

2019 Annual Report

Presented at the May Member Meeting

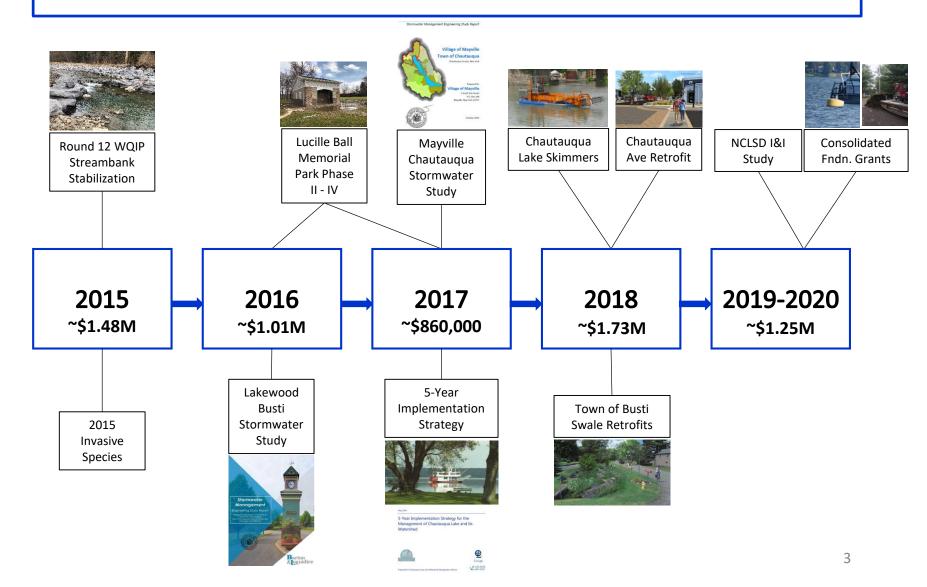
May 14, 2020

History of the Alliance

- Evolved from the Chautauqua Lake Management Commission (CLMC) in late 2014
- Established for the benefit of all lake and watershed stakeholders
- Mission: The Chautauqua Lake & Watershed Management Alliance, working in collaboration with lake and watershedrelated organizations, municipalities and other stakeholders, will promote and facilitate implementation of recommendations from the Chautauqua Lake Watershed Management Plan and the Chautauqua Lake Macrophyte Management Strategy by prioritizing projects, securing funding and allocating resources.

Timeline of Alliance Major Milestones

56 Total Projects = ~\$6.33 Million = ~\$1.2Million/Year



2019-2020 Members

- Village of Bemus Point
- Village of Celoron
- Village of Lakewood
- Village of Mayville
- Jamestown BPU
- Chautauqua Watershed Conservancy
- Chautauqua Lake Association
- Chautauqua Lake Partnership
- Audubon Community Nature Center
- Roger Tory Peterson Institute
- Chautauqua Lake Fishing Association
- Arnold Holmberg Foundation
- North Chautauqua Lake Sewer District

- Town of Busti
- Town of Chautauqua
- Town of Ellery
- Town of Ellicott
- Town of North Harmony
- Chautauqua County Visitors Bureau
- NYS OPRHP-Allegany Region
- Chautauqua-Cattaraugus Board of Realtors
- The Lenna Foundation
- Chautauqua Institution
- Chautauqua County Chamber of Commerce
- County of Chautauqua
- South and Center Chautauqua Lake Sewer District

State Grant Funded Alliance-Partnered Projects

- **County Round 12 WQIPs** (Streambank Stabilizations)
- Chautauqua Lake Invasive Species Control Project - NYS
- County Lake Skimmers WQIP
- Lakewood-Busti Stormwater Study EPG
- Lakewood Chautauqua Ave GIGP
- Busti Swales WQIP
- Village of Celoron Lucille Ball Memorial Park Improvements – LWRP
- Mayville-Chautauqua Stormwater Study EPG
- Orchard Terrace I&I EPG



Dutch Hollow Creek Main Stem Restoration (Round 12 WQIP)

