



**Sixth Annual  
Friends of Bolton Lakes  
Membership Meeting  
and  
Community Forum**

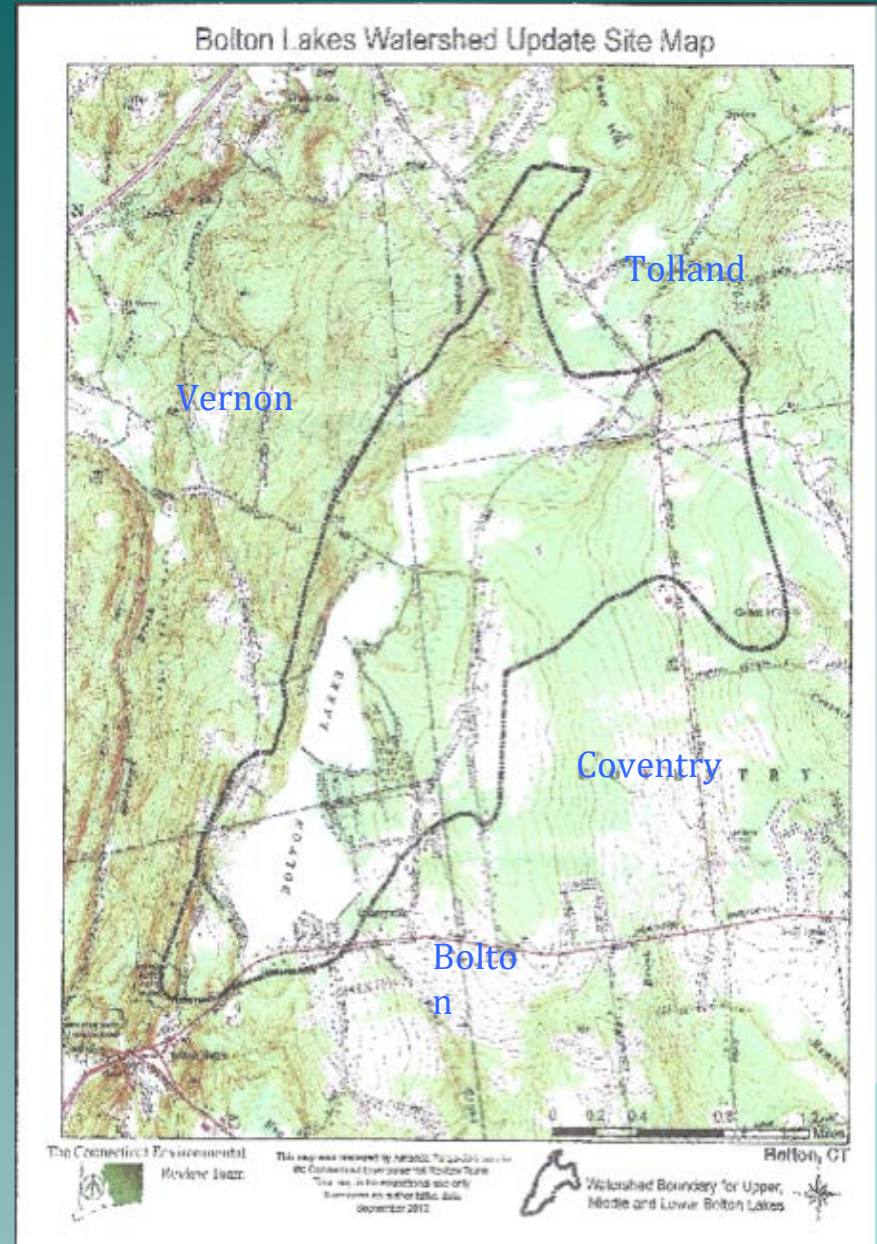
*Welcome*

October 22, 2019



# Agenda

- ◆ **Welcome and Introductions**
- ◆ **Guest Speakers**
- ◆ **Summary of 2019 FBL activities**
  - David Forrest -FBL President
- ◆ **FBL Board Speakers**
  - John Williams
  - Peter VanDine
  - Paul Senk
- ◆ **Aquatic plants ID Workshop**
  - Summer E. Stebbins  
Research Technician I, Invasive Aquatic Plant Program, Environmental Sciences, CT Agricultural Experiment Station
- ◆ **Question and Answer**
  - Hillary Kenyon Garovoy, Limnologist
- ◆ **Question & Answer Discussion**
- ◆ **Refreshments & Networking**



