

# Chautauqua Lake Partnership – Memorial Weekend Rally

- Chautauqua Lake Partnership
- 2017 Plan and Results
- 2018 Organization and Plans
- NYS DEC Mission
- Challenges



# Chautauqua Lake, A Great Lake Seeking a Greater Future

## Chautauqua Lake Partnership – Partnership Update

- Chautauqua Lake Partnership, Inc (CLP), a 501c3 non-profit corporation
  - Mission: improvement in Chautauqua Lake water quality and enjoyment
  - ~425 members/growing with over \$440k raised (\$140k from individuals/businesses)
- Governance (\* Board Member)
  - **Dr. Jim Cirbus\***, President
  - **Jim Wehrfritz\***, Vice President
  - **Mike Latone\***, Treasurer
  - **Rebecca Haines\***, Secretary
  - Science Advisors: **Dr. Tom Erlandson\*** (Biology) and **Dr. Doug Neckers** (Chemistry)
  - Regulatory Advisors: **JoDee Johnson\*** and **Frank Nicotra\***
  - Others: **Dale Robbins, Esq.\***, **Sara DeMink**, Fundraising Chairperson
- Contact information
  - E-Mail: [clp@chqlake.org](mailto:clp@chqlake.org)
  - USPS: PO Box 337, Bemus Point, NY 14712
  - Website: [www.chqlake.org](http://www.chqlake.org)



# Chautauqua Lake, A Great Lake Seeking a Greater Future

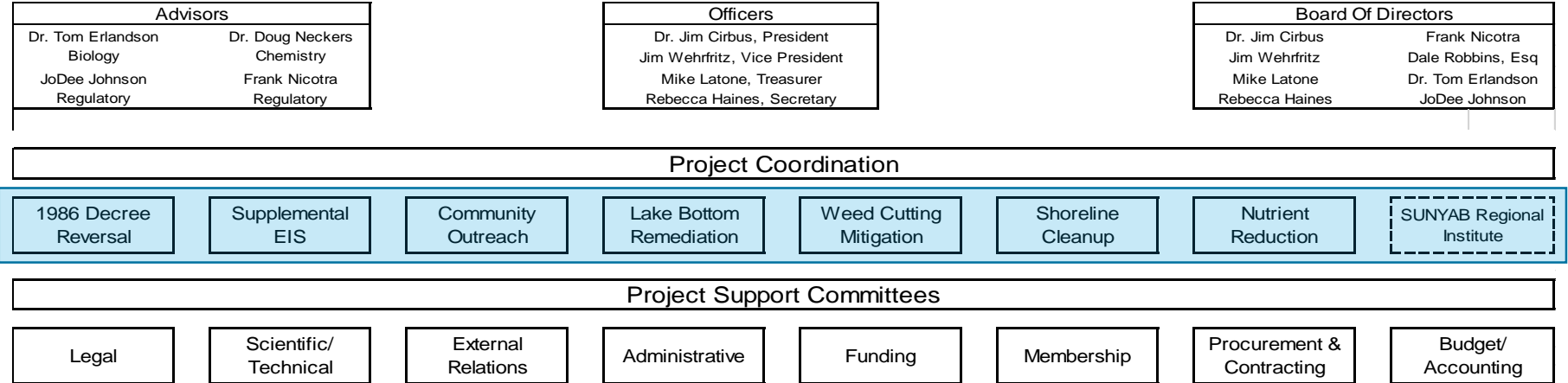
## Chautauqua Lake Partnership – 2017 Plan and Results

- Approach: property owner action with municipality leadership
- Objectives (results)
  - Complete County's Macrophyte Management Study (complete, April 2017)
    - + No regulatory basis, not implementable, most to be superseded by ongoing SEIS
  - State, County and municipality support (ongoing)
    - + Grassroots approach highly successful organizing property owners with their municipalities
  - Upgrade of Chautauqua Lake Association (CLA) weed cutting operation (ongoing)
    - + Negative environmental impacts must be mitigated, collaboration efforts unsuccessful to date
  - Secure NYS DEC permit for herbicide application and apply herbicides (complete)
    - + Successful June, 2017, treatment documented in report and confirmed by DEC
  - Develop and deploy improved near shore/shoreline cleanup (complete)
    - + Optimizing HydroRake from 2017 trial and to add MobiTrac amphibious/tracked for 2018 trial