- Stabilized 1,100-foot-long section of Dutch Hollow Creek
- Completed in Fall 2018
- Features:
 - J-hooks
 - Cross Veins
 - Rip-Rap Bank and Toe Protection
 - Riffle Grade Control Structures
 - Riparian plantings
- Funding provided by the NYS DEC Water Quality Improvement Program, Chautauqua County, and reallocated Chautauqua Lake Management Commission funds



Lucille Ball Memorial Park Improvements – Village of Celoron

- Replacement of a failing 430-foot-long concrete sea wall
- Shoreline stabilization and installation of 390-foot-long timber boardwalk
- New ADA accessible Kayak/Canoe Launch
- New Amenities Building
- Funding provided by the NYS DOS LWRP Program & Village of Celoron



ADA Kayak and Canoe Launch



Locally Funded Alliance-Partnered Projects

5-Year Strategy

ca. 2019

- 2017 County Contingency Funding
- 2018 Sheldon Foundation Grant Referrals
- 2018 2020 Alliance Consolidated Foundation Grant Program
- 2019 Burtis Bay Clean-up





2019 Herbicide Application by SOLitude Lake Management

2019 Alliance Consolidated Foundation Grant (n=8)

- 5 Municipalities led a targeted herbicide treatment program in the South Basin
- CLA Operational Support
- CWC Starve the Algae! Save the Lake!
- Invasive Species Volunteer Taskforce
- Funding provided by the Sheldon Foundation, Chautauqua Region Community Foundation, and the County of Chautauqua

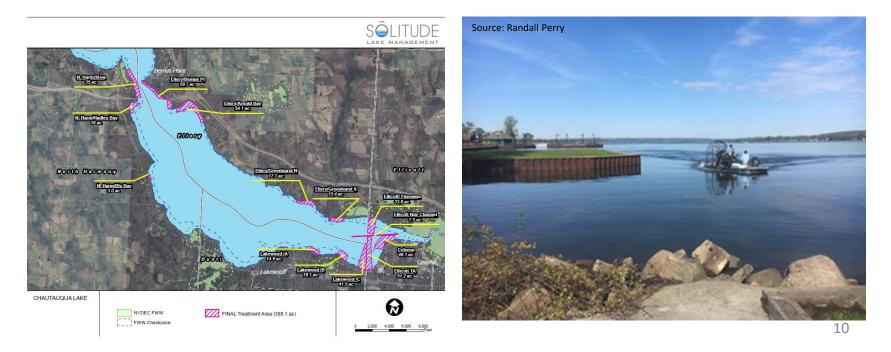






2019 NYS DEC Permitted Targeted Herbicide Treatments

- 388 Acres of Chautauqua Lake were treated
 - Aquathol K (Endothall)
 - Navigate (2, 4-D)
- Resulted in improved recreational use of Chautauqua Lake



CLA Operational Support and Extended Season

- Lake Wide Harvesting, Near shore maintenance, Spring Debris removal, scientific monitoring, public outreach
- Regular Season: 4,337 tons of macrophytes removed
- Extended Season: 156 tons of macrophytes
- Funding provided by **The Lenna Foundation, Sheldon** Foundation, Chautauqua Region Community Foundation, and County of Chautauqua





Burtis Bay Spring Clean-Up

- November 2018 accumulation of weeds and organic material
- 2,950-foot-long section of Burtis Bay
- 4/29 5/13/19 clean-up by the CLA, Town of Ellicott, County of Chautauqua, Village of Celoron, and Alliance
- Results: improved aesthetics and reduced phosphorus and nitrogen load to the Lake.
- Funding provided by the Chautauqua Region Community Foundation, County of Chautauqua, Sheldon Foundation & Alliance





2020 Alliance Consolidated Foundation Grant

- Balanced Approach
 - Watershed (n=3)
 - Address sources of nutrient loading
 - Long-term impacts
 - Lake (n=12)
 - Addresses the symptoms of excess sediment and nutrient loading
 - Improves short-term usability of the lake
 - Prevents invasive species introduction and establishment
- Funding provided by the Chautauqua Region Community Foundation, Sheldon Foundation, Lenna Foundation, and Gebbie Foundation