THE OUTLINED AREA RUNS NORTH & SOUTH



- ◆ This is an interactive forum – we want to learn from you as well as inform.
- ◆ There will be time for extended discussions with the speakers.
- ◆ FBL have made available helpful handouts for you to take with you
- ◆ Help yourself to refreshments at any time



# What are the benefits from your dues and contributions?

- ◆ Lower and Middle Lakes aquatic plant and water monitoring & assessments
- ◆ Advocacy/communication with town and state officials:
  - Meetings with the Town of Bolton and Vernon officials
  - Meetings with stakeholders and decision-makers regarding catfish restocking
- ◆ Collaboration with NEAR
- ◆ CT Federation of Lakes events
- ◆ Review of other watershed management approaches to proactively address algae blooms and the proliferation of invasive plants
- ◆ Plans for ongoing workshop series, town education departments and Spring forum
- ◆ Administrative costs




# Collaborating with the Towns, CT DEEP, and our State Legislators

- *Re-stocking of catfish by DEEP in LBL was halted for 2020.*
- *Notices were posting during chemical treatments.*
- *A 'joint' drawdown letter signed by both towns was submitted and approved by DEEP*
- *Cooperate with the Lower Bolton Lake Commissioner Kim Welch*
- *Continued participation in the Four Town Bolton Lakes Watershed Conservation Alliance HB6637 Boat Stamp Testimony*

We understand DEEP will provide these drawdown and monitoring services during drawdown period on a drawdown related reimbursement basis. Each Town will remain responsible for the costs associated with their lake and is to be individually invoiced.

Respectfully submitted,

  
Michael J. Purcino  
Town Administrator  
Town of Vernon  
14 Park Place  
Vernon, CT 06066  
860-870-3665

  
Joyce Stille  
Town Administrator  
Town of Bolton  
222 Bolton Center Road  
Bolton, CT 06043  
860-669-8066 X6111

cc: Honorable Daniel A. Champagne, Mayor of Vernon  
Charles Lee, DEEP  
Scott Dawley, DEEP - Marlborough Office  
Brian Golenbiewski, Environmental Analyst  
David Forest, Friends of Bolton Lake  
Robert Kleinhaus, Director Public Works  
David Smith, Engineer  
Marty Sitter, Director Parks and Recreation  
Kim Welch, Bolton Lake Commissioner



# 319 EPA Grant Application

## One page summary for 2020 EPA 319 Grant

The Bolton Lakes Watershed Alliance with the Friends of Bolton Lakes is applying for an EPA 319 grant to construct a nine-point watershed management plan for the Bolton Lakes Watershed that lies in the four towns of Vernon, Bolton, Tolland and Coventry. The plan will be built upon the concept that the three lakes, Upper Bolton Lake, Middle Bolton Lake and Lower Bolton Lake are best managed as a single water body. With the support of the four towns, the problems with non-point source runoff, invasive species, controlled draw downs and water chemistry will be addressed with the use of monitoring and education.



The water that flows into Upper Bolton Lake from its large watershed located in Tolland, Coventry and Vernon flows directly into Middle Bolton Lake and then on into Lower Bolton Lake. What happens in the watershed affects each of the lakes. And anything done in each lake affects the other lakes. Any plan that simply addresses the needs of one of the lakes without considering the entire watershed would be problematic. A comprehensive plan to maintain the vitality of all the lakes for future generations is critical,

The opening of the mission statement of the Friends of Bolton Lakes is:

“In recognition that the lakes known as Lower, Middle and Upper Bolton Lake and their watershed areas are major natural resources for the Towns of Bolton, Coventry, Tolland and Vernon and that sustaining the environmental quality of the lakes and watershed areas is the responsibility of and an asset to the Towns, “

The plan for 2019 is the following:

- Get the written support of the towns of Vernon, Bolton, Tolland and Coventry for developing a watershed plan for the Bolton Lakes.
- Apply for the DEEP sponsored EPA 319 grant.
- Begin to work in a thoughtful and planned manner to manage and improve the water quality of the lakes and manage invasive plants.



