

Upper Dam Pond Conservation Association Member Meeting & “Ask the Experts” 19-February 2022

Board of Directors

- Don Antonelli - President
- Tom Pendergast - VP Marketing & Members
- Jason Sweet - VP Technology
- Joe Bettencourt - Director
- Lori Jean Smith – Secretary

“Ask the Experts”

- Elizabeth Herron
- Joe Onorato

Mission Statement - Lori

- The Upper Dam Pond Conservation Association - Breezy Lake (UDPCA-BL) is an all-volunteer, non-profit organization; dedicated to the restoration and preservation of Breezy Lake.
- Our goal is to collaborate with lake associations, ecological specialists, our neighbors, local, state, and national supporters to bring back our lake.
- We shall promote safe recreation including boating, swimming, and fishing.
- We will protect the biological diversity and natural beauty of the lake for present and future generations.

Agenda - Lori

- Association Business
 - Come to Order and Agenda - Lori
 - Introduction and Thanks - Don
 - Financials and Budget - Tom
 - Branding and Technology - Jason
 - Sponsors and Events - Lori
- "Ask the Experts"
 - Joe Onorato and Elizabeth Herron
 - Lake accomplishments and status
 - The "world of AIS" and pond management
 - Lake future and treatment options
 - URI Watershed Watch testing results
 - Education and Community Influence on Government and Municipalities
 - Open questions throughout

Introductions and Thanks - Don

As we enter the New Year, I would like to thank all members and sponsors for your continued support, most of all, the Board.

There is a lot of ongoing work behind the scenes but also exciting at the same time.

The Board is always welcoming any members who would be available to help in future events so contact us for more information.

We are very excited about the new newsletter to funnel information to members and the community, so we hope you learn something within it.

2021 UDPCA Financials - Tom

This is a snapshot of the Year End 2021 Income Statement

| | | | |
|----------------------------------|---------------|---------------------------------|---------------|
| INCOME | 24,895 | EXPENSES | 19,140 |
| Event:Beer Tasting | 1,620 | Expense:Apparel | 1,376 |
| Event:Dinner | 276 | Expense:Koozie | 100 |
| Event:Fishing Tournament | 370 | TOTAL Expense | 1,476 |
| Event:Raffle | 3,945 | Fees & Charges:Bank Fee | 81 |
| Event:Savers | 352 | TOTAL Fees & Charges | 81 |
| Event:Steak Fry | 1,700 | Financial:Financial Advisor | 66 |
| Event:Yard Sale | 960 | Financial:Networking | 2,012 |
| TOTAL Event | 9,223 | TOTAL Financial | 2,078 |
| Gifts and Donations:Gifts | 5,800 | Lake:Dues | 347 |
| Gifts and Donations:Grants | 3,500 | Lake:Permit | 350 |
| TOTAL Gifts and Donations | 9,300 | Lake:Technology | 208 |
| Interest Inc | 6 | Lake:Treatment | 14,600 |
| Membership dues | 2,060 | TOTAL Lake | 15,505 |
| Sales:Apparel | 3,805 | | |
| Sales:Flags | 100 | | |
| Sales:Koozies | 5 | | |
| Sales:Plant | 395 | | |
| TOTAL Sales | 4,305 | | |

2022 UDPCA Budget - Tom

This is a snapshot of the 2022 Budget

| Category | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 2022 Budget |
|---------------------|-----|-------|-------|-------|--------|-------|-------|-----|--------|-------|-----|-----|-------------|
| INCOME | 300 | 2,400 | 2,700 | 3,300 | 500 | 4,950 | 3,200 | 600 | 300 | 2,200 | 300 | 300 | 21,052 |
| Event | 0 | 0 | 2,300 | 2,900 | 0 | 1,000 | 2,800 | 200 | 0 | 1,800 | 0 | 0 | 11,000 |
| Gifts and Donations | 300 | 300 | 300 | 300 | 300 | 3,800 | 300 | 300 | 300 | 300 | 300 | 300 | 7,100 |
| Interest Inc | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Membership dues | 0 | 2,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,100 |
| Other Inc | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sales | 0 | 0 | 100 | 100 | 200 | 150 | 100 | 100 | 0 | 100 | 0 | 0 | 850 |
| EXPENSES | 350 | 300 | 75 | 125 | 9,100 | 925 | 25 | 25 | 3,000 | 25 | 100 | 0 | 14,050 |
| Expense | 0 | 0 | 25 | 25 | 0 | 25 | 25 | 25 | 0 | 25 | 0 | 0 | 150 |
| Fees & Charges | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Financial | 0 | 0 | 50 | 100 | 100 | 900 | 0 | 0 | 1,000 | 0 | 100 | 0 | 2,250 |
| Interest Exp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lake | 350 | 300 | 0 | 0 | 9,000 | 0 | 0 | 0 | 2,000 | 0 | 0 | 0 | 11,650 |
| TOTALS | -50 | 2,100 | 2,625 | 3,175 | -8,600 | 4,025 | 3,175 | 575 | -2,700 | 2,175 | 200 | 300 | 7,002 |

- Over \$745.00 for January Dues and Gifts
- Received Senator Raptakis \$2,000 Grant for 2022
- Remember dues for association members
- Tax filing
- Donation barometer

Technology and Branding - Jason and Lori

- Suggestion box
- Website and sponsors
- Comments from members
- Created and distributed Newsletter
- Branding and sponsors

Events – Lori and Tom

The below dates still to be determined. Our fundraising team has done a terrific job and should be commended for their money raising skills. As each Event is booked, we will send out notices and information.

- February Ask The Expert with Water & Wetlands via Zoom
- March Spaghetti Supper at PNA
- April Beer tasting at PNA
- May Beach Cleanup with Plant & Merchandise sale
- May Flag sale - goal is for ALL poles in area
- June Craft/Yard sale at Club Jogues
- July Steak Fry
- August Fishing Tournament
- September Potluck/Wine Tasting Dinner
- October Halloween Party at PNA
- November Shoreline Cleanup or specific area needed

Sponsors - Lori and Tom

These sponsors were picked based on donation and support. More sponsors will be needed this year, especially in the Coventry business community. Sponsor owners will be responsible for reaching out to the sponsor and gathering donation.

