



CHAUTAUQUA LAKE
& WATERSHED MANAGEMENT
ALLIANCE

2022 Annual Report

Presented at the
May Member
Meeting

The Lawson Center,
Bemus Point, NY &
via Zoom

May 11, 2023

Photo courtesy of

**Barton
& Loguidice**

History of the Alliance

- ❑ 501c3 Non-Profit Member Organization
- ❑ Evolved from the Chautauqua Lake Management Commission (CLMC) in late 2014
- ❑ Established ***for the benefit of all lake and watershed stakeholders***
- ❑ Our Mission:

The Chautauqua Lake & Watershed Management Alliance, working in **collaboration** with lake and watershed-related 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**.

Alliance Members



- Village of Bemus Point
- Village of Celoron
- Village of Lakewood
- Village of Mayville
- Jamestown Board of Public Utilities
- Chautauqua Watershed Conservancy
- Chautauqua Lake Association
- Chautauqua Lake Partnership
- 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
- Chautauqua-Cattaraugus Board of Realtors
- The Lenna Foundation
- Chautauqua Institution
- County of Chautauqua
- South and Center Chautauqua Lake Sewer Districts

Alliance Structure

Board of Directors (May 2022 to May 2023)

1. **Bruce Erickson** – Chair (Chautauqua Lake Association)
2. **Don Emhardt** – Vice Chair (Town of Chautauqua)
3. **Janis Bowman** – Secretary (Chautauqua Watershed Conservancy)
4. **Ellen Barnes** – Treasurer (Village of Lakewood)
5. **Jim Andrews** (Town of Busti)
6. **Marty Proctor** (County of Chautauqua)
7. **Mike LaTone** (Chautauqua Lake Partnership)
8. **Dave Shepherd** (Arnold Holmberg Foundation)
9. **Paul (P.J.) Wendel, Jr.** (County of Chautauqua)

Alliance Members

Committees

- **Lake Management Committee**
- **Watershed Management Committee**
- **Data Analysis & Research Committee**

Staff

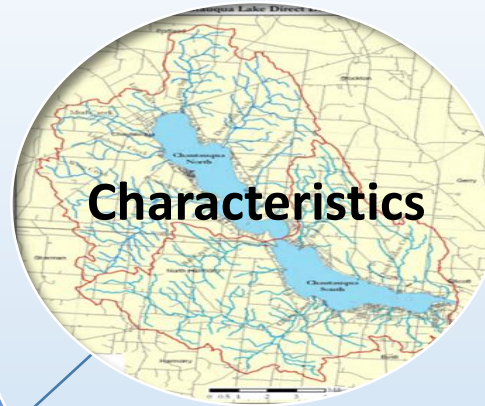
- **Executive Director**
- **Project Manager**
- **Communications Coordinator**

Acknowledgments

- **Members and founders of the Chautauqua Lake Management Commission (CLMC)**
- **Our Founding & Current Members**
- **County of Chautauqua**
- **Ralph C. Sheldon Foundation**
- **Chautauqua Region Community Foundation (CRCF)**
- **The Lenna Foundation**
- **Arnold Holmberg Foundation**
- **Hultquist Foundation**
- **Gebbie Foundation**
- **Committee Volunteers**
- **Individual Contributors**
- **Past & Present Board of Directors**



Our Shared Resource that is *CHAUTAUQUA LAKE*



Characteristics

- ❑ 13K Acre Lake & 102K Acre Watershed
- ❑ Unique North & South Basin Geography & Ecology
- ❑ Class A Waterbody & Drinking Water Source
- ❑ Relatively shallow and productive



Ecological Resource

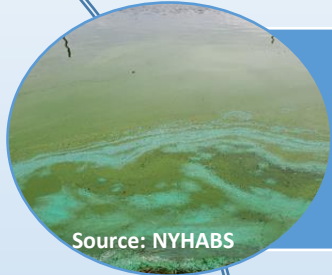
- ❑ Highly Productive & Sought-After Fishery
- ❑ Supports Rare, Threatened, and Endangered Species
- ❑ 2nd Best Musky Fishery in NY (Wide Open Spaces)
- ❑ 83rd ranked in US for bass (Bassmaster Magazine)
- ❑ Improving walleye fishery (NYSDEC)