# Middle Bolton Lake Emergent Island 2019?





# Science Committee: Three Lakes Testing & Surveying

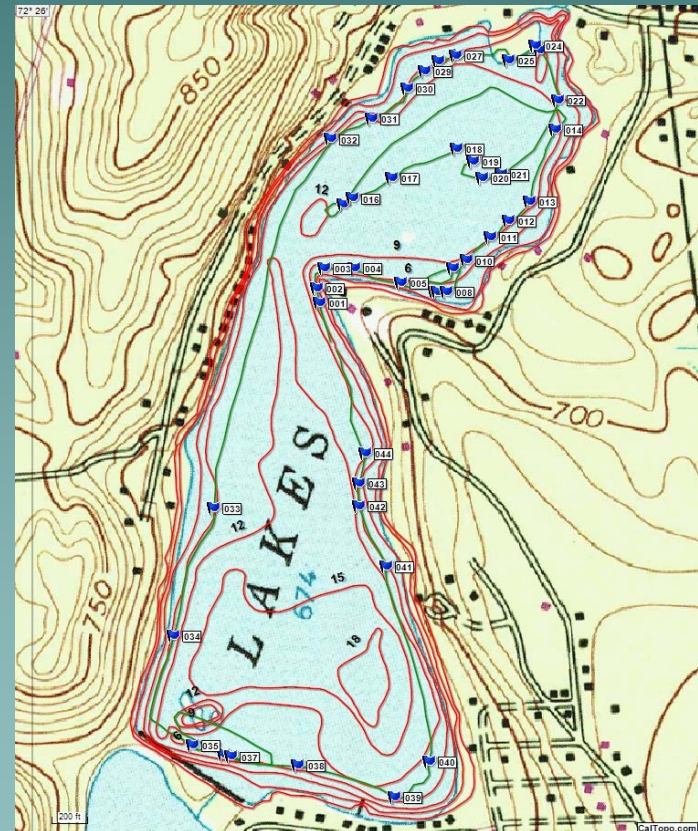
## Periodic Water Clarity and Chemical Analysis

*FBL committed to two monitoring sessions per month. Vernon committed to fund the cost.*

## NEAR's comprehensive report on MBL – February 2019

*FBL supplied the data with the help of trained volunteers.*

## Annual Aquatic Plant Surveys & Invasive Plant Awareness







# Spring Seminar – May 2019



UCONN Grad student Connor Mitchell

UCONN Professor William Ouimet, Geosciences

FBL Peter VanDine, Science Committee



# Education/Advocacy

## Signage

- **Boat Trailer Handouts**

Invasive Species Found in the Bolton Lakes

**Variable-Leaf Milfoil:** Persistently found in Middle Bolton Lake and to a lesser degree in Upper and Lower lakes.

**Fanwort:** Found in Middle Bolton Lake but removed in 2017, 2018 and 2019.

**Curly-leaf Pondweed:** Found in Lower Bolton Lake.

**Mudmat:** Found in Lower Bolton Lake but not a problem yet.

Invasive Species not found in Bolton Lakes but in nearby lakes

**Hydrilla:** Found in Coventry lake and the Connecticut River. Very aggressive and hard to get rid of.

**Water Chestnut:** Found in the Connecticut river and its tributaries, notably the Mattabasset in Middletown and, in Vernon, in the Tankerhoosen, Dobsonville and Talcottville ponds.