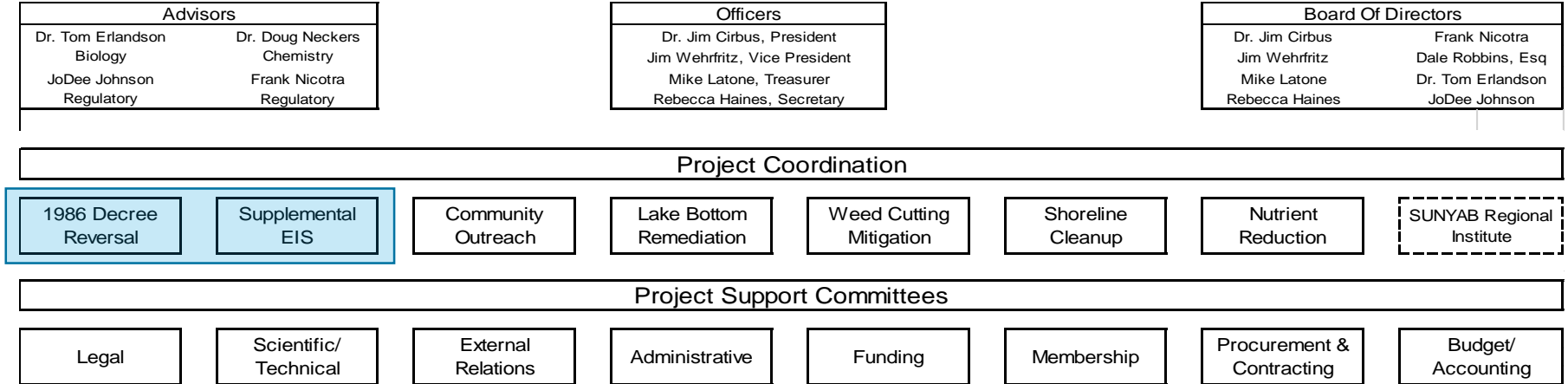
# Chautauqua Lake, A Great Lake Seeking a Greater Future

## Chautauqua Lake Partnership – 2018 Projects



- Partnership projects “cover the waterfront” on Chautauqua Lake
- Legal and regulatory
  - 1986 Decree Reversal, Supplemental EIS and Weed Cutting Mitigation
- Regional and community involvement
  - Community Outreach and SUNY Buffalo Regional Institute
- Lake remediation/restoration
  - Lake Bottom Remediation, Weed Cutting Mitigation, Nutrient Reduction
- Shoreline and nearshore prevention and cleanup
  - Weed cutting mitigation, Shoreline Cleanup, Nutrient Reduction
- Weed and cyanobacteria reduction
  - Supplemental EIS/herbicides, Weed Cutting Mitigation and Nutrient Reduction

## Chautauqua Lake Partnership – Supplemental EIS (SEIS)



- Objective: use of herbicides as part of the Chautauqua Lake weed management toolkit
- Town of Ellery (Lead Agency) completed the SEIS April 5 and the SEQRA process April 17
  - + 5 month regulatory process with two public hearings and over 800 comments addressed
  - + 1700 page SEIS privately-funded at a cost of over \$250,000 and thousands of volunteer hours
  - + SEIS “Findings” issued by Towns, Village and DEC through May 21
- Parallel public permit notifications and application submittal March 14 and 16, respectively
  - + 9 applications by Towns of Ellery, North Harmony, Busti and Ellicott and Village of Celoron
- Permits issued May 15 then revised and re-issued May 25
- Treatments targeted for week of June 4 dependent upon permit conditions and funding

[1986 Decree Reversal (caused need for SEIS) on hold pending SEIS and permitting experience]