Economic Driver

- ❑ Cultural, recreational, employment hub
- ❑ Provides Array of Boating & Other Recreation Uses to Visitors & Residents
- ❑ Major component of County Property and Sales Tax bases
- ❑ Supports Year-Round Lakeside Businesses and Events

Our Collective Challenges, Our Collective Opportunities



- Internal Loading (Nitrogen and Phosphorus)
- Harmful Algal Blooms (HABs)
- Drinking Water Protection, Climate Change



- Nuisance Aquatic Plant Growth and Human Conflicts (Native & Invasive)
- New Invasive Species Threats
- Shoreline Conditions



- Flooding and Property Loss due to Erosion
- Excess Sediment and Nutrient Loading From Watershed, and Other Pollutants (e.g., salt)
- Loss of Habitat/Biodiversity

Complex System, Comprehensive Focus

- ***Example Lake Projects***

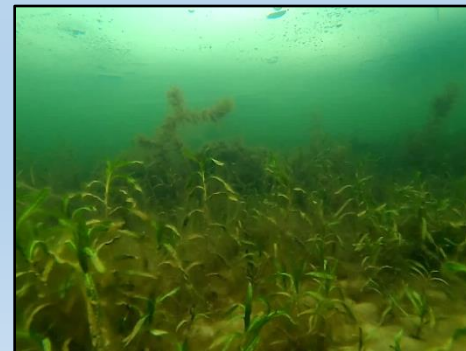
- Aquatic plant harvesting
- Shoreline, Near-shore, and debris clean-up
- Chemical aquatic plant management
- Invasive species programs/removal

- ***Example Watershed Projects***

- Stream stabilization
- Municipal storm water management
- Lake access/amenities
- Riparian Buffers
- Wastewater (septic/sewers)

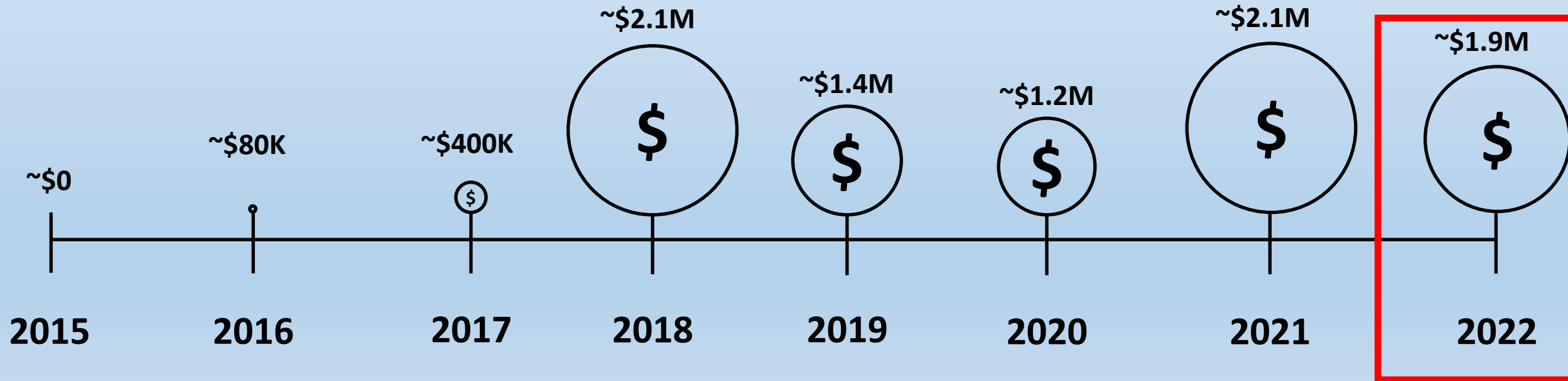
- ***Example Research/Monitoring***

- Nutrient monitoring
- HAB monitoring/reporting
- Fisheries assessment
- Lake monitoring and modeling
- Plant and lake condition surveys
- Public research panels



