



Department of
Environmental
Conservation

Volunteer Lake & Stream Monitoring in NYS

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Bureau of Water Assessment and Management
Division of Water

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Clean Water Plans



Clean water plans

- Watershed-based approach to that outlines a strategy to improve water quality.
- TMDLs, 9E Plans
- These plans document the:
 - Pollutant sources and loads
 - Allowable pollutant level
 - Actions will improve water quality



9E Plans v. TMDLs

Feature	9E Plan	TMDL
Pollutant sources	Better for Nonpoint	Better for Point (regulatory)
Public comment period	No (public participation throughout)	Yes
Implementation	Required	Optional
Approval	NYS DEC	EPA
Funding	Eligible for state & federal	Eligible for state & federal

How are waterbodies prioritized—303(d) & beyond?

DEC developed a strategy to prioritize waterbodies listed on the 303(d):

1. Identified pollutants of concern—nutrients & pathogens
2. Identified priority uses (impaired or unimpaired)--PUBLIC
3. Scored & ranked waterbodies based on water quality data, public health & access, public interest, ecological importance
4. Developed list of waterbodies for TMDL or alternative plans



Citizens can help implementation

- Many state and federal grant opportunities
- Communicate needs or projects identified in plans to eligible applicants (municipal, Soil and Water Conservation Districts)
 - Water Quality Improvement Project (WQIP)
 - Agricultural Nonpoint Source Abatement and Control Program (AgNPS)
 - Environmental Facilities Corporation Green Innovation Grant Program (GIGP)
 - NYSERDA Cleaner Greener Communities Program
 - Great Lakes Restoration Initiative (GLRI)
- Support by helping to write, provide letters of support
- Get neighbors to support or participate (landowners) in funding programs



Funding to develop plans

- Department of State Local Waterfront Revitalization Program (LWRP)
- Clean Water Act Section 604(b)
- Great Lakes Restoration Initiative (GLRI)



Information needed to develop a TMDL

- Land uses in watershed (e.g. Urban, Forest, Agricultural, Wetland)
- Water quality sampling data
- Number of residential on-site septic systems / wastewater treatment plants
- Rainfall data
- Land topography and soils data
- Lake and tributary characteristics



Water Quality Improvement Projects (WQIP)



WQIP Overview

- Eligible Applicants:
 - ✓ Municipalities
 - ✓ Soil and Water Conservation Districts
 - ✓ Not-for profit corporations (for two project types)
- Match ranges from 25% to 60%
- May submit up to 5 different applications



WQIP Supports Restoration:

- Municipal Wastewater Treatment Improvement
 - High Priority Projects
 - General Wastewater Treatment Improvement
- Non-Agricultural Nonpoint Source
- Aquatic Connectivity Restoration
- Municipal Separate Storm Sewer Systems (MS4)



WQIP Supports Protection:

- Land Acquisition for Source Water Protection
- Protected Storage for Road Salt



Volunteer Lake & Stream Monitoring in NYS



All waterbodies are classified for best use

- 6 NYCRR Part 701 provides for the Classifications of Surface Waters and Groundwaters
- Waterbody classification denotes the waters best use
 - suitable for fish propagation
 - public water supply
 - primary and secondary contact recreation
- Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations)
- Narrative or numeric



Data Solicitation for 2020 CWA Section 303(d) List

Section 303(d) of the Federal Clean Water Act (CWA) requires States to compile every two years, a list of impaired waters that do not meet water quality standards, where designated uses are not fully supported and where a Total Maximum Daily Load (TMDL) plan is necessary to address the impairment. States are scheduled to submit their next Section 303(d) Lists to USEPA by April 1, 2020. To support the development of the Section 303(d) List, States are required to assemble and consider existing, readily available water quality related data and information. New York State is currently soliciting and accepting water quality data and information that may be useful in compiling the 2020 Section 303(d) List.

Background: Water quality assessment of New York State's waters is a continuous process. Participation and input from a wide range of state, federal and local agencies and non-governmental water quality partners (watershed groups, lake associations, academic researchers, etc.) is encouraged.

Every two years, corresponding to the development of the State's Section 303(d) List, the public is solicited to provide water quality data and information for any waterbody or basin. This allows for a more comprehensive updating of the List. Solicited data and information may result in changes to the List or may be incorporated into water quality assessments.

