CSLAP: IT'S ABOUT THE JOURNEY, NOT THE REST STOPS

DAVE MATTHEWS

UPSTATE FRESHWATER INSTITUTE

NYSFOLA APRIL 30, 2021

MANAGING EXPECTATIONS

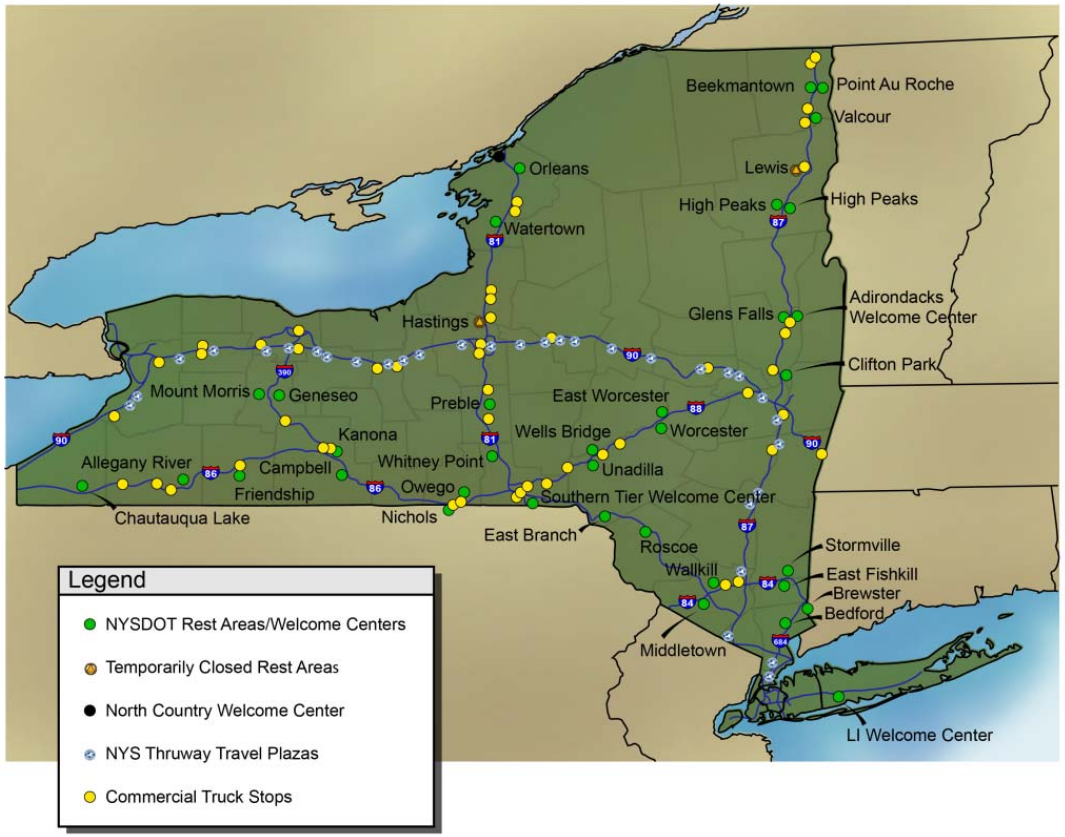
CITIZENS STATEWIDE LAKE ASSESSMENT PROGRAM (CSLAP)

- ESTABLISHED IN 1985 BY NYSDEC AND NYSFOLA
  - TRAINED VOLUNTEERS COLLECT DATA FROM REPRESENTATIVE LAKES THROUGHOUT NEW YORK STATE
- GOALS
  - COLLECT LAKE DATA
  - IDENTIFY PROBLEMS
  - EDUCATE THE PUBLIC
- 164 LAKES IN 2021!
- UNIQUE DATASET!