You can report any suspicious plants at the FBL website:

Sponsored by The Friends of Bolton Lakes

Website:  
[www.friendsofboltonlakes.org](http://www.friendsofboltonlakes.org)

Email: [fbl@friendsofboltonlakes.org](mailto:fbl@friendsofboltonlakes.org)

**Help Stop the Spread of Invasive Aquatic Plants**

**Inspect and Clean Your Boat and Trailer!**

## Remediation of Dam

- Emergency preparedness
- Management of water flow from 60% of watershed
- Preserve Upper Lake and Atlantic White Cedar Swamp





# John Williams, FBL

Trailer flyer



- Cloud Storage for all documents
- Permanent email
- [fbl@friendsofboltonlakes.org](mailto:fbl@friendsofboltonlakes.org)



Peter VanDine, FBL



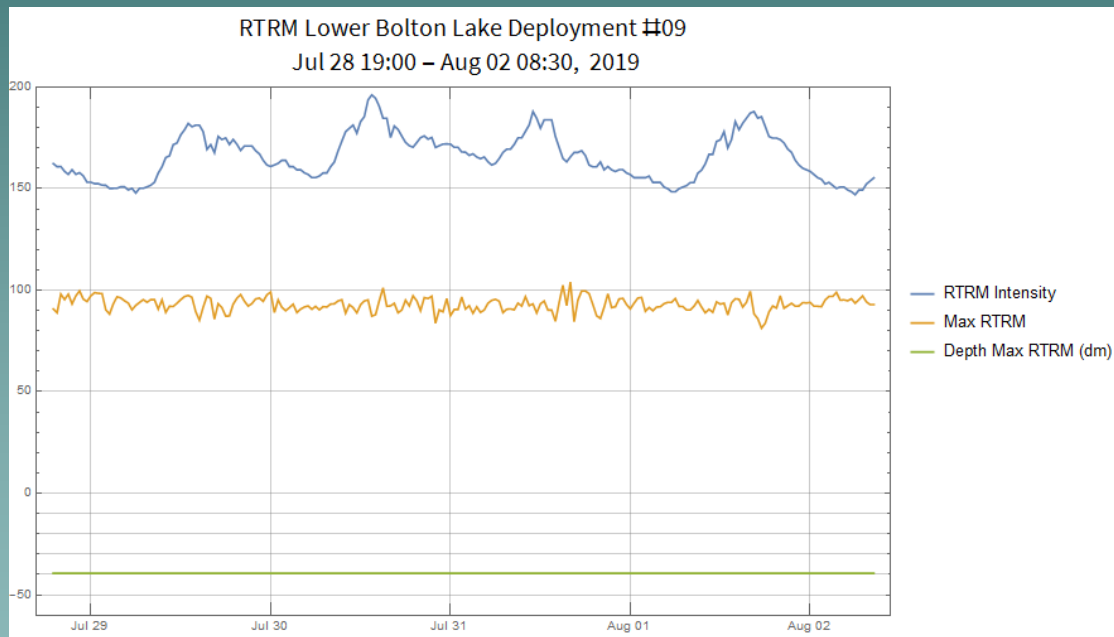
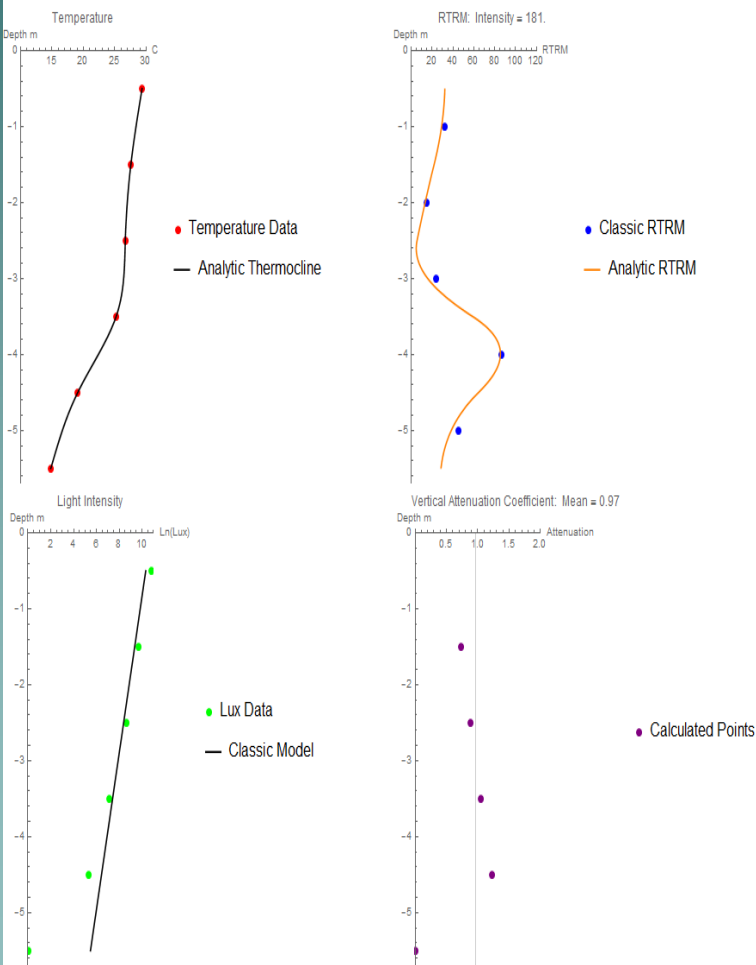
# Lake Science 2019