- Sponsors

- DAI: \$1,500 Lori & Tom
- SAFE: \$500 Don
- Liberty Fence: \$500 Don
- Ace Hardware: \$100 Linda
- C. Lumber: \$100 Drew
- NK Bowl: \$100 Cheryl
- Iannotti Funeral: \$100 Don

“Ask the Expert”

Joe Onorato- Director of Business Development & Aquatic Specialist
Water & Wetlands

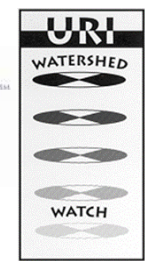
Elizabeth Herron- Business Director
URI Watershed Watch

Please remain on mute unless you have a question

State of Breezy Lake - Joe Onorato

- Introduction
- What is the current status of Breezy Lake?
- What is a lake “reset” and how did we do?
- What should we look for this spring?
- What is the treatment and cost for this coming year?
- What other options should we consider? (dredging, bacteria, algae, phosphorus socks, stormwater remediation, etc.)

THINK BIG  WE DO™



Introduction to URI Watershed Watch, and Upper Dam Monitoring Results 2021

Elizabeth Herron
Program Director

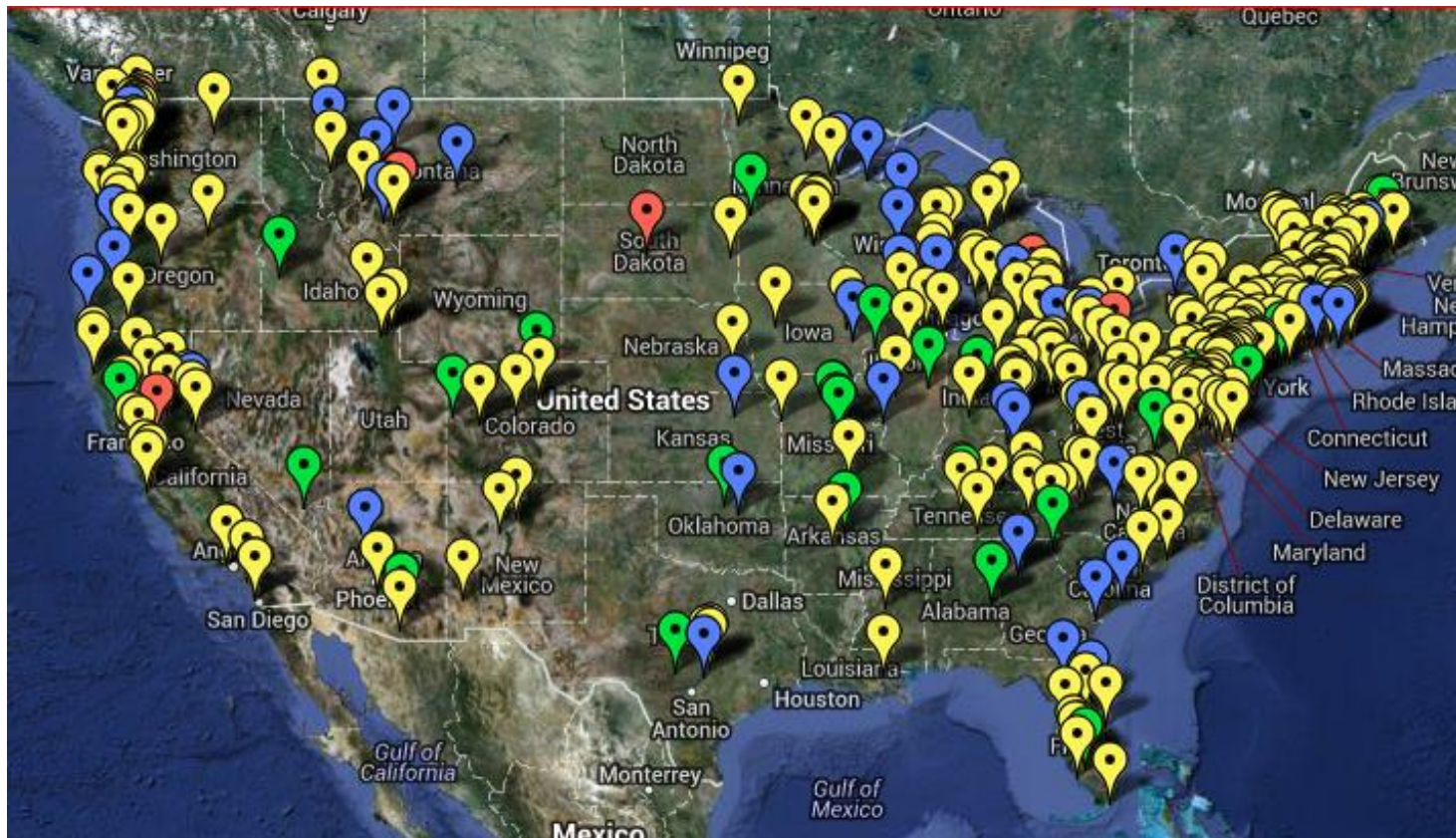


Presentation Outline

- Watershed Watch Overview
- Upper Dam Pond monitoring
 - Brief review of 2021 / multi-year data
- Answer your questions after the presentations



Volunteer monitoring across the US



350 stand-alone or parent programs
1675 affiliated programs

URI Watershed Watch

Long term volunteer water quality monitoring



- 💧 Began in 1988 with 14 lakes
- 💧 Now has ~400 volunteer monitors on 250+ sites on 180+ waterbodies
 - 💧 Lakes, ponds & reservoirs
 - 💧 Rivers, streams & tributaries
 - 💧 Salt ponds, surfing sites, etc....
- 💧 Provides ~90% of RI's lake baseline data



Long term ecological monitoring

<https://web.uri.edu/watershedwatch/>

Volunteers

- All ages (HS aged through retired)
- All backgrounds (no science background needed)
- Typically, folks who live near or on a site, or who frequently use the site