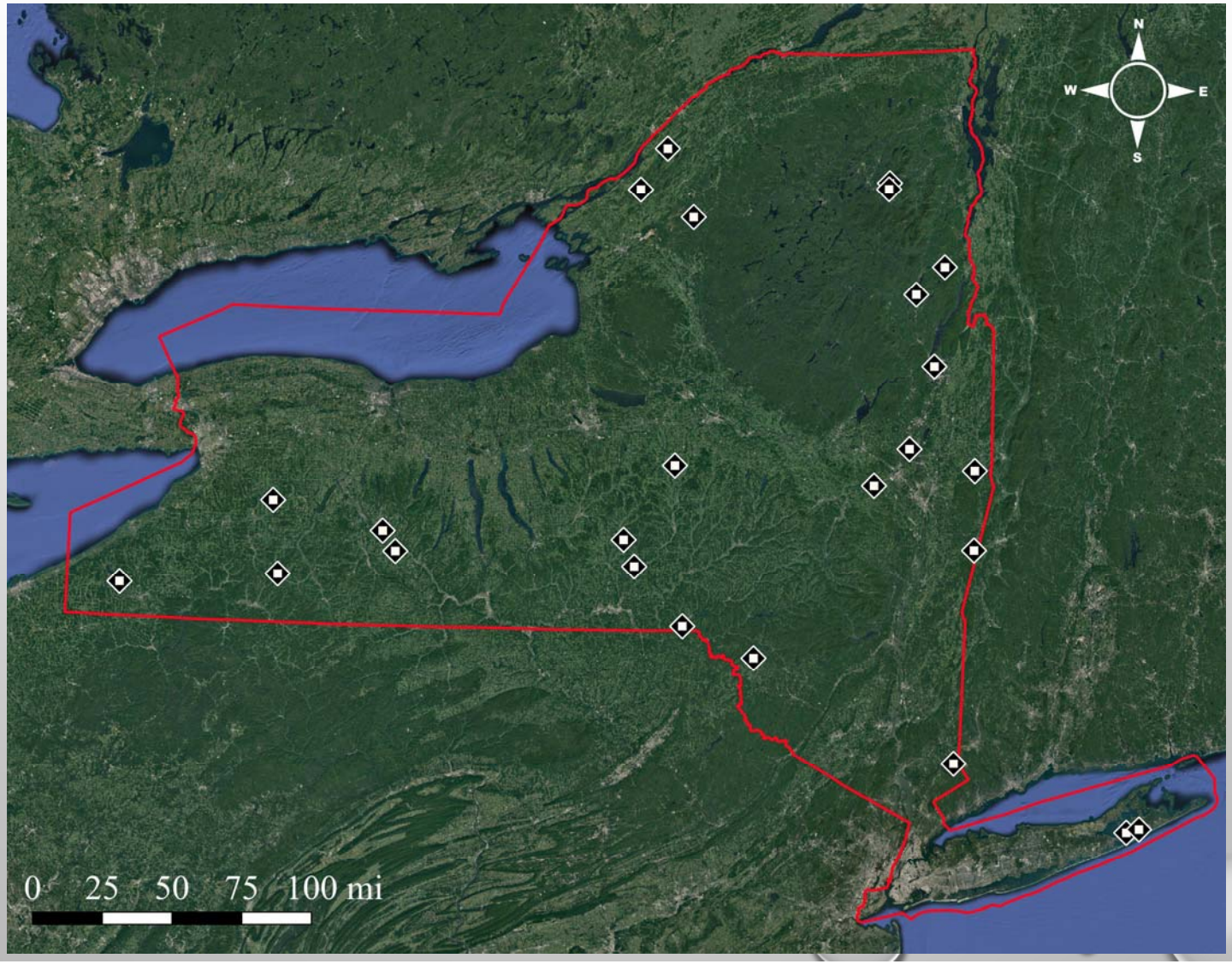
CSLAP ANNUAL REPORTS

- IMPORTANT MILESTONES IN THE LONG-TERM STORIES OF OUR LAKES
- PROVIDE TIMELY AND QUANTITATIVE FEEDBACK ON WATER QUALITY CONDITIONS
- POWER OF CONSISTENT LONG-TERM MONITORING FOR TREND ANALYSIS
- ANNUAL REPORTS ARE JUST CHAPTERS IN A VERY LONG BOOK