# Chautauqua Lake Partnership – SEIS/Permitting

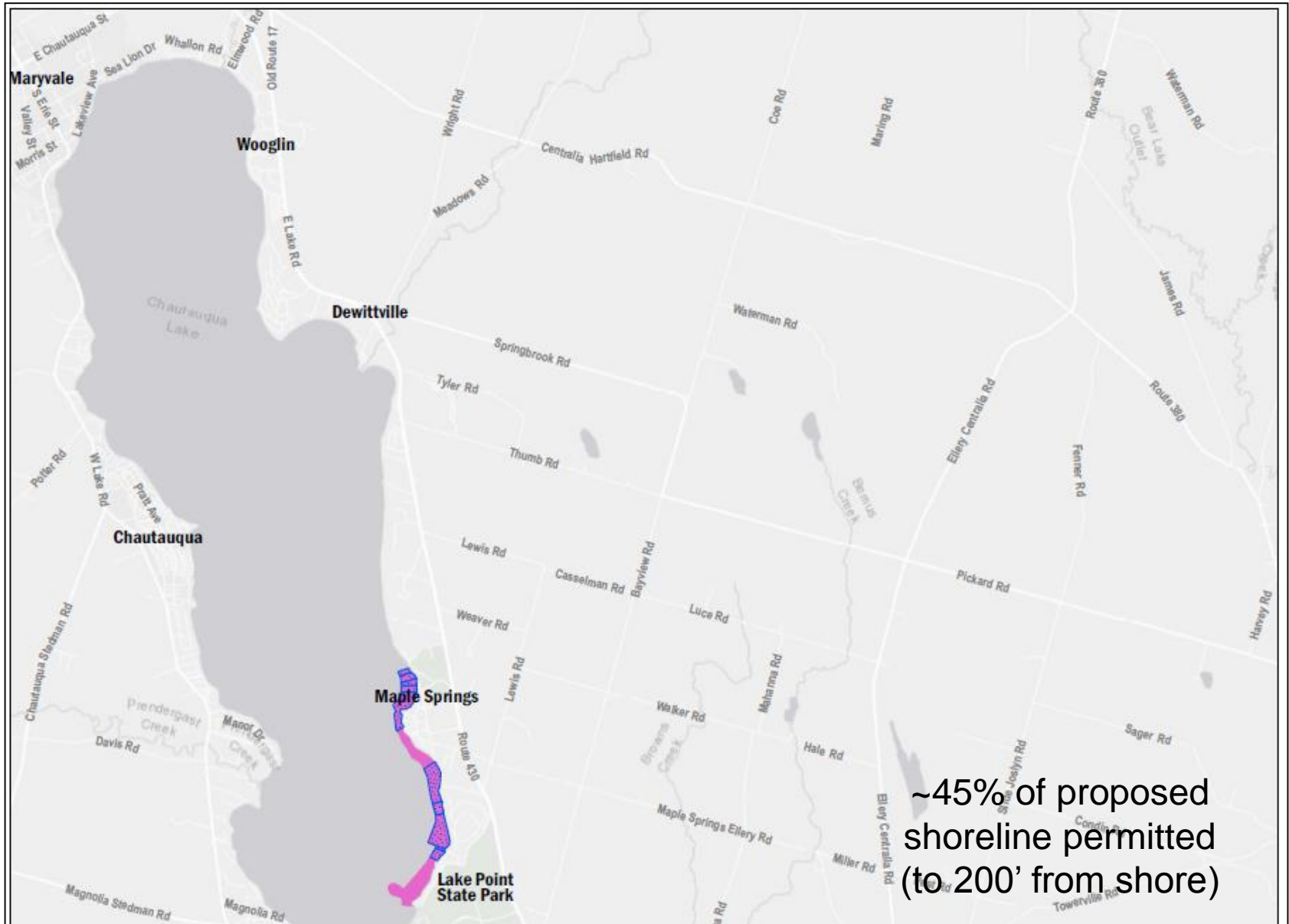
	2016			2017									2018								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Forma Funding Request to County																					
Other Towns/Village Issue Positive Findings																					
Legislature Meeting: No Vote																					
Permits Issued by DEC																					
Resolutions Passed by Towns and Village																					
Herbicide Treatments																					
Planning for 2018 (July-October)																					