Progress through Partnership

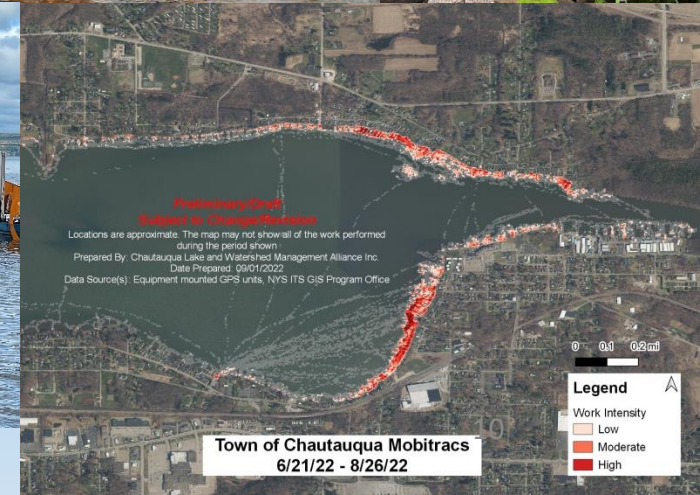
- ❑ Alliance-Partnered Projects, ca. 2015 – 2022
- ❑ ~100 grants/projects/programs,
Valued at >\$9 Million
- ❑ Blend of *Lake, Watershed, and Research/Monitoring*



2022 Chautauqua Lake Management – Our Members at Work



- Lake-wide service
- Joint Operations & Collaboration
- Large debris cleanup (May)
- Near-shore/Shoreline cleanup (May-Sept)
- Aquatic plant harvesting
 - Early season, esp. Curly Leaf Pondweed – May/June
 - Regular season (~June-Sept)
- Late-season cleanup focused on Lower So. Basin (Sept)
- ~10.7M pounds of weeds and debris removed
- Herbicide treatments via NYSDEC permits
 - Aquathol K (Curly Leaf Pondweed) – May; ~101 ac
 - ProcellaCOR EC (Eurasian Watermilfoil) – June; ~369 ac
- Aquatic plant surveys
- New AIS – prevent, detect, remove
- GPS/GIS
- Reporting of completed & planned work
- Continue to evaluate equipment, methods & needs



Intercepting New Invasive Species

❑ Prevention

- Chautauqua Lake Association Watercraft Stewards staffing boat launches around the lake
- Plus, NYSDEC and WNYPRISM steward programs

❑ Early Detection

- Invasive Plant Paddles led by Chautauqua Watershed Conservancy
- Community education by CWC

❑ Rapid Response

- **Removal of invasive water chestnut** by CWC and Audubon Community Nature Center – over 200 plants removed in 2022
 - *200 plants could produce ~4K new seeds & ~40-60K new stems*
- **Survey and management planning for starry stonewort** by CWC – identification and mapping of over 7 acres of impacted littoral zone in 2022
- **Starry stonewort removal pilot** by CWC, CLA, Alliance, SWCD, CCC, ACNC, and volunteers



Water Chestnut

Source: CWC (T. Leenders)