REST AREAS – NECESSARY, BUT NOT MEMORABLE



CSLAP INDEX LAKES

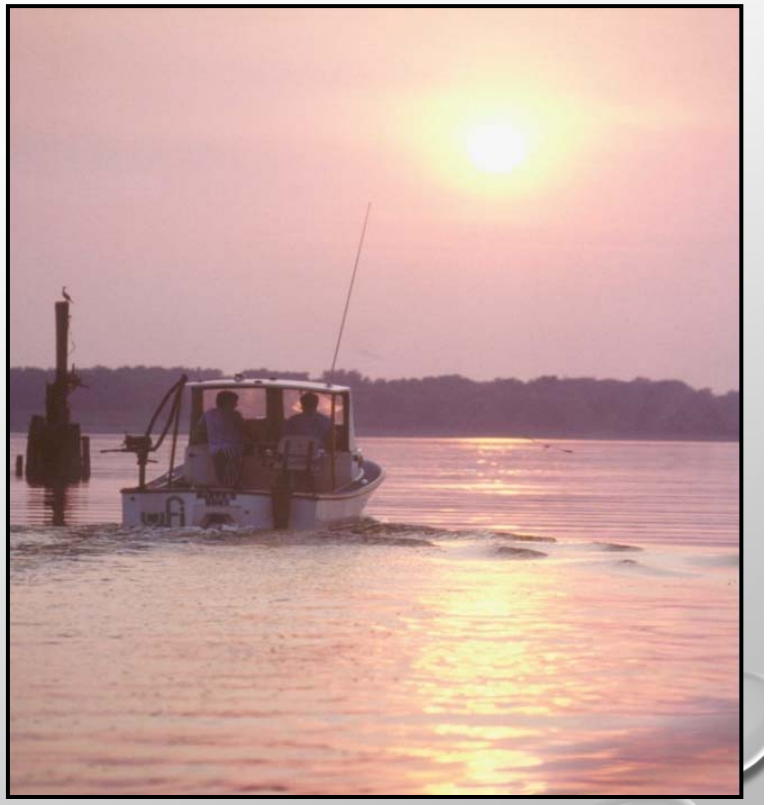


SELECTED CSLAP INDEX LAKES

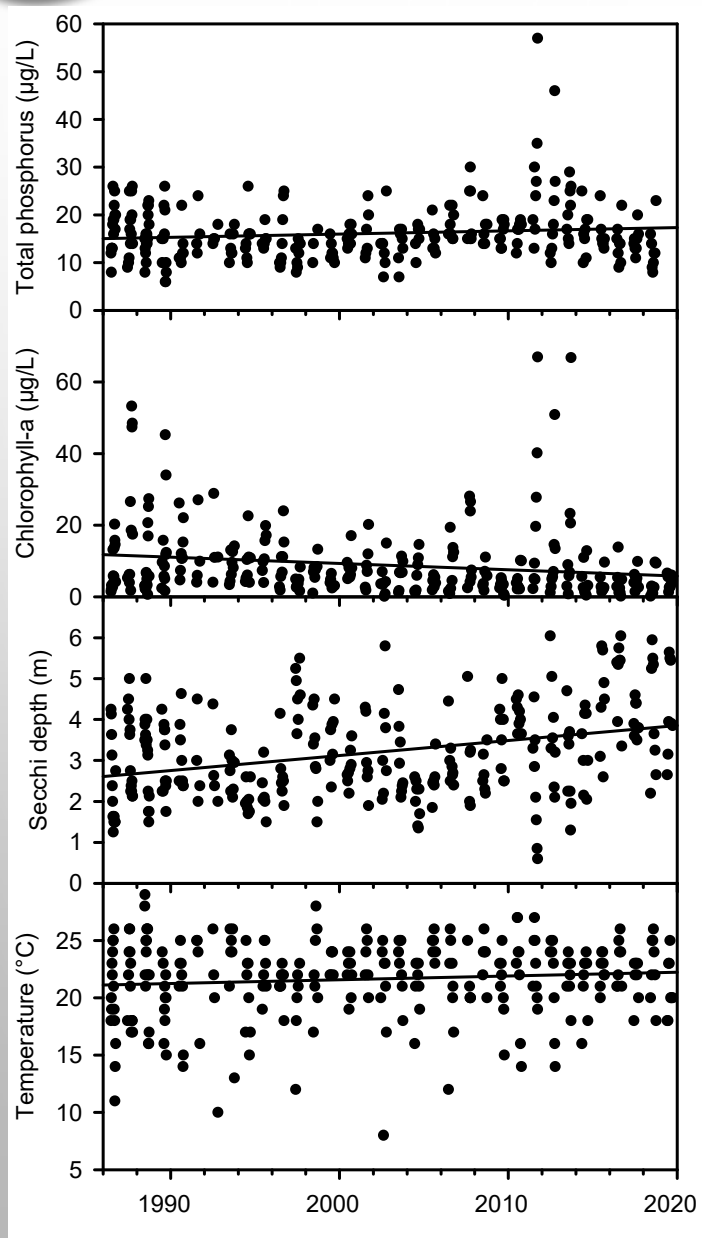
- ANAWANDA LAKE (30 YR)
- BABCOCK LAKE (32 YR)
- BALLSTON LAKE (29 YR)
- BLACK LAKE (32 YR)
- CHAUTAUQUA LAKE (32 YR)
- CUBA LAKE (27 YR)
- DUANE LAKE (30 YR)
- GLEN LAKE (31 YR)
- LAKE BONAPARTE (23 YR)
- LAKE MORAINE (34 YR)
- LAKE WACCABUC (23 YR)
- LITTLE FRESH POND (26 YR)
- MELODY LAKE (29 YR)
- OQUAGA LAKE (24 YR)
- PETONIA LAKE (24 YR)
- QUEECHY LAKE (29 YR)
- SCHROON LAKE (23 YR)