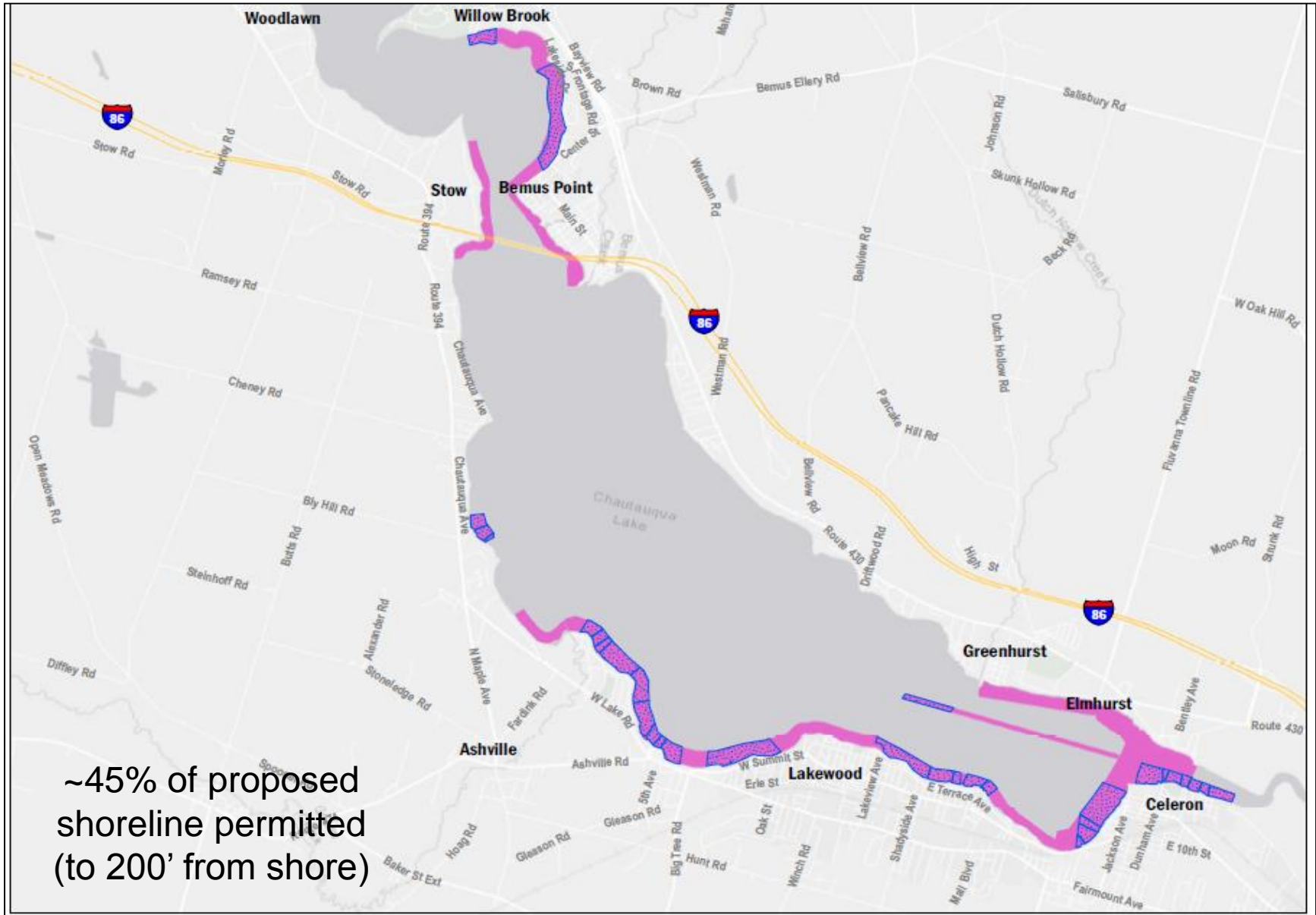
## Chautauqua Lake Partnership – May 2018 Permits