Starry Stonewort



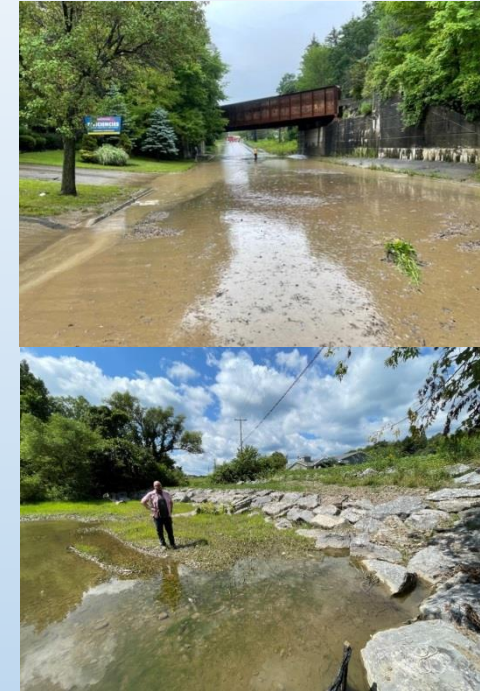
Source: Chautauqua Lake Association



Long-term Investments in the Watershed

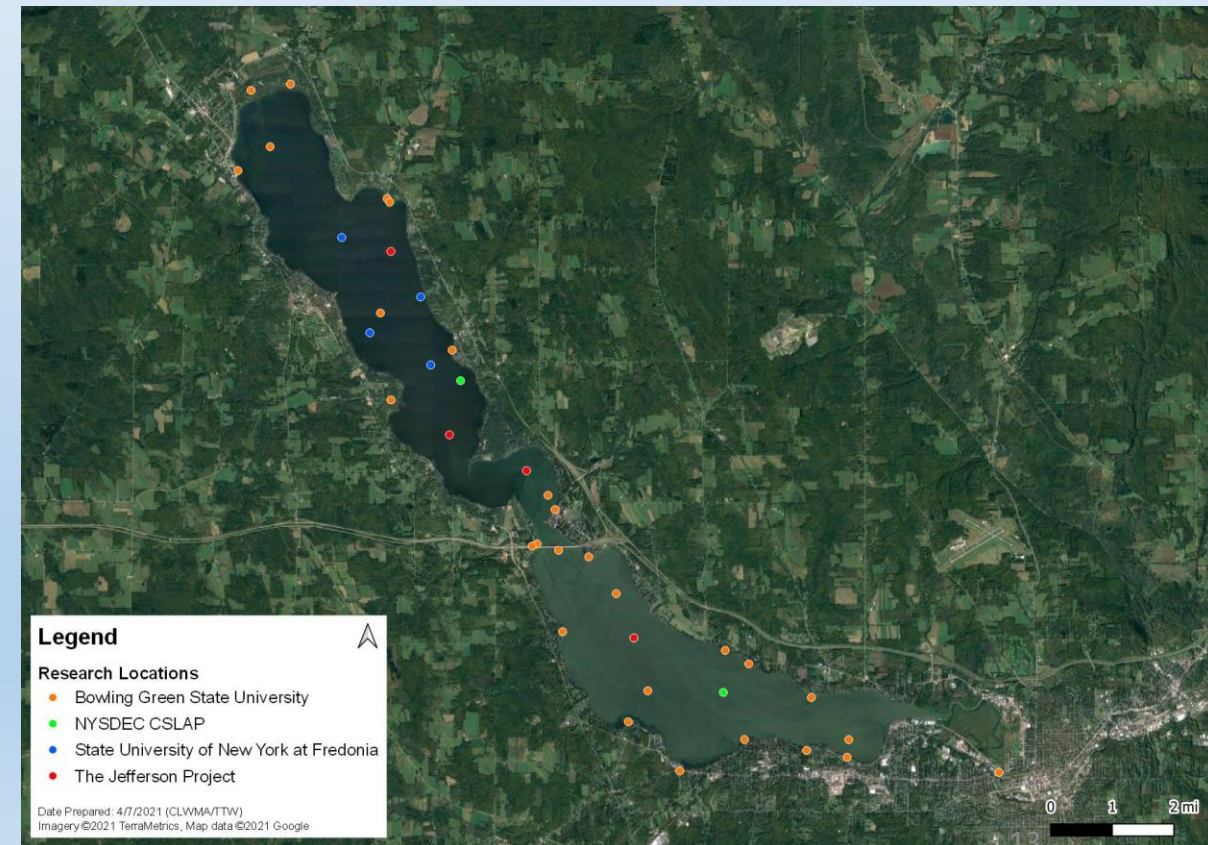
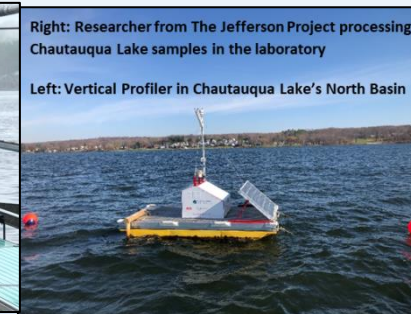
- *In progress* – Chautauque Watershed Conservancy Watershed Technical Assistance and Stormwater Management Program
- *In progress* – Village of Lakewood Grandview Stormwater Management Project
- *In progress* – Town of North Harmony Ball Creek Stabilization Project
- *In progress* – Town of Chautauque Roadside Swales Stabilization Project
- *Coming soon* – Town of Chautauque Stream Culvert Assessments NPG
- *Coming soon* – Town of North Harmony Ball Creek Stabilization Engineering Study Phase II NPG
- *Coming soon* – Village of Lakewood Commercial Corridor Stormwater Engineering Study - Mall Boulevard NPG
- *Major Projects Closed in 2022* – Busti Swales Retrofits, Chautauque Ave Green Street, Dutch Hollow and West Dutch Hollow Creek Stabilizations