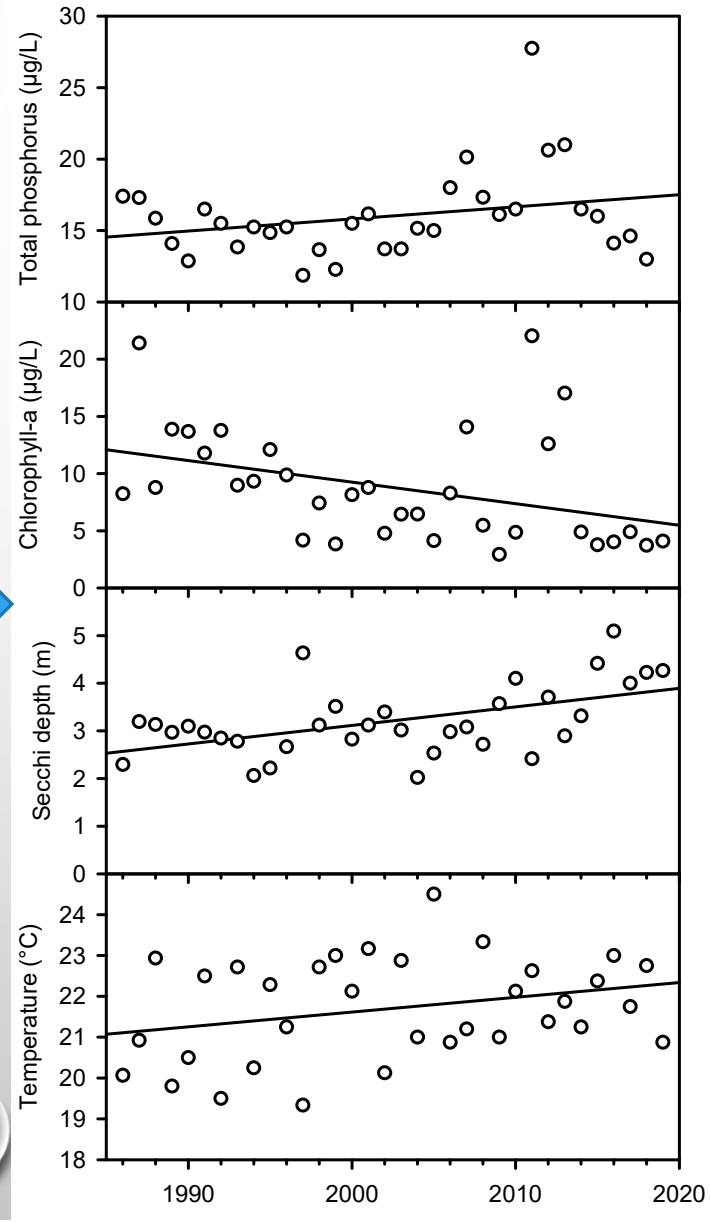
RANGE OF MORPHOMETRIC AND TROPHIC STATE CONDITIONS