Scientist-led Statewide (+) Volunteer Monitoring Program

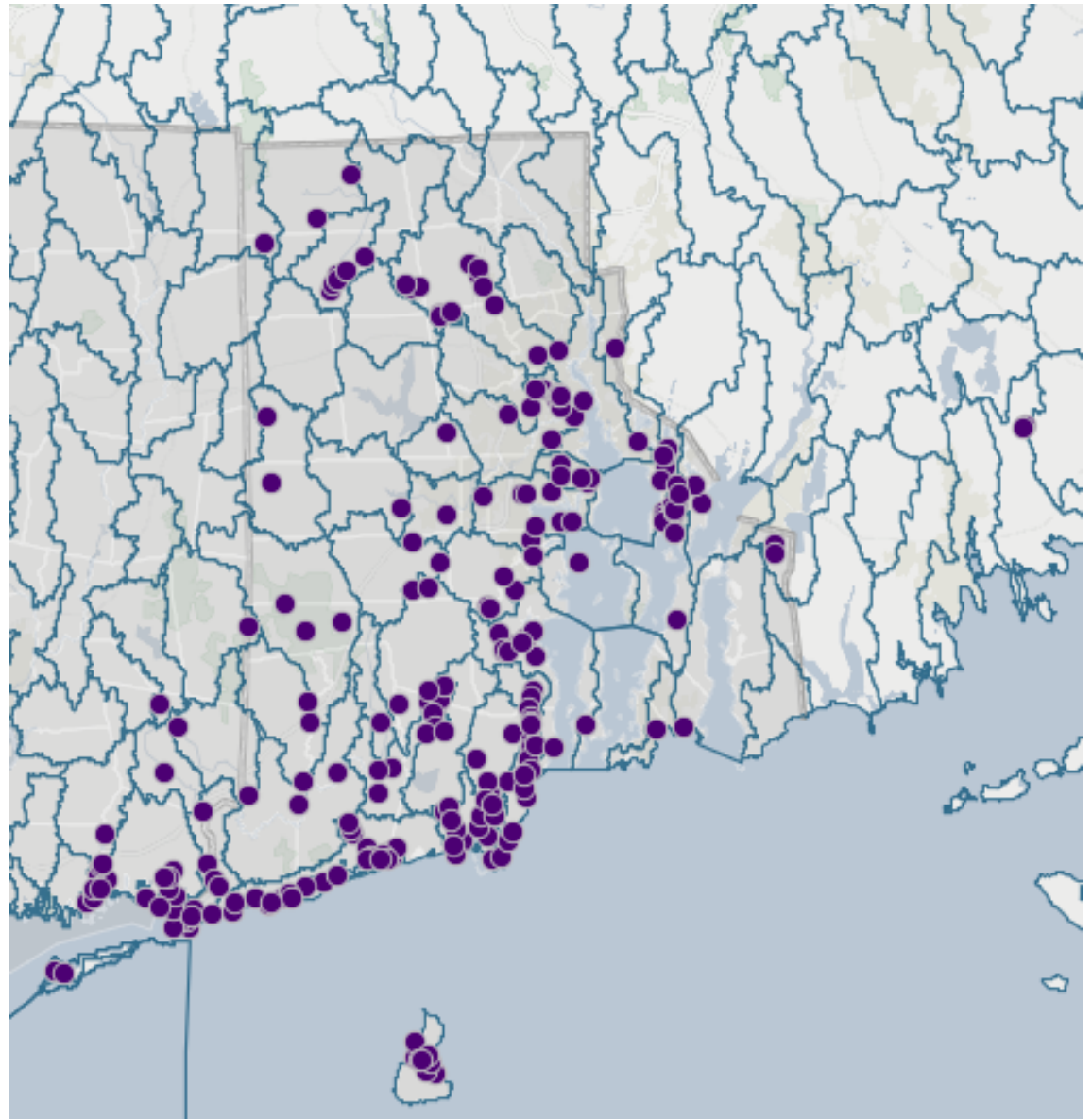
Sites throughout RI

Southeastern, CT

Fisher Island, NY (2)

Rochester, MA (1)

- Lakes, ponds, reservoirs
- Rivers, streams
- Salt ponds
- Bays
- Swimming & surfing beaches



What We Monitor



Field

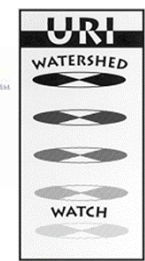
- Water Clarity (Secchi Depth)
- Water Temperature
- Dissolved Oxygen
- Algae (Chl-a)