- ◆ Winter Study with UConn & NRCS – Atlantic White Cedar Stand in Upper Bolton Lake – go to the FBL web site – Important Events – download presentation slides and thesis
- ◆ Grant from CFL to buy CyanoScope Equipment
- ◆ Monitoring of Middle Bolton Lake in cooperation with NEAR & Vernon
- ◆ Continued Monitoring of Lower Bolton Lake
- ◆ BART testing for algae
- ◆ Zooplankton Study
- ◆ Lower Lake Light Penetration & Temperature Gradient Study



# Light & Temperature

Lower Bolton Lake Jul 29 14:30 Station: LBDEEP Sample #: 40  
 HOBO Temperature/Light Data Loggers UA-002-XX Deployment: 09





# Zooplankton

- ◆ 25 of these – head to tail – might make an inch





Paul Senk, FBL





## GET INVOLVED

Check out bloomWatch, cyanoScope, and cyanoMonitoring to find ways you can start monitoring cyanobacteria.



### bloomWatch App

Crowdsourcing to find and report potential cyanobacteria blooms

Engaging the public to report when and where potential cyanobacteria blooms appear.

[LEARN MORE](#)



### cyanoScope

Mapping cyanobacteria one slide at a time

Engaging trained citizen scientists and professional water quality managers to understand where and when cyanobacteria species occur.

[LEARN MORE](#)



### cyanoMonitoring

Monitoring cyanobacteria populations over time

Engaging professionals and trained citizen scientists to track seasonal patterns of cyanobacteria.

[LEARN MORE](#)





FBL is participating in the Cyanobacteria Monitoring Program sponsored by the EPA to collect data on cyanobacteria for the purpose of better predicting and dealing with deadly blooms. With the help of a \$500 grant from the Connecticut Federatoin of Lakes Association, the FBL purchased a Cyanomonitoring kit. By group sourcing the identification images of bacteria from our lakes, we hope to help defend the lake from harmful blooms. For information go to: <https://cyanos.org>.



THE BOARD URGES EACH MEMBER TO PARTICIPATE IN THE FBL ORGANIZATION. THE CHALLENGE IS FOR EACH OF YOU TO ATTEND AT LEAST ONE MONTHLY MEETING DURING 2020. THE MEETINGS WILL BE HELD IN THE NOTCH BUILDING 106 NOTCH ROAD, BOLTON AT 6:30 PM ON THE THIRD WEDNESDAY OF EACH MONTH.

Your voices continue to be heard.

*Please use the FBL website to its fullest.*



# Plant ID Workshop

Summer E. Stebbins  
Research Technician,  
Invasive Aquatic Plant Program, CAES

BU, Cum laude  
Environmental Sciences



# Leona Crosskey, FBL Question & Answer Session



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***THANK YOU***

October 22, 2019