In order to be included for consideration in the compiling of the 2020 CWA Section 303(d) List, data and information must be received by September 27, 2019.

Data submissions should be accompanied by a completed [Waterbody Inventory/Priority Waterbodies List \(WI/PWL\) Assessment Worksheet](http://www.dec.ny.gov/chemical/36730.html) (PDF 350 KB), which may be found at: <http://www.dec.ny.gov/chemical/36730.html>. This worksheet allows for the capture of water quality information based on available data or on general observation of conditions and/or local knowledge of designated use support/non-support of a waterbody absent specific, numeric monitoring data.

Worksheet information can also be obtained by contacting Sarah Rickard at the NYSDEC Bureau of Watershed Assessment and Management by mail at 625



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PEERS

Professionals



CSLAP

Trained Volunteers



WAVE

Citizen Scientists



Acronyms

WAVE

- Water Assessments by Volunteer Evaluators
- A robust macroinvertebrate sampling method

PEERS

- Professional External Evaluators of Rivers and Streams
- Any NYSDEC parameters or sampling methods

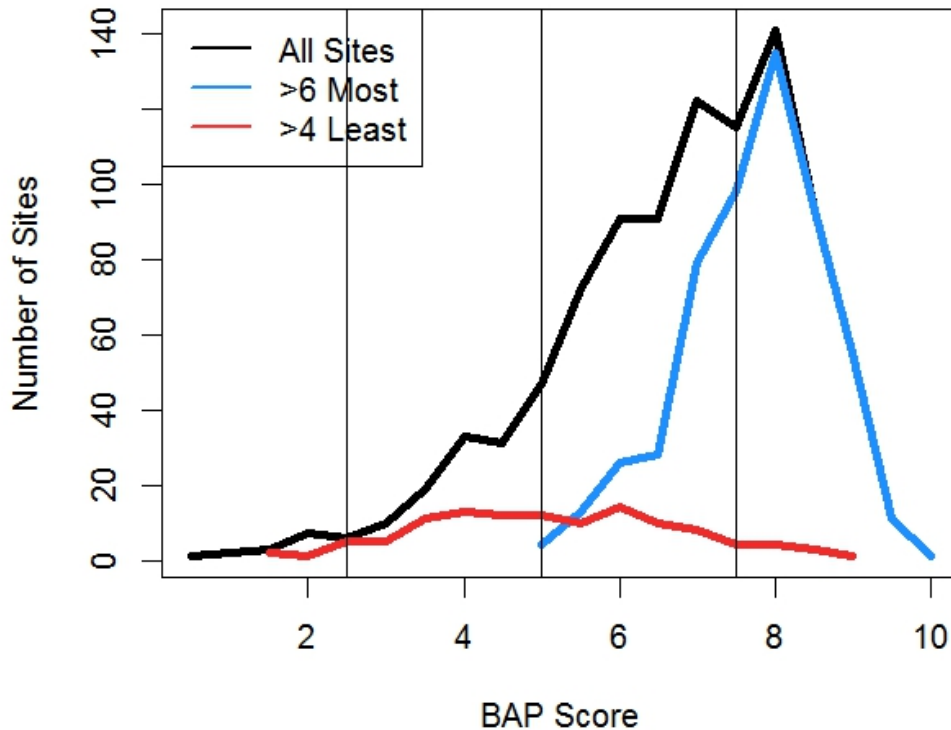


CSLAP

- Citizen Statewide Lake Assessment Program
- Single site, deepest part of lake, multiple parameters

Regulatory Applications of WAVE data

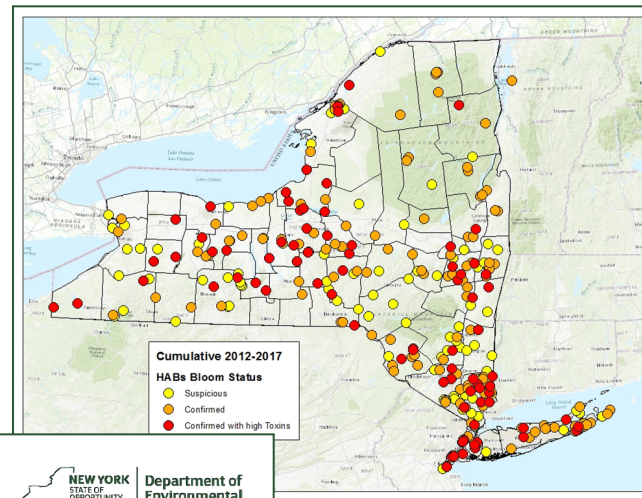
- Citizen Scientists
- A robust *macroinvertebrate* sampling method
 - Identifies streams not impaired for aquatic life
 - Red flags possibly impaired locations for professional follow up