2020 Watershed Projects

- Starve Algae! Save the Lake!
- Grandview Stormwater Management
- RTPI Chadakoin River Basin Erosion Mitigation Study



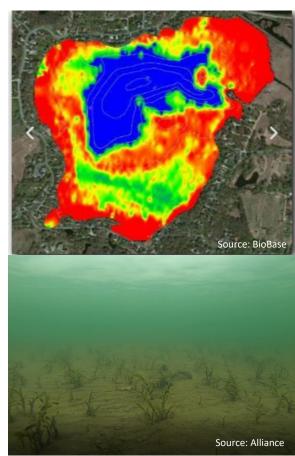
2020 Chautauqua Lake Projects

- Targeted Herbicide Treatments (n=6)
- Phosphorus Sensors
- Weed Survey
- Harvesting and Near-Shore Joint Operations
 - Mobitracs
 - CLA Operational Support
- RTPI Invasive Species Volunteer Taskforce
- Audubon Water Chestnut Rapid Response



Chautauqua Lake Aquatic Data (CLAD) Mapping

- Deployment in Spring 2020
- Data gathered by Lowrance sonar
 - BioVolume (% of water column plants occupy)
 - Depth
- Data processed by BioBase program
- Used to make informative maps about macrophyte growth and sedimentation to assist members with lake maintenance



Alliance Committees

- Lake Management Committee coordinate and collaborate about lake management
 - MMS Subcommittee provide updates to the MMS
 - MOA Subcommittee planned for Fall 2020
- Watershed Management Committee recommend watershed projects for grant submission
- Scientific Review and Advisory Committee – provide recommendations to Alliance Board regarding Alliance projects



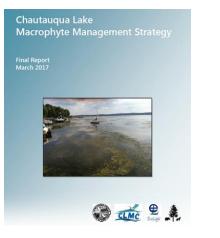
Chautauqua Lake Macrophyte Management Strategy

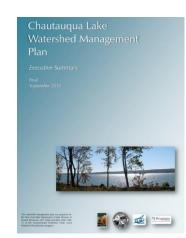
Final Report March 2017



Planning & Guiding Documents

- 2010 Watershed Management Plan
- 2017 Macrophyte Management Strategy
- 2018 5-Year Strategy for Chautauqua Lake and its Watershed
- 2018 Chautauqua Lake HAB Action Plan
- 2019 Chautauqua County Memorandum of Agreement
- Stormwater Studies









18

Summary

- Continue to use a balanced approach for lake and watershed management by utilizing current guidance documents and emerging technologies/approaches
- Focus on unity of effort and facilitating partnerships for improved and responsive Lake Management
- Collect/gather lake and watershed data to better understand and manage the lake and watershed



A Look Ahead

- Unity of effort in near-shore and shoreline clean-up
 - Increased efficiency and responsiveness
- Unified macrophyte management approach
 - Harvesting
 - Herbicides
 - Skimmers
 - Mobitracs
 - Other
- Increased data & research for data-driven decision making
- New GPS Integration Program
- MOA & MMS support
- Bringing lake stakeholders together
- Promising new watershed projects



5/2019 – 5/2020 Board of Directors

- Pierre Chagnon Chair
- Ted McCague Vice Chair
- Dave Shepherd Secretary
- Jim Andrews Treasurer
- Mike Latone
- Mike Jabot
- Paul Wendel
- Bruce Erickson
- Rob Yates

Special Recognitions

- Members and founders of the Chautauqua Lake Management Commission (CLMC)
- County of Chautauqua
- Sheldon Foundation
- Chautauqua Region Community Foundation (CRCF)
- The Lenna Foundation
- Holmberg Foundation
- Gebbie Foundation
- Our Founding & Current Members

Thank You

- Vince Horrigan, Alliance Interim Executive Director
 - horriganv@co.chautauqua.ny.us
- Randall Perry, Alliance Project Manager
 - <u>rperry@chautauquaalliance.org</u>
- Taylor West, Alliance Communications Coordinator
 - <u>twest@chautauquaalliance.org</u>
- Website: <u>http://www.chautauquaalliance.org/</u>