Laboratory

- Nutrients
- Bacteria
- Chl-a
- pH & alkalinity
- Chlorides

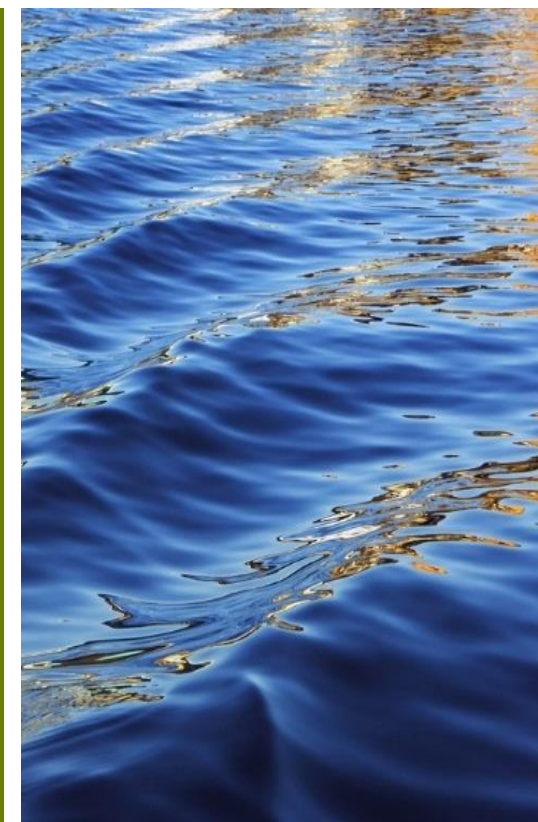
STATE CERTIFIED LAB

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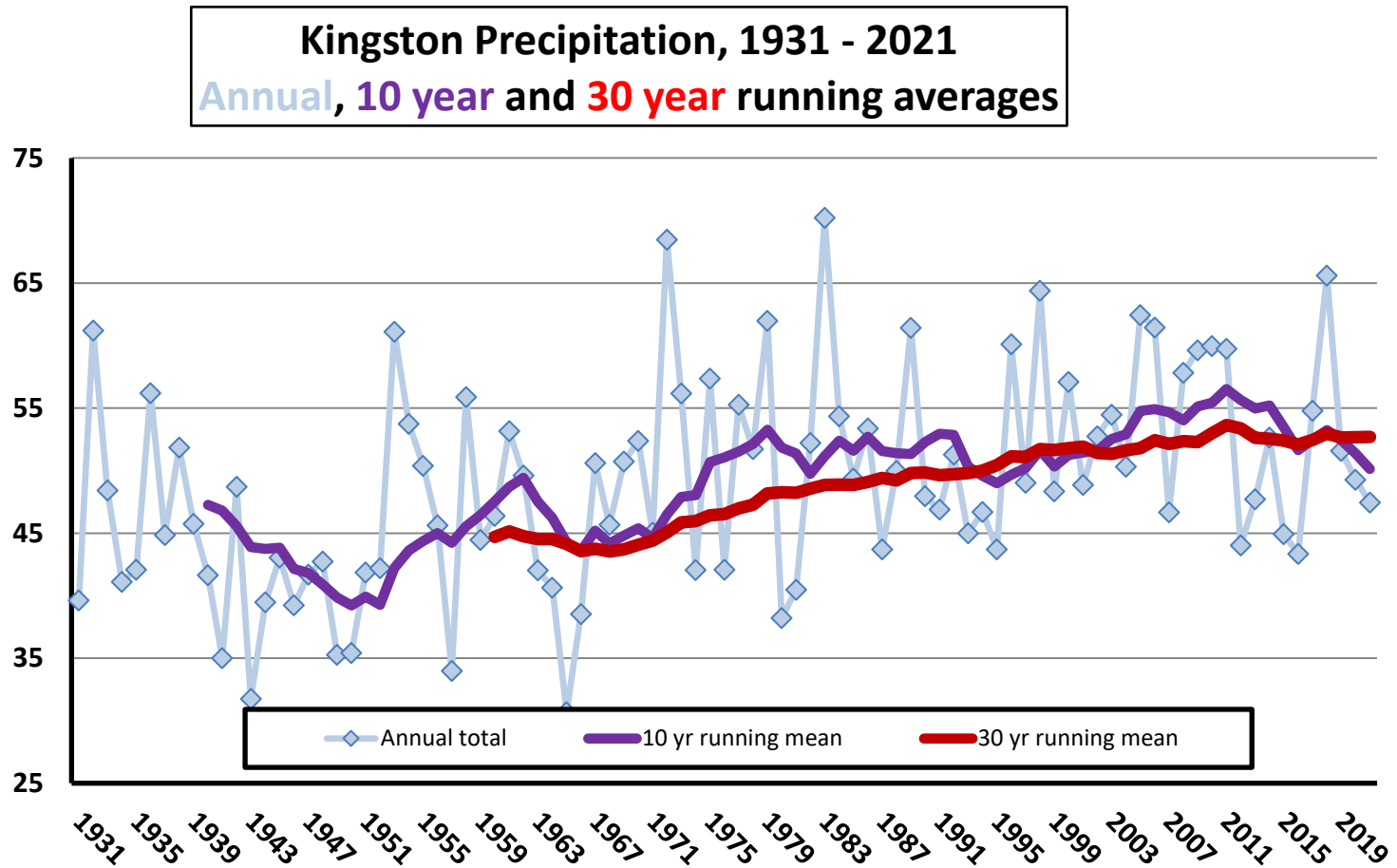


UDPCA Monitoring

2021 Draft/ Multi-year Results URI Watershed Watch

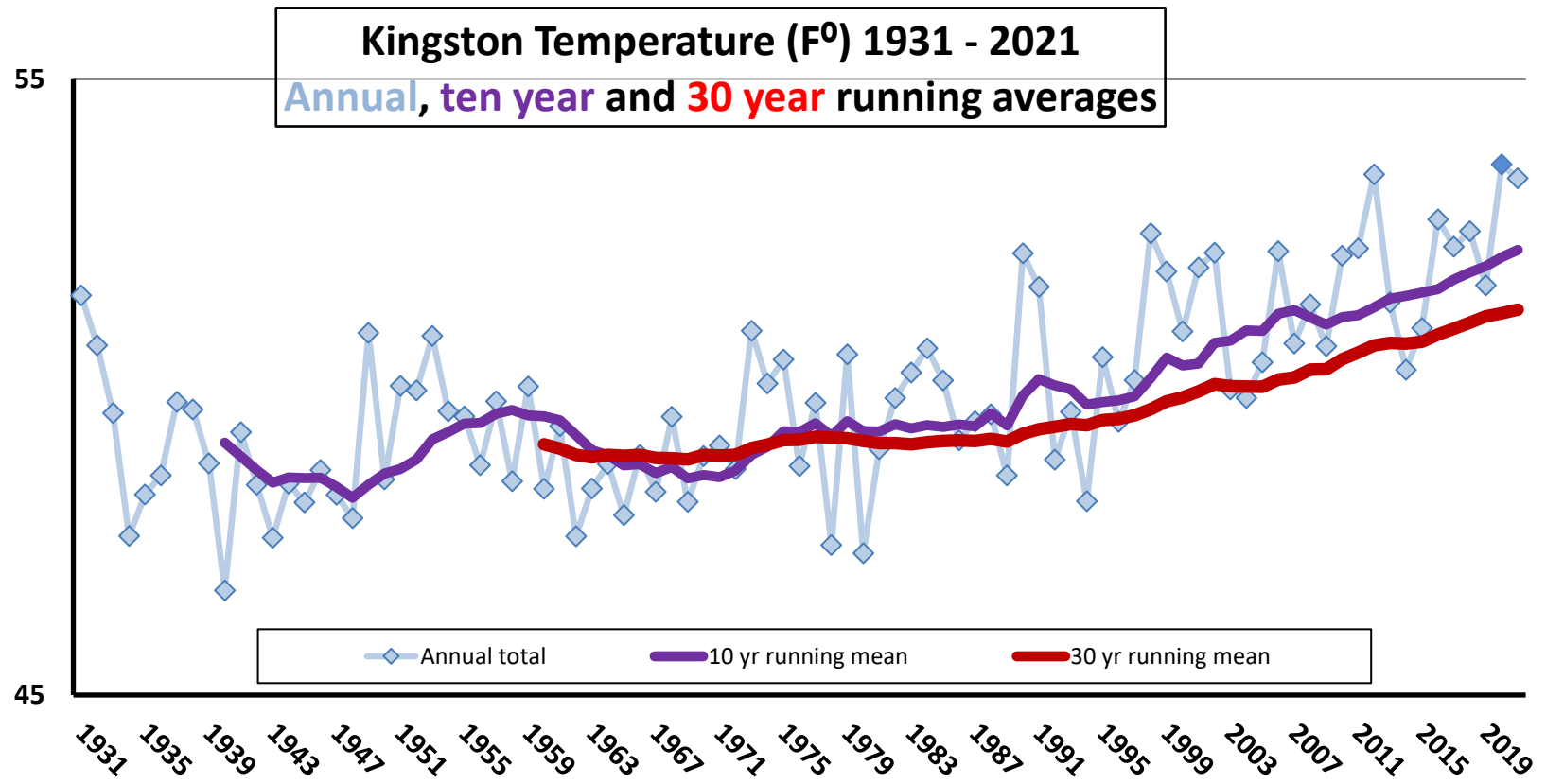


Climate and Weather Plays an Important Role in WQ



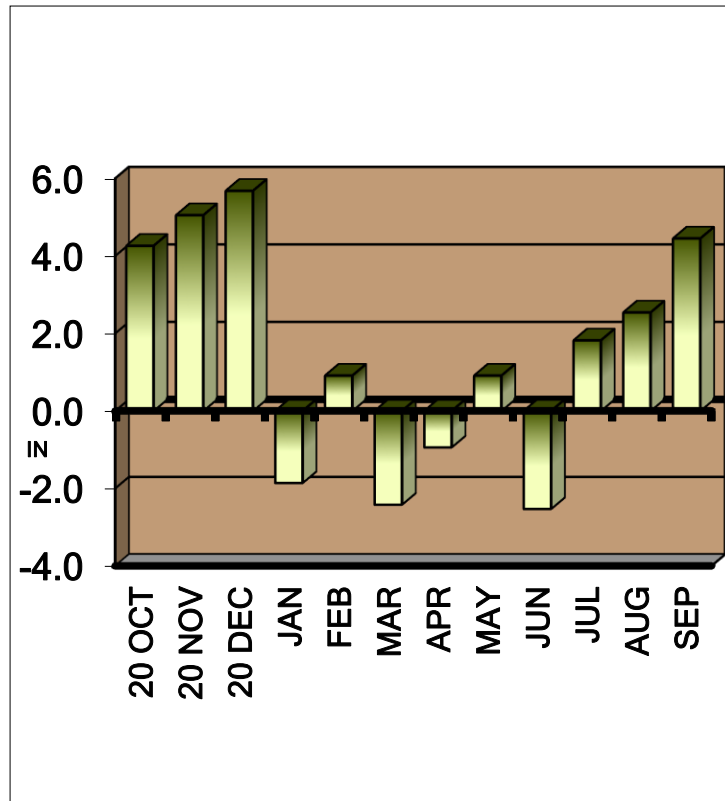


We're getting Warmer too

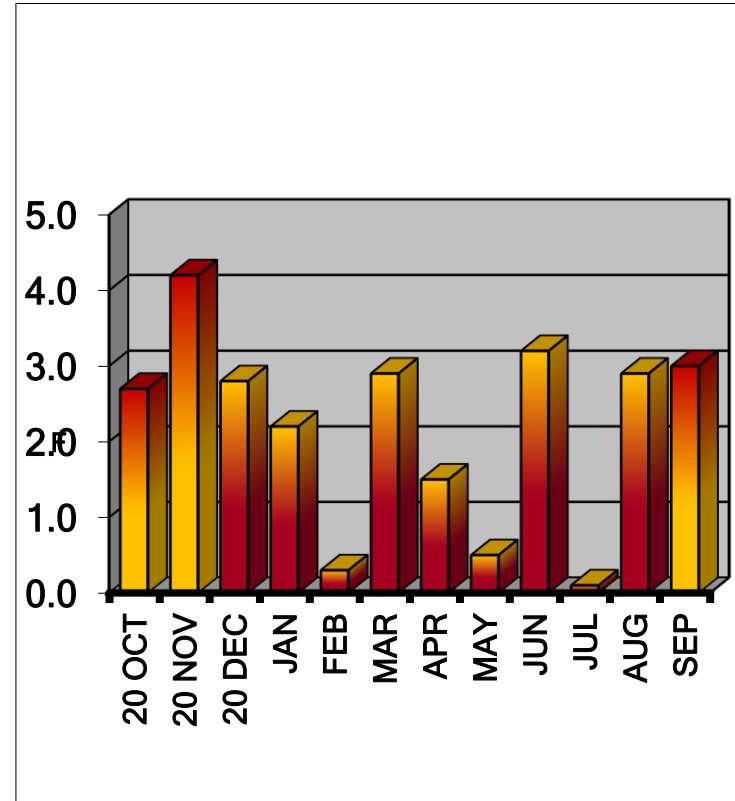


2021 Water Year Weather Data

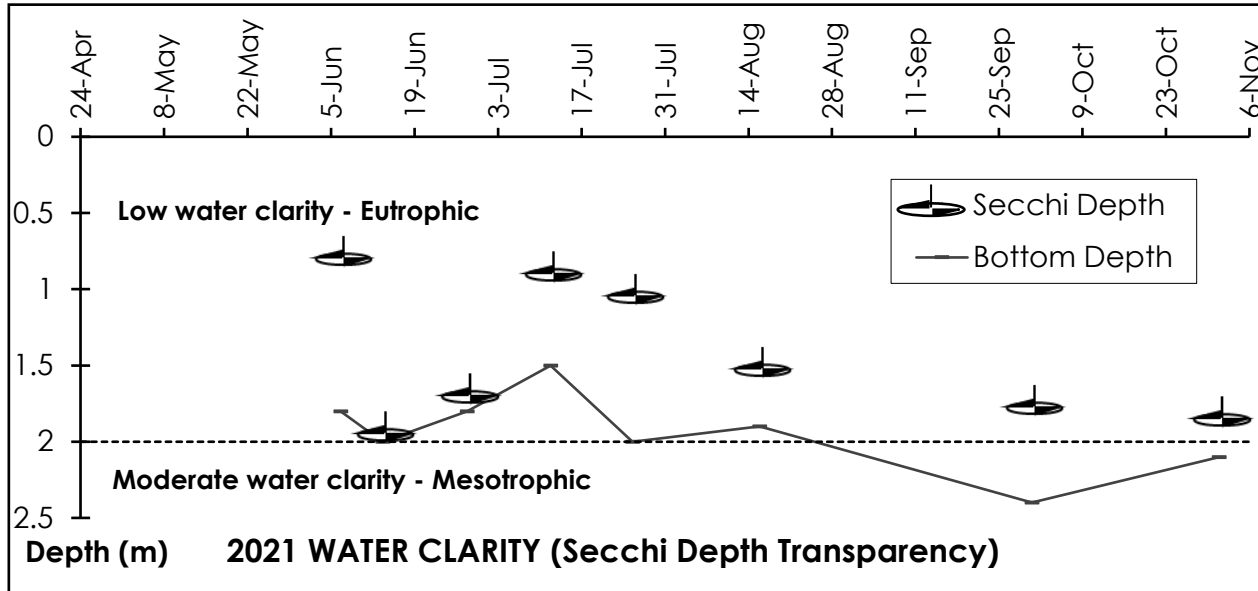
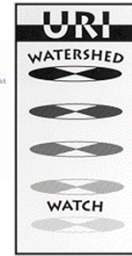
2021 WATER YEAR TOTAL PRECIPITATION DEPARTURE FROM NORMAL