- Utilizing local investments to leverage bigger NYS grants.
- Stream stabilization, culverts, flood reduction, and other projects completed, in progress, or planned.
- Several developed with help from Chautauque Watershed Conservancy as part of locally-funded programs that also include homeowner and business consultation and technical assistance.
- Using engineering planning studies to identify & develop projects for capital funding.
- Plus, many other partners over the years – e.g., Soil & Water, County, other Towns & Villages.
- Other watershed work also being advanced by Soil & Water, CWC, Highway Departments, County, and others.



Collaborative Research Initiatives

- ❑ Collaborative research efforts by leading experts in lake dynamics, HABs, environmental monitoring & modeling
- ❑ Sharing & coordination of data/planning
- ❑ “Science towards Solutions” approach
- ❑ Actionable data & information for decision-makers
- ❑ Public updates
 - *UPCOMING* for 2023 - *Chautauqua Lake Conference* hosted by Chautauqua Institution (6-17)
 - See all at: <http://www.chautauquaalliance.org/data-and-research/>



THANK YOU! The Jefferson Project at Lake George, Bowling Green State University, SUNY Fredonia, SUNY Oneonta, SUNY ESF, CSLAP (NYSDEC & Volunteers), NYHABS, North Carolina State University, Racine-Johnson Aquatic Ecologists, SOLitude Lake Management, Princeton Hydro, and More

Looking Ahead



- ☐ **2023 Coordinated Lake Work Plan and New Watershed Initiatives led by Members**
- ☐ **2023 NYS Consolidated Funding Application opportunities**
- ☐ **Alliance Consolidated Local Funding Program**
- ☐ **Expanded research to fill critical data gaps**
- ☐ **Prioritizing long-term datasets**
- ☐ **Forging new partnership opportunities**
- ☐ **Continuing to explore more sustainable lake funding options**