Regulatory Applications of CSLAP Data

Primary data for NYS HABs notification program

Data used to inform assessments of the Waterbody Inventory/Priority Waterbodies List and for small lakes TMDL modeling



TOTAL MAXIMUM DAILY LOAD (TMDL)

An Introduction

Why are TMDLs Needed?

To understand what a TMDL is, it is important to know the basis for developing one. All waterbodies in New York State are classified to represent their best uses, such as public drinking water supply, swimming, fishing, and fish reproduction/ habitat. New York water quality standards protect these best uses. When a lake or river is identified as not fully supporting its best uses, it is listed on the state's Clean Water Act Section 303(d) List of Impaired Waters. For these listed waters, New York State must develop a TMDL or other strategy to reduce the amount of pollution.



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Regulatory Applications of PEERS data

Data are used equivalent to our own



Expectations of Citizen Scientists

WAVE

- WAVE participants have no criteria for participation nor are there any expectations for how many sites or where they will sample



Expectations of Citizen Scientists

WAVE & PEERS

- PEERS participants meet criteria for professional credentials
- PEERS participants write their own quality assurance documents using NYSDEC templates and reviewed by NYSDEC
- PEERS participants are audited by NYSDEC staff
- PEERS participants pay for their own sampling costs



Expectations of Citizen Scientists

CSLAP

- Member of NYSFOLA
- Participate in group or individual training
- Follow CSLAP sampling protocol
- Collect and process water and HAB samples
- Collect field and lake perception measurements
- Send samples to laboratory
- Maintain equipment and supplies
- Communicate results to lake association
- Provide lake management information to DEC/NYSFOLA
- Provide feedback to DEC/NYSFOLA



CSLAP volunteer collecting water sample with Kemmerer sampler on Kirk Lake

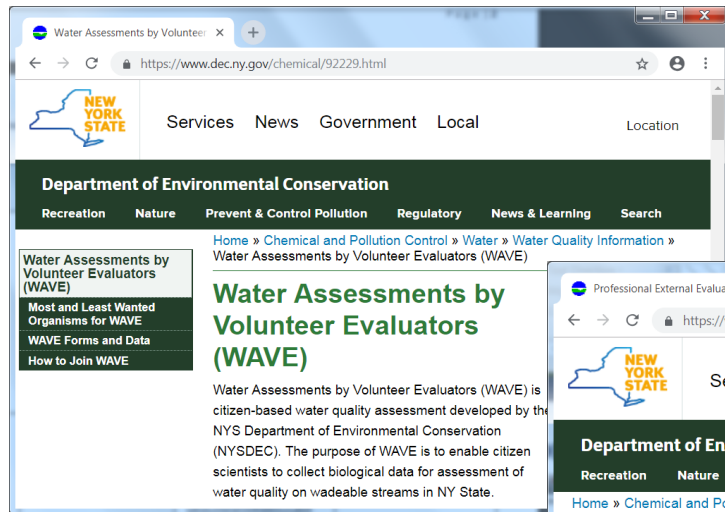
For more information:

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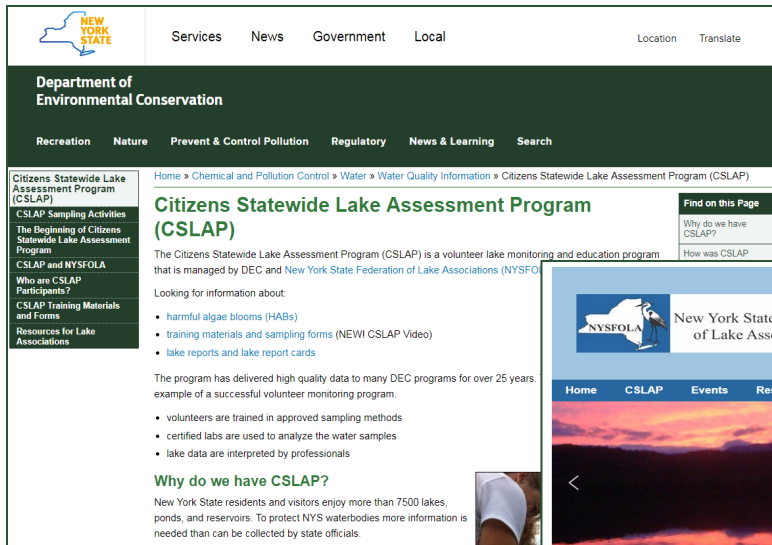
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Citizens Statewide Lake Assessment Program (CSLAP)

The Citizens Statewide Lake Assessment Program (CSLAP) is a volunteer lake monitoring and education program that is managed by DEC and New York State Federation of Lake Associations (NYSFOLA).

Looking for information about:

- harmful algae blooms (HABs)
- training materials and sampling forms (NEW! CSLAP Video)
- lake reports and lake report cards

The program has delivered high quality data to many DEC programs for over 25 years, example of a successful volunteer monitoring program.

- volunteers are trained in approved sampling methods
- certified labs are used to analyze the water samples
- lake data are interpreted by professionals

Why do we have CSLAP?

New York State residents and visitors enjoy more than 7500 lakes, ponds, and reservoirs. To protect NYS waterbodies more information is needed than can be collected by state officials.

Citizens Statewide Lake Assessment Program (CSLAP)

CSLAP Sampling Activities

The Beginning of Citizens Statewide Lake Assessment Program

CSLAP and NYSFOLA

Who are CSLAP Participants?

CSLAP Training Materials and Forms

Resources for Lake Associations

Find on this Page

Why do we have CSLAP?

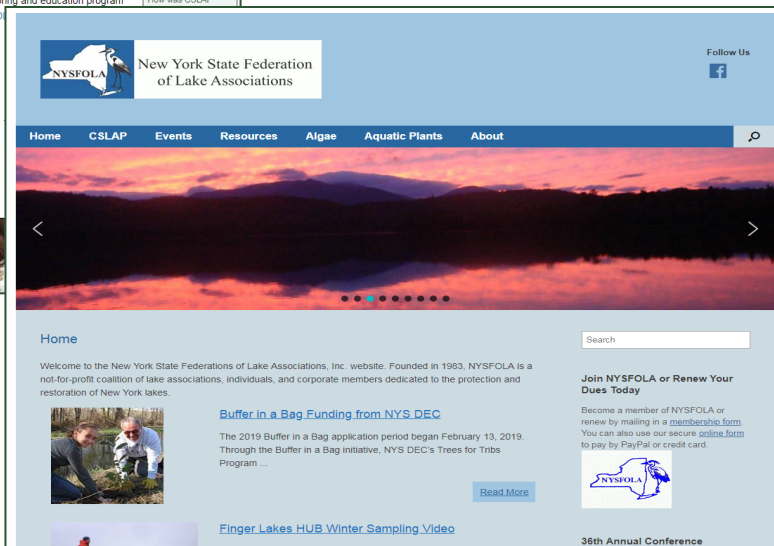
How was CSLAP

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NYSFOLA New York State Federation of Lake Associations

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Home

Welcome to the New York State Federations of Lake Associations, Inc. website. Founded in 1963, NYSFOLA is a not-for-profit coalition of lake associations, individuals, and corporate members dedicated to the protection and restoration of New York lakes.

Buffer in a Bag Funding from NYS DEC

The 2019 Buffer in a Bag application period began February 13, 2019. Through the Buffer in a Bag initiative, NYS DEC's Trees for Tribes Program ...

Join NYSFOLA or Renew Your Dues Today

Become a member of NYSFOLA or renew by mailing in a [membership form](#). You can also use our secure [online form](#) to pay by PayPal or credit card.

[Read More](#)

[Finger Lakes HUB Winter Sampling Video](#)

36th Annual Conference



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