

# CLONet

Coastal Lakes Observing Network



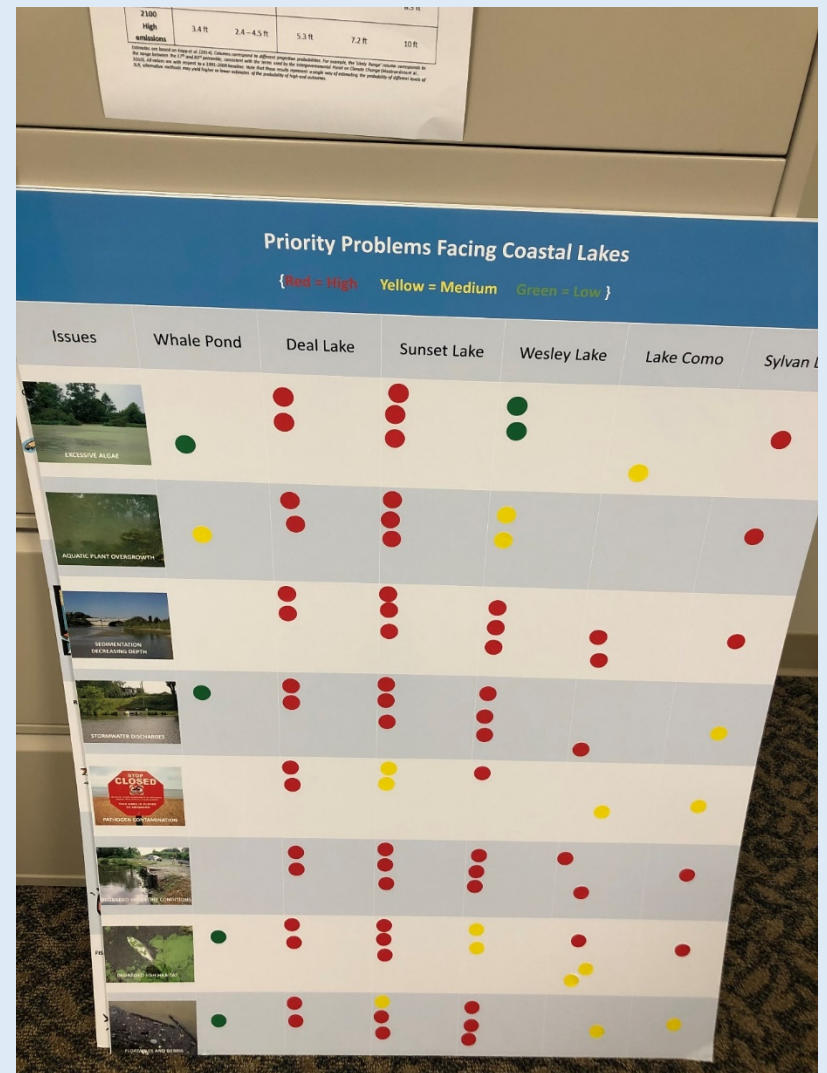
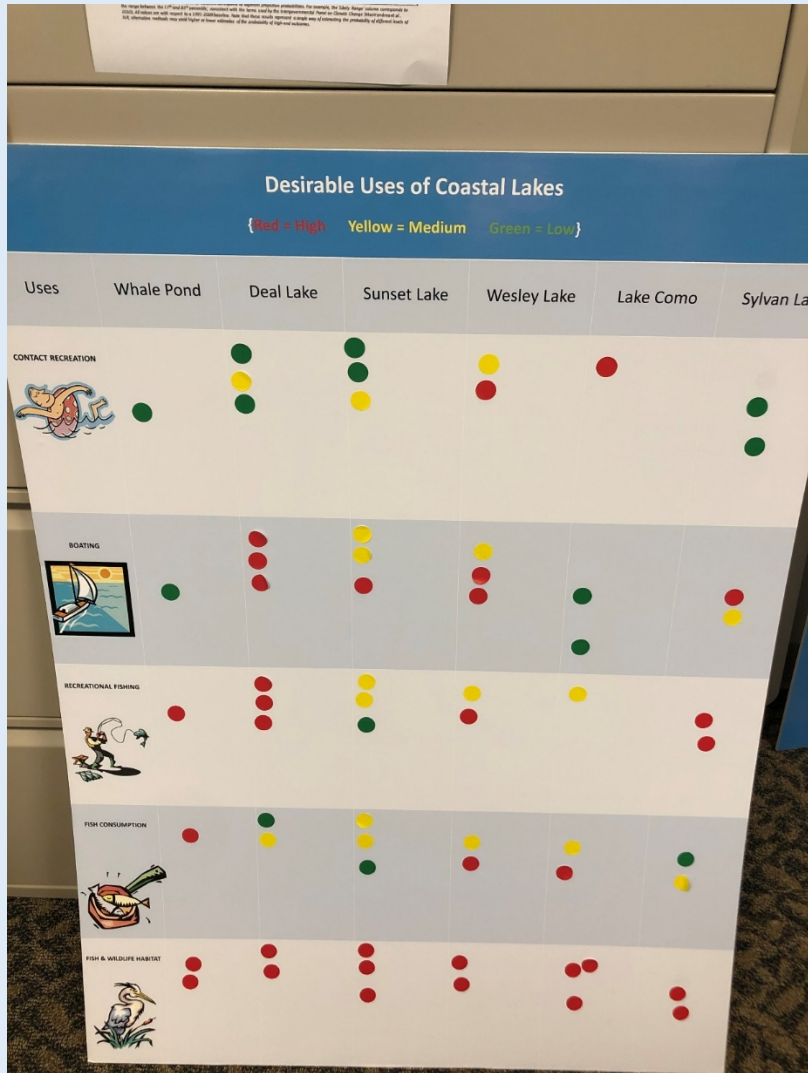
**Fall 2019 Coastal Lakes Workshop  
Sampling Season One Workshop**

