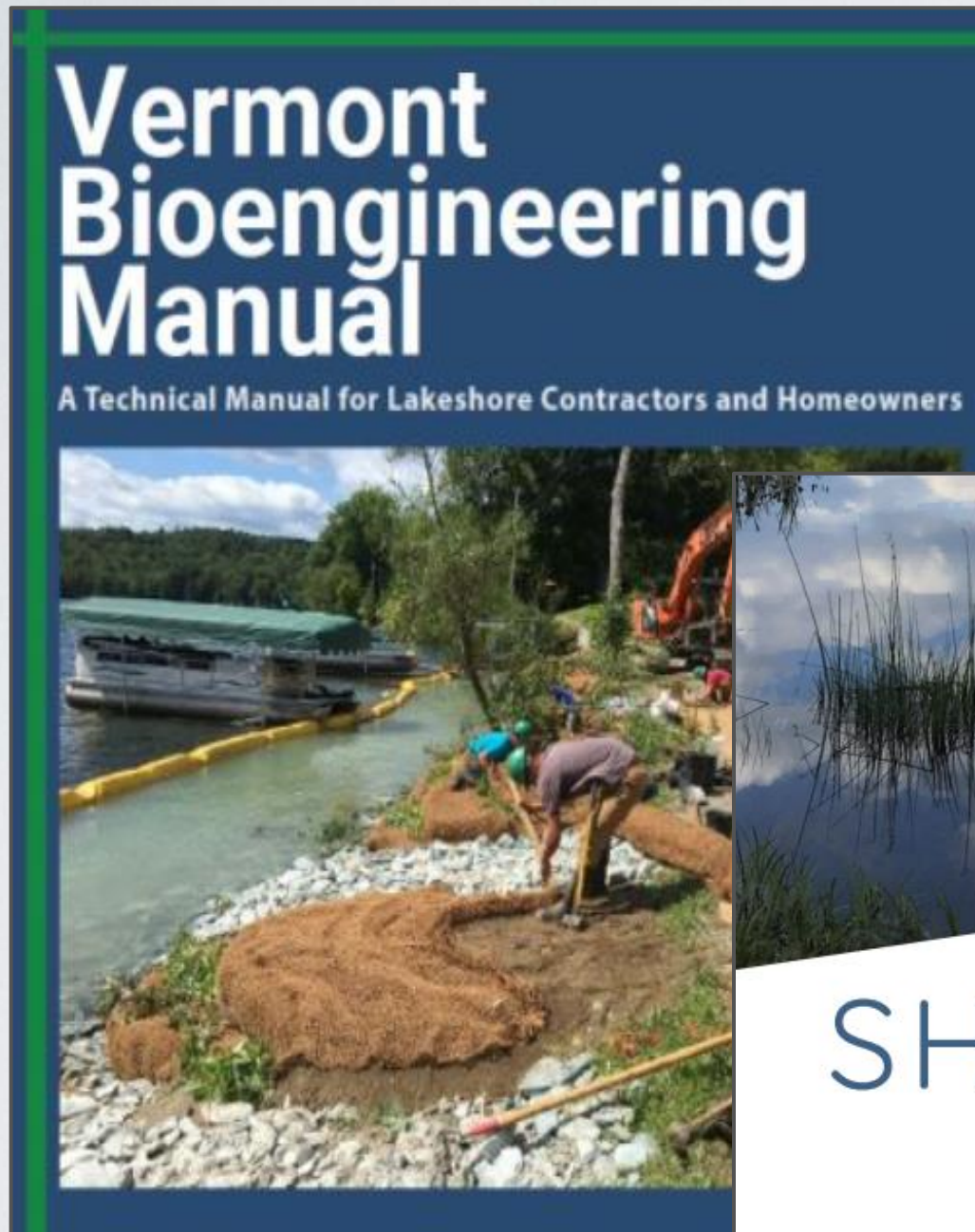
Conservation Reserve Enhancement Program



Greensboro
Association



Resources



VERMONT DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
**WATERSHED
MANAGEMENT DIVISION**
LAKES & PONDS PROGRAM

November 4th, 2022 8:30am-3:00pm
Natural Shoreland Erosion Control Certification

Welcome

8:30 Log on to Microsoft Teams
Welcome and Overview of Day

Presentations

8:40 Lake Ecology: Why Natural Shoreland Erosion Control Matters!
Kellie Merrell, Aquatic Ecologist, VTDEC
Overview of Water Quality and Habitat

Regulations

VTDEC
Clean Water Act, Encroachment, Wetlands, Stormwater,
and other regulations

Standards

VTDEC
Erosion Control Friendly Development

Native Plants

VTDEC, Nectar Landscape Design, UVM Plant & Soil Science

Case Studies

VTDEC, Woods Stewardship Center
Shoreland Stabilization Projects

Tools for BMPs and Calculating Benefits

VTDEC

Products and Operation and Maintenance

Prescott, Inc.), Biodegradable Products
(Traders), Permeable Pavers

SHARING THE EDGE



**A Guide for Lakeshore
Property Owners in Vermont**

Greensboro Association – Stewards of Greensboro ONGOING OR COMPLETED

- Lake Wise
- Stream Wise
- Septic Socials
- New bylaws for shore land protection
- Educational kiosk at the beach

ENLARGE THE WORKING GROUP

- Town of Greensboro
- Conservation Committee
- Planning Committee
- YOU



Greensboro Association



Founded 1934

The Greensboro Association's mission is to conceive, advance and support village initiatives and organizations that enhance our community, and to protect Caspian Lake and its surrounding environment.



GreensboroAssociation.org
PO Box 59, Greensboro Vermont 05841

STAY IN TOUCH

Check out the Caspian Lake LWAP webpage - <https://www.vacd.org/lake-caspian/>

LWAP Process & Projects - Sarah Damsell - OCNRCD Manager
sarah.damsell@vt.nacdnet.net

LakeWise - Alison Marchione - VTDEC Lake Shoreland Coordinator
Alison.Marchione@vermont.gov

LakeWise, StreamWise & Local Connections - Greensboro Association & Stewards of the Greensboro Watershed joannhanowski@gmail.com

LWAP Process & Projects - Dana Allen dana@fluidstateconsulting.com

Land Conservation - Greensboro Land Trust John Cannon, chair, at 802-533-7122