Location	2018 Permitted Acreage	2018 Proposed Acreage	Herbicide
<b>Town of Ellery</b>			
Sunset Bay	8	81	Aquathol & Navigate
Warner Bay	12	37	Navigate
Bemus Bay	28	124	Aquathol & Navigate
<b>Town of Ellicott</b>			
Burtis Bay/Corridor	16	198	Aquathol Only*
Burtis Bay/Corridor	16		Aquathol & Navigate
<b>Village of Celoron</b>			
Burtis Bay/Outlet	17	79	Aquathol Only*
<b>Town of Busti</b>			
Busti/Lakewood Shoreline	71	289	Renovate
<b>Town of North Harmony</b>			
Sunrise Cove	15	23	Navigate
Bly Bay	6	15	Aquathol & Navigate
Total	191	846	
	vs 989 proposed		Excluded
	19%	40	Bemus Point
		48	Stow
		55	Stockholm/Greenshurst
		143	
		989	

# Chautauqua Lake Partnership – May 2018 Permits



# Chautauqua Lake Partnership – May 2018 Permits



# Chautauqua Lake, A Great Lake Seeking a Greater Future

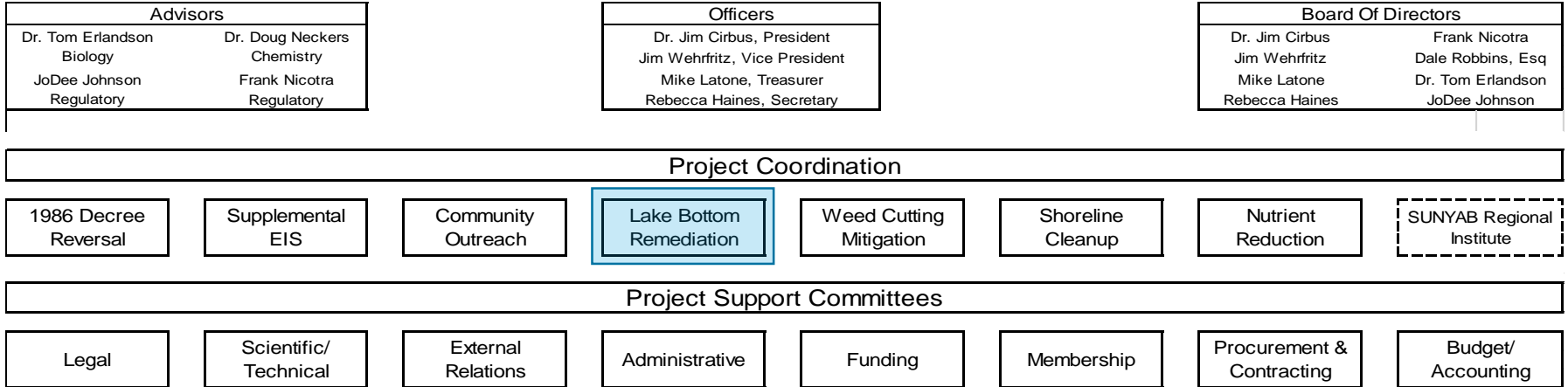
## Chautauqua Lake Partnership – Community Outreach



- 10 communities organized for 2018
- Kickoff/planning sessions after 2017 CLP Labor Day Rally
- Communities included in 2018 SEIS and permit applications
- Meet-n-Greet education sessions held January through April
  - Bemus Point: SeeZuhr House
  - Lakewood: Lakewood Rod & Gun Club
  - Lakewood: Yacht Club



## Chautauqua Lake Partnership – Lake Bottom Remediation

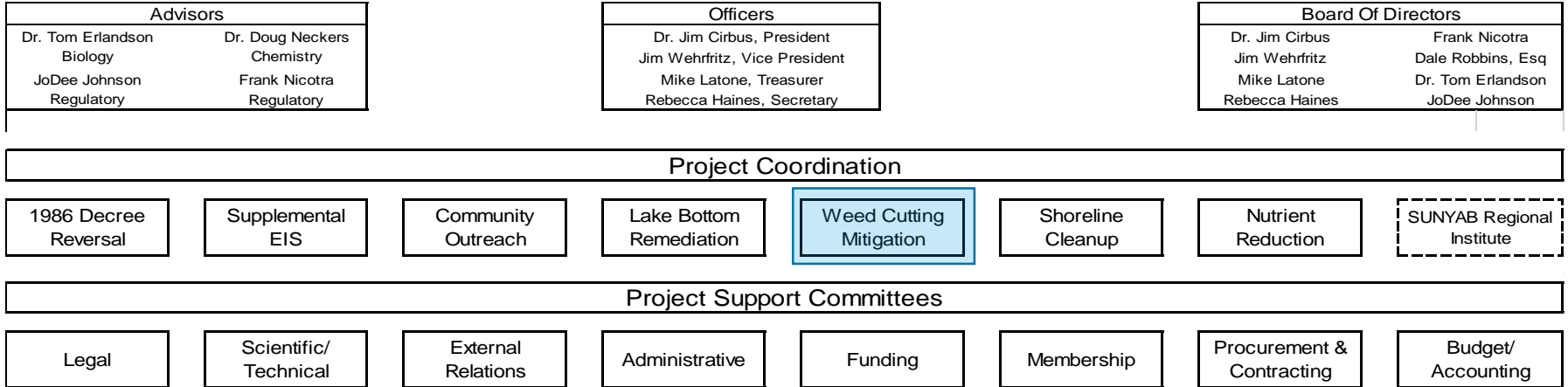


- Objective: restore lake bottom, reduce nutrient load
- Focus on primary phosphorus source “internal loading”
- Working with BGSU, USACOE and SUNY Buffalo
- Phase 1: phosphorus “hot spot identification”
- Phase 2: “internal loading” removal at “hot spots”





## Chautauqua Lake Partnership – Weed Cutting Mitigation

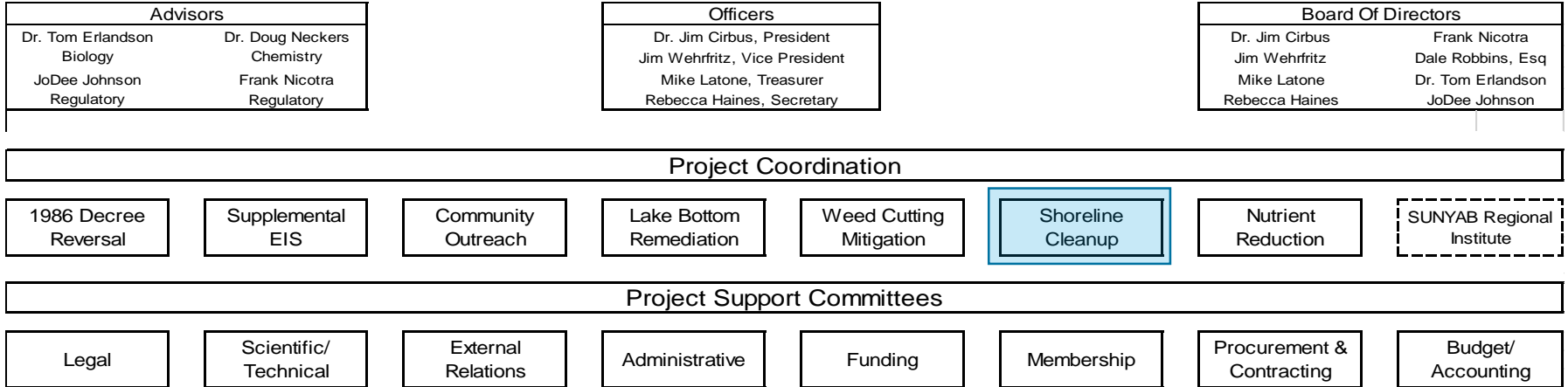


- DEC-documented negative impacts require mitigation
- Weed cutting requires permits in Adirondacks/7+ states





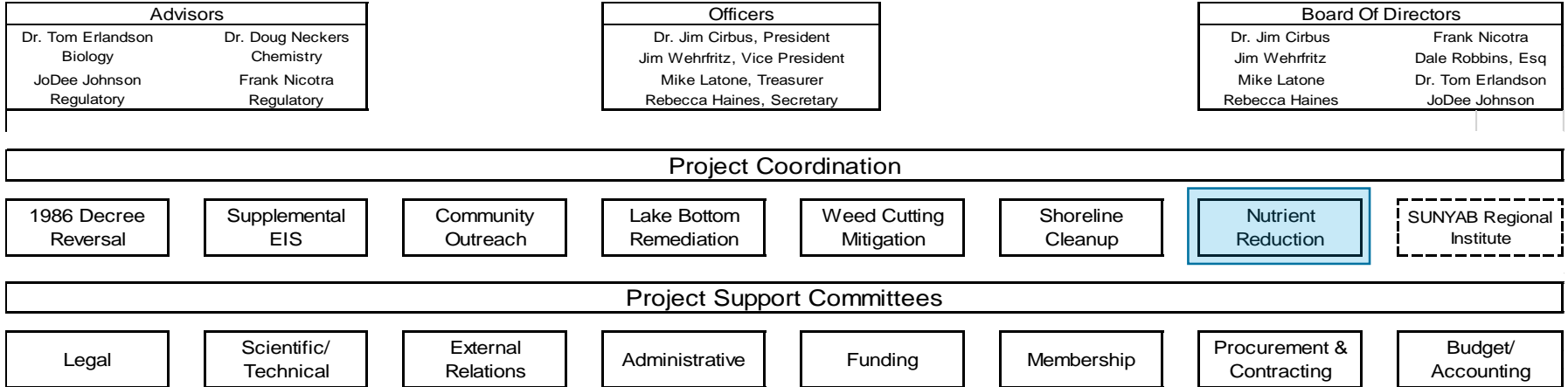
## Chautauqua Lake Partnership – Shoreline Cleanup



- Shoreline and Near Shore Cleanup
- HydroRake redesign/fabrication
- Seeking purchase of "MobiTrac" amphibious vehicle



## Chautauqua Lake Partnership – Nutrient Reduction



- 2012 EPA/DEC study set phosphorus reduction requirements
- CLP involvement to clarify misconceptions
  - Reduction won't significantly reduce invasive weeds
  - Popular reduction methods will have minimal impact
- Blue green algae = cyanobacteria, toxins are the problem



## Chautauqua Lake Partnership – Nutrient Reduction

- Nutrient reduction is the key to long term weed and algae reduction
- Current and planned nutrient reductions are insufficient
  - 2% “Septic System” replacement: voluntary, slow progress
  - 5% “Developed Land” efforts: voluntary, minimal significance, progress unknown

+ Management of storm water specifically mentioned

+ Referenced from CC Watershed Management Plan

\* Elimination of phosphorus-based fertilizers

\* Road deicing and road ditch vegetation

\* Addition of shoreline buffers

\* Removal of land from development

\* Stabilization of stream banks

TMDL-Required Reductions (lbs/yr)				
	North	South	Total	%age
Agriculture	9205	6357	15562	25%
Internal	5172	29148	34320	54%
Treatment Plants	4439	637	5076	8%
	18816	36142	54958	87%
Developed Land	860	2112	2972	5%
Septic Systems	760	249	1009	2%
	1620	2361	3981	6%
From North Basin		4276	4276	7%
	20436	42779	63215	100%
<b>Agriculture</b>	<b>9205</b>	<b>6357</b>	<b>15562</b>	<b>25%</b>
<b>Internal</b>	<b>5172</b>	<b>29148</b>	<b>34320</b>	<b>54%</b>
	<b>14377</b>	<b>35505</b>	<b>49882</b>	<b>79%</b>

– 8% “Treatment Plant” upgrades: mandated, to be completed 1H2018

– **25% “Agriculture” reductions: voluntary, progress unknown**

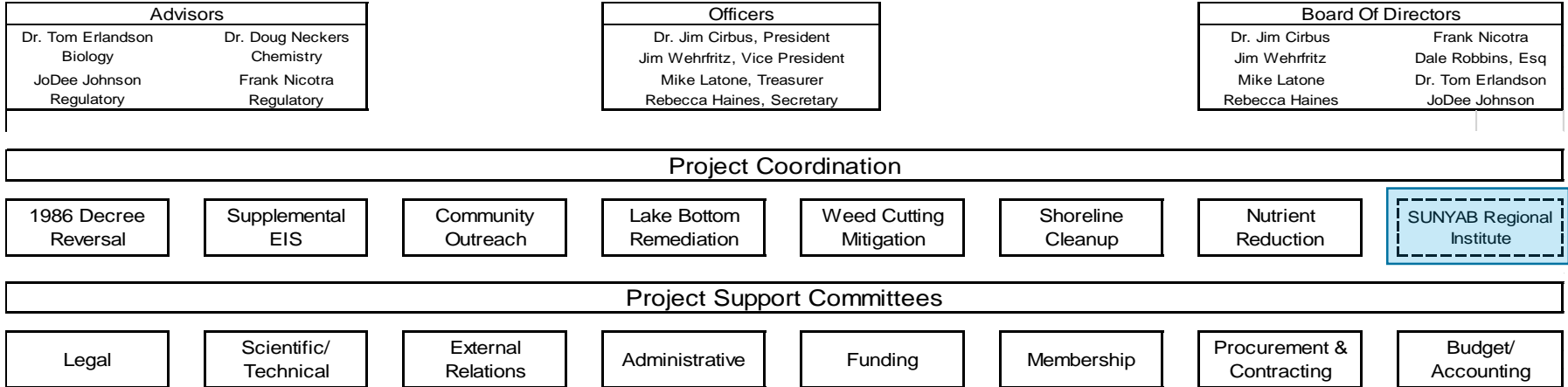
– **54% “Internal Loading” (sediments): not being addressed**

# Chautauqua Lake, A Great Lake Seeking a Greater Future

## Chautauqua Lake Partnership – Nutrient Reduction

- What's needed...
  - Education of public on realistic nutrient reduction time horizon
    - + Will never be attained without significant “internal loading” and “agriculture” initiatives
    - + Herbicides, weed cutting (and algaecides) needed until reduction targets are reached
    - + “Popular” initiatives of minimal positive impact
  - Active (not passive) reduction of “internal loading”
    - + Support Partnership's 2018 Bemus Bay Remediation/Restoration Demonstration Project
  - Update of 2010 CC Chautauqua Lake Watershed Management Plan
    - + Integrate 2012 EPA/DEC Phosphorus Total Maximum Daily Limit using university/regional firm
    - + Highlight need for active (vs passive) “internal loading” reduction
    - + Highlight need to active stewardship of “agriculture” reductions
    - + Highlight need for cost/benefit evaluation of popular reduction initiatives
  - Review TMDL-required lake water monitoring and analysis program
    - + 9 samples/tests plus weed survey required at each of 8 times each summer
    - + Gather and review test results, analysis and conclusions to date (DEC Albany?)

## Chautauqua Lake Partnership – Regional Institute



- Economic potential of Lake with improved water quality
- Study proposal reviewed with Chautauqua County Industrial Development Agency, awaiting their action





## Chautauqua Lake Partnership – NYS DEC Mission

To conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being.



DEC's goal is to achieve this mission through the simultaneous pursuit of environmental quality, public health, economic prosperity and social well being, including environmental justice and empowerment of individuals to participate in environmental decisions that affect their lives.

## Chautauqua Lake, A Great Lake Seeking a Greater Future

# Chautauqua Lake Partnership – Challenges

- Investment in Chautauqua Lake consistent with economic contribution
- Acceptance that Chautauqua Lake property and sales taxes benefit all in County
- Importance of Chautauqua Lake to Comedy Center, Harbor Hotel, Chautauqua Institution, etc
- Support for “status quo”, resistance to change and resulting lake decline
- DEC Region 9 herbicide permitting experience and competence
- Chautauqua County support of lake improvement realities/needs and leadership
- Reluctance of lake organizations to collaborate
- Lack of cost-benefit evaluation, implementation skills and performance stewardship
- Implementation of all aspects of DEC Mission and Goal