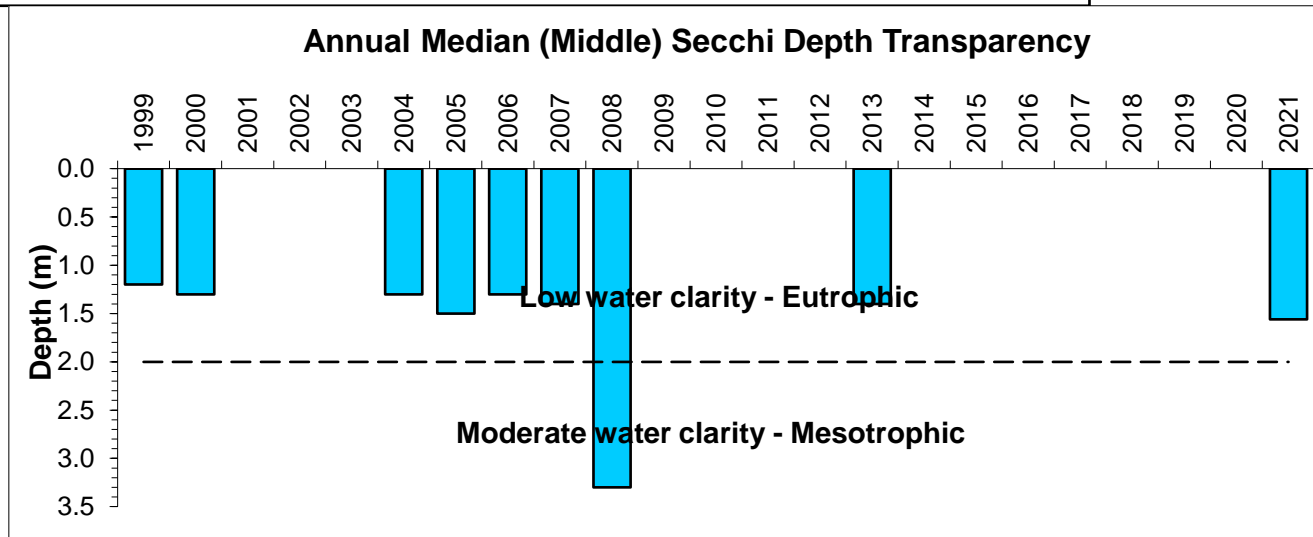
2021 WATER YEAR AVERAGE TEMPERATURE DEPARTURE FROM NORMAL

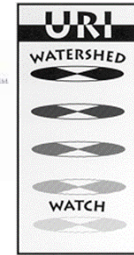


Water Clarity

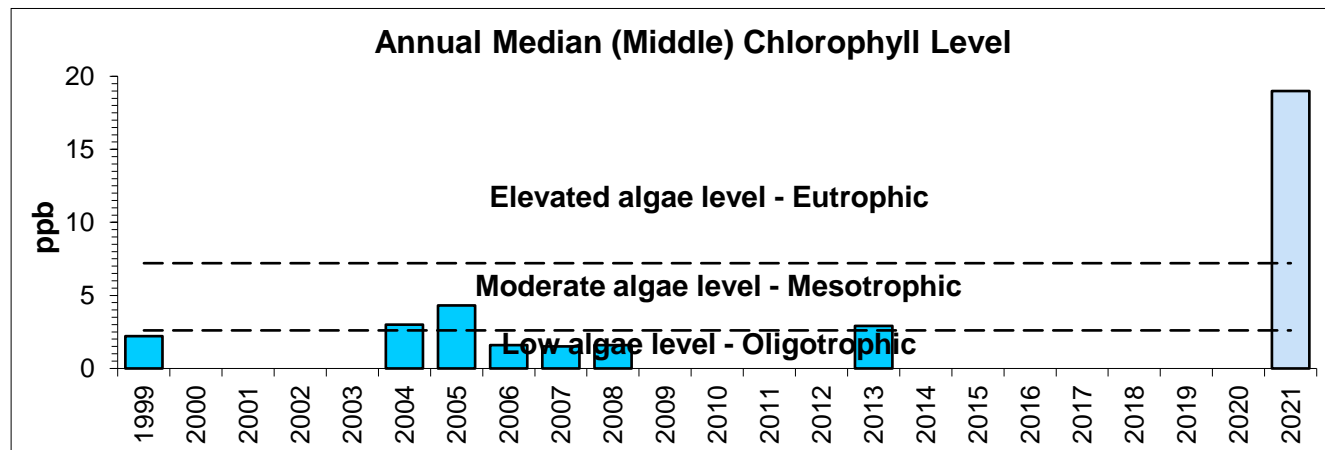
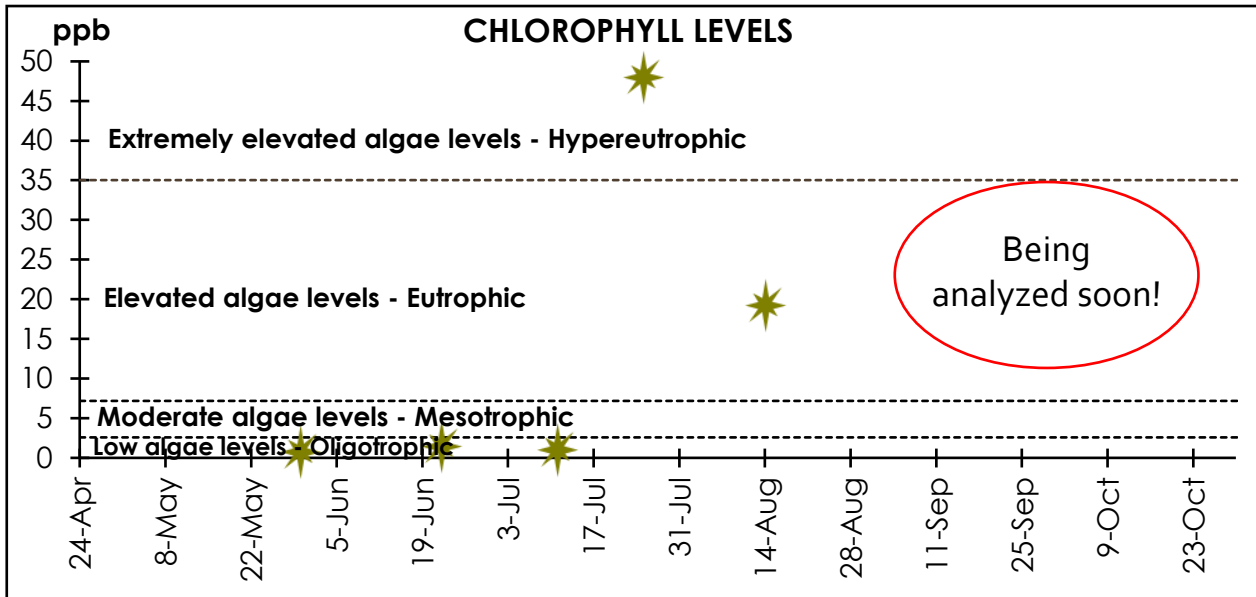


Low water clarity at both sites





Variable algal concentrations

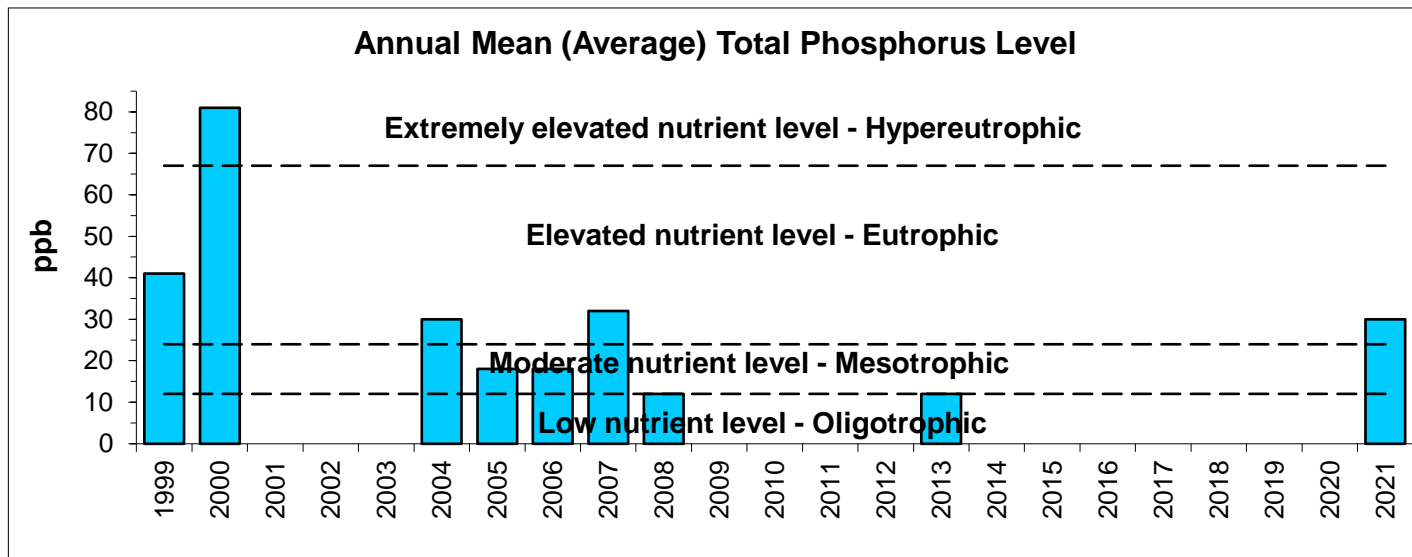




2021 Phosphorus Data

| JUNE | JULY | AUG | SEPT | OCT | MEAN |
|---|------|-----|------|-----|------|
| -----Total Phosphorus (ppb)----- | | | | | |
| 40 | 26 | 33 | - | 19 | 30 |
| Low <12 ppb; Moderate 12-24 ppb; Elevated 25-67 ppb RIDEM lake maximum 25 ppb TP | | | | | |
| -----Dissolved Phosphorus (ppb)----- | | | | | |
| 21 | 12 | 6 | - | 8 | 12 |