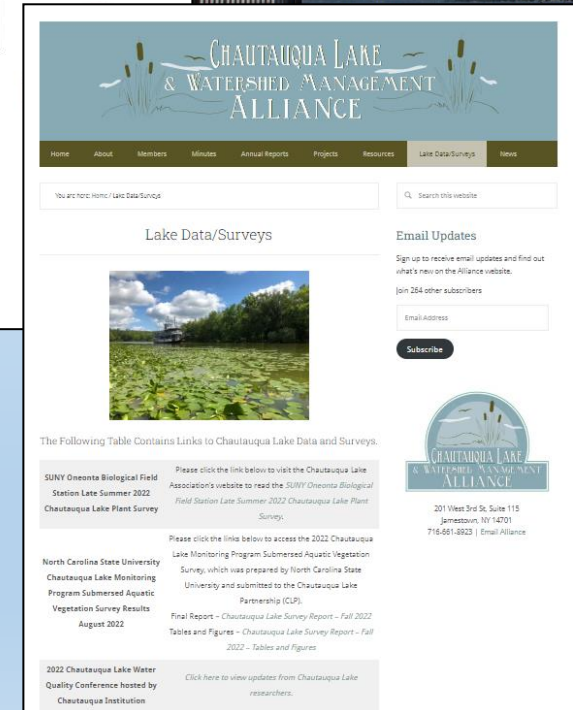
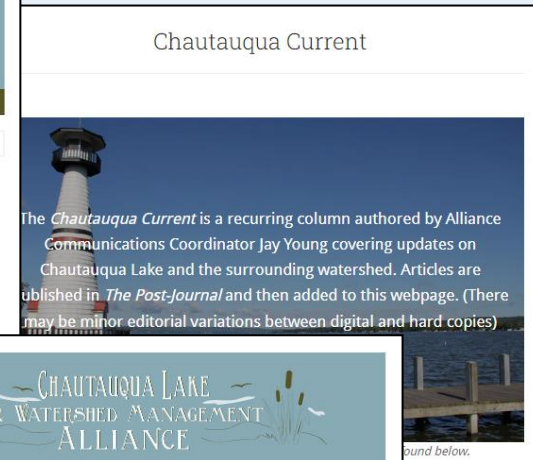
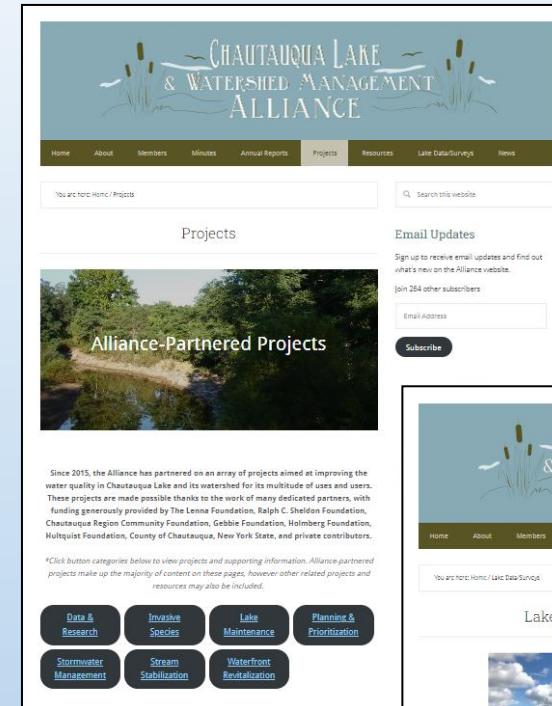
Getting the Word Out

- Recent website updates – including comprehensive ‘Projects’ page.
- Rapid dissemination of data/info.
- Hub for lake-related data and surveys and other resources.
- *Chautauqua Current* - Recurring column in partnership with The Post-Journal, covering lake and watershed topics
- Meetings, press releases, emails, etc.
- Build trust, build interest & awareness... and keep it.
- Linkage of information & awareness to action & results – e.g., 2022 starry stonewort.

Next Public Board Meeting Thu 7/13/23 @ Lawson Center, Bemus Point (2nd Thu of Jan, Mar, May, Jul, Sep, and Nov)

Please visit us at: <http://www.chautauquaalliance.org/>

And, visit our Members’ websites to learn more.



Thank You!



- **Randall Perry, Executive Director**
 - rperry@chautauquaalliance.org | (716) 661-8923
- **Taylor West, Project Manager**
- **Jay Young, Communications Coordinator**
- **Website: <http://www.chautauquaalliance.org/>**
 - Full Version of 2022 Annual Report and copy of this presentation will be available online soon.