- SURFACE AREA: 19-13,000 ACRES
- MEAN DEPTH: 2-17 METERS
- TOTAL PHOSPHORUS: 6-43 µg/L
- CHLOROPHYLL-α: 2-24 µg/L
- SECCHI DEPTH: 1.5-7.4 METERS
- TEMPERATURE: 19-25°C



LAKE MORAINE





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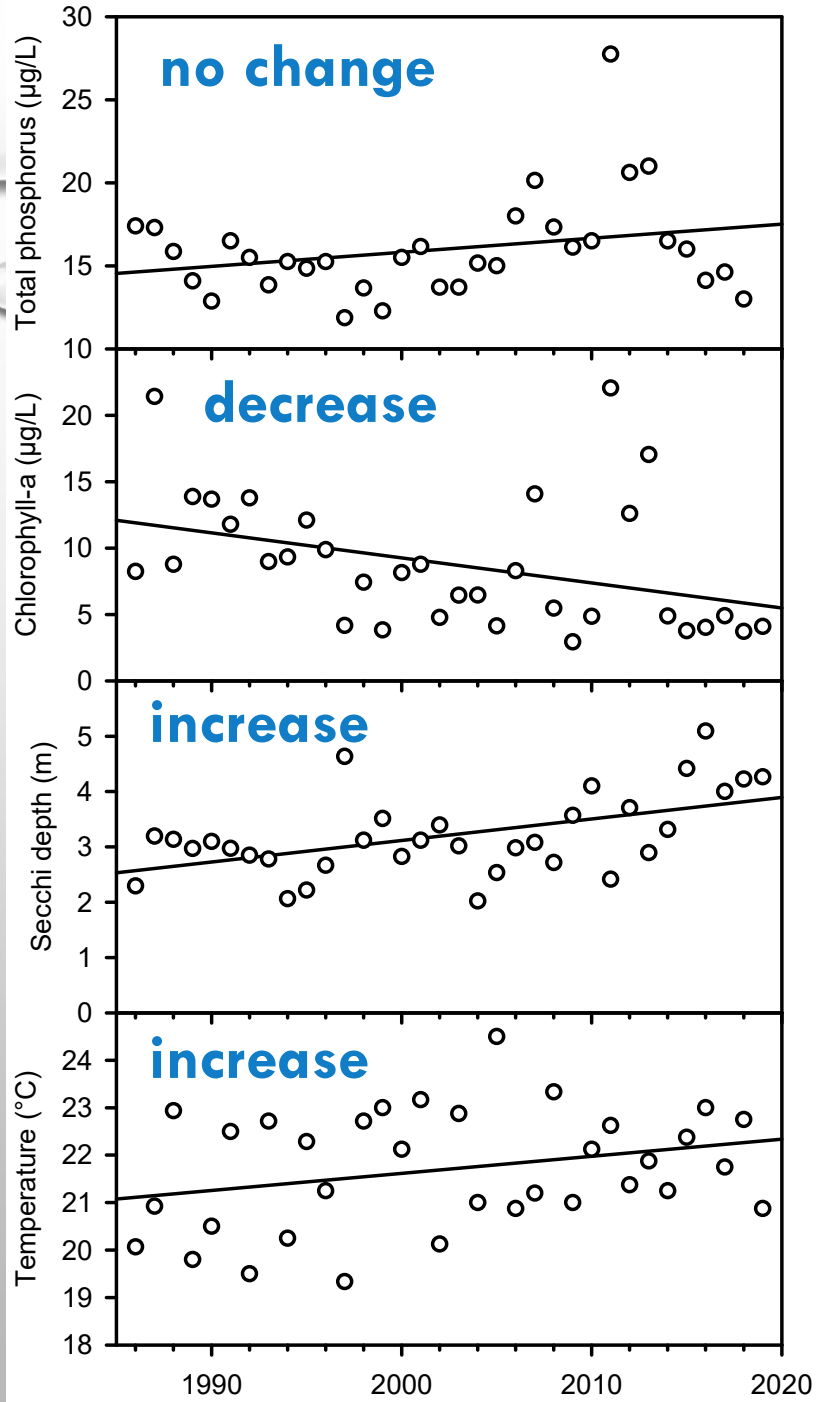
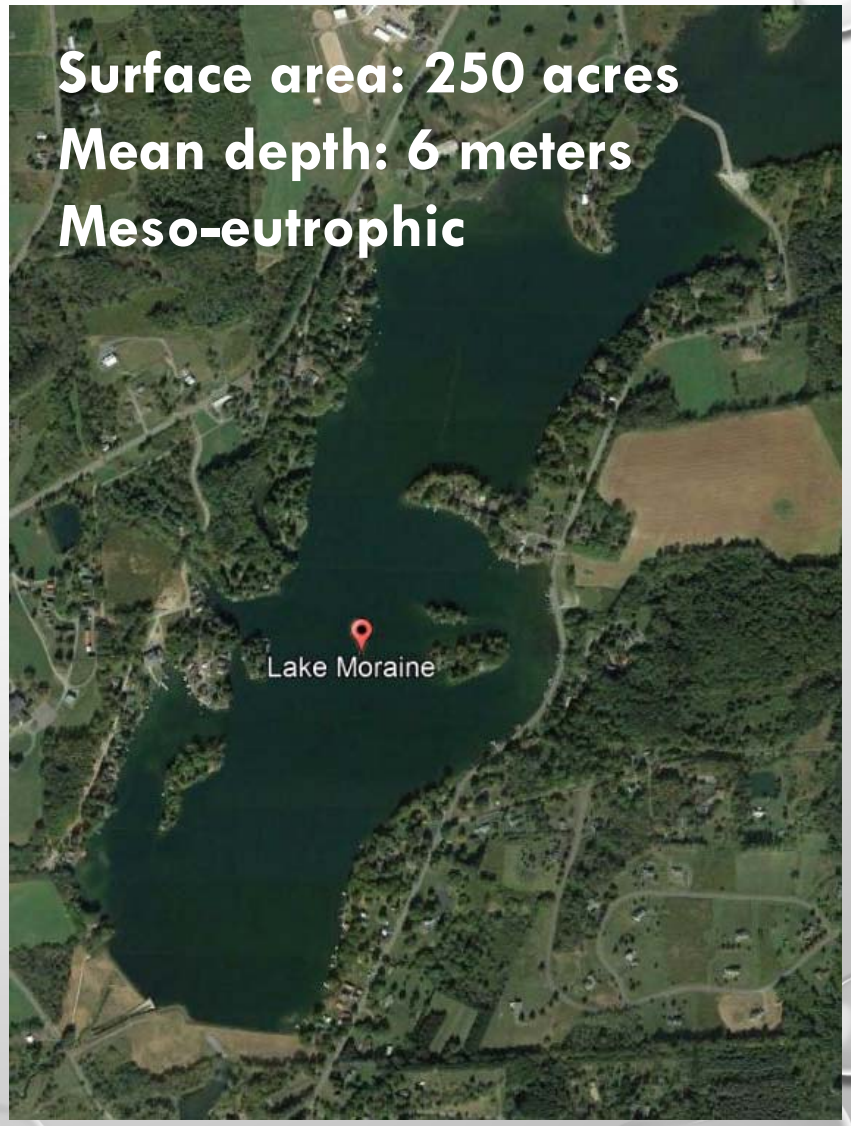