Both total and dissolved phosphorus regularly elevated





2021 Nitrogen Data

----- Total Nitrogen (ppb) -----

| JUNE | JULY | AUG | SEPT | OCT | MEAN |
|------|------|------|------|------|------|
| 690 | 1013 | 1368 | - | 1212 | 1071 |

Low TN < 350 ppb; Moderate TN 350 - 750 ppb; Elevated TN >750 ppb

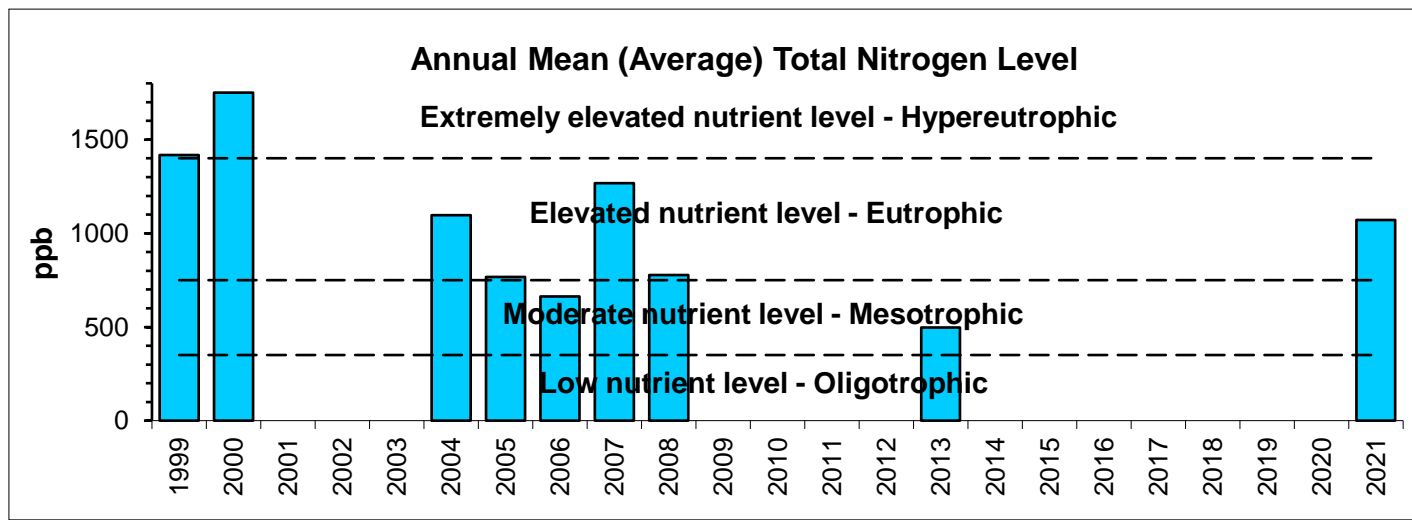
----- Nitrate-Nitrogen (ppb) -----

| | | | | | |
|----|----|----|---|-----|----|
| 29 | 79 | 29 | - | 184 | 80 |
|----|----|----|---|-----|----|

----- Ammonia-Nitrogen (ppb) -----

| | | | | | |
|----|-----|-----|---|-----|-----|
| 79 | 576 | 598 | - | 593 | 462 |
|----|-----|-----|---|-----|-----|

High nitrogen indicative of urbanization



Nutrient sources include:

- Fertilizers applied to lawns and gardens
- Cropland, livestock manure, pet waste
- Septic systems (via groundwater) and leaking sewers
- Stormwater runoff
- Atmospheric deposition
- Erosion/road sand

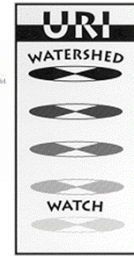
Nutrient sinks include:

- Vegetated buffers (i.e. plants, preferably deep-rooted grassland types)
- Storm runoff diverted to rain gardens
- Wetlands

Nutrients are food for algae and plants

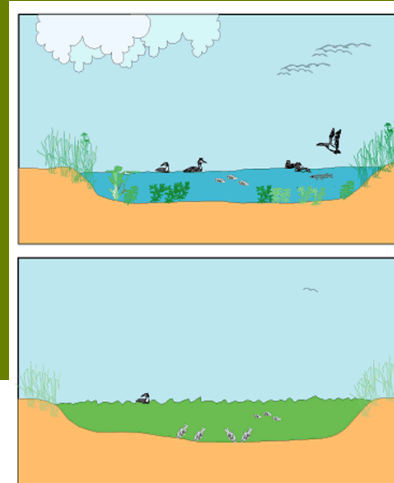


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Take home message

- Upper Dam Pond is impaired for nutrients and aquatic plants
- As a shallow pond these elevated nutrients mean that you'll either have algal blooms or plant growth throughout
- Increased runoff and warmer temps are a challenge
- Goal is to reduce and **STABILIZE** nutrients, but not to turn the pond into a pool



Questions??



- Elizabeth Herron
- URI Watershed Watch Program Director
- eherron@uri.edu
- 401-874-4552

Closing - Tom

- There are many benefits in participating and contributing to our on-going lake remediation.
- The association has and will continue to be the driving force for the future health of our lake.
- The lake is being restored and maintained for use today and in the future for our association, our neighborhood and our Town.
- **With these benefits comes a responsibility. The association board needs your continued help to restore and preserve the lake by being an active member and participating in this year's events and fundraising.**
- As a neighborhood we will move forward together.
- Thank you!!