**Tom Herrington, Associate Director  
Urban Coast Institute, Monmouth University**

# Coastal Lake Issues 2008 & 2019

- Monmouth University has hosted three Coastal Lake Summits beginning with the First Summit in 2008.
- At the 2008 summit we reviewed the status of Monmouth County's coastal lakes, our assessment of lake impairments and problems, and discussed issues impacting lake management efforts
- We repeated that assessment at the March 2019 Coastal Lakes Summit to see if the status of our coastal lakes has improved or worsened over the last decade.
- We also asked each of you to identify what data gaps currently exist, what data would help you better understand the health of your lake, what parameters should we monitor as long-term indicators of lake health, who is working with you to manage/help your lake, and how can Monmouth University aid in helping you monitor your lake.

# Spring 2019 Survey



2008

## Coastal Lakes Use Impairment Ratings

<b>Use</b>	<b>Good</b>	<b>Impaired</b>	<b>Severely Impaired</b>
<b>Swimming</b>	<b>0 %</b>	<b>33 %</b>	<b>67 %</b>
<b>Boating, Sailing, Waterskiing</b>	<b>0 %</b>	<b>67 %</b>	<b>33 %</b>
<b>Fishing</b>	<b>10 %</b>	<b>80 %</b>	<b>10 %</b>
<b>Fish Consumption</b>	<b>10 %</b>	<b>70 %</b>	<b>20 %</b>
<b>Fish, Wildlife, Aquatic Life Support</b>	<b>10 %</b>	<b>50 %</b>	<b>40 %</b>

- **Good = fully supporting the use**
- **Impaired = partially supporting the use**
- **Severely Impaired = not supporting the use**

2019

## Coastal Lakes Desired Uses

Use	High	Medium	Low
Swimming	17 %	25 %	58 %
Boating, Sailing, Waterskiing	50 %	29 %	21 %
Fishing	59 %	33 %	8 %
Fish Consumption	25 %	50 %	25 %
Fish, Wildlife, Aquatic Life Support	100 %	0 %	0 %

- High = fully supporting the use
- Medium = partially supporting the use
- Low = not supporting the use

# Coastal Lake Problems Identified

Coastal Lake Problems	Percent of Lakes Affected	
	2008	2019
Excess sediment & Decreasing depth	83%	83%
Degraded shoreline conditions	83%	83%
Degraded fish habitat	75%	83%
Excessive algae	67%	67%
Aquatic plant overgrowth	67%	83%
Debris & Garbage	67%	83%
Stormwater runoff	67%	83%
Pathogen contamination	25%	83%

# Spring 2019 Breakout Questions

1. Are there gaps in information/knowledge of your lake that would improve your understanding of the stressors impacting lake health?
2. What data and information will help you understand the health of your lake? What data and information will help you in securing funding for lake improvement?
3. What locations and parameters should be sampled to provide long-term indicators of lake health?
4. Who are the existing community groups/programs that have an interest and/or are working to improve your lake and adjacent uplands?
5. How can Monmouth University faculty and staff engage with the lake community to build out CLONet through volunteer participation in data collection?

Are there gaps in information/knowledge of your lake that would improve your understanding of the stressors impacting lake health?

- **Baseline data lacking**
  - Water quality data lacking
  - Water quality history lacking
  - Do not know stream flow
  - Do not know nutrients entering lakes



What data and information will help you understand the health of your lake? What data and information will help you in securing funding for lake improvement?

- Water Depth in Lakes
- Water Elevation in Lakes
- Dredging History
- Water quality
  - Nutrients
  - Suspended Solids

What locations and parameters should be sampled to provide long-term indicators of lake health?

- Annual lake depth
- Lake levels during each sampling
- Outfall mapping
- Dissolved Oxygen
- Outfall discharge

Who are the existing community groups/programs that have an interest and/or are working to improve your lake and adjacent uplands?

- Lake Commissions
- Municipal Committees
  - (e.g., Shade Tree, Environmental Comm)
- Friends of Lake groups
- Monmouth University
- Adjacent homeowners
- K12 Schools
- Clean Ocean Action
- Clean Water Action
- American Littoral Society
- Surfrider Foundation

How can Monmouth University faculty and staff engage with the lake community to build out CLONet through volunteer participation in data collection?

- Share information between surrounding lake communities
- Monmouth University as facilitator of communication
  - Base Camp communication platform
  - Story Map for CLONet
  - Online Data Platform
- Hold Periodic Coastal Lake Summits
- Attend Lake Commission Meetings
- Provide Student Volunteers/Training

# Discussion ?

SCENE AT SUNSET LAKE, ASBURY PARK, N.J.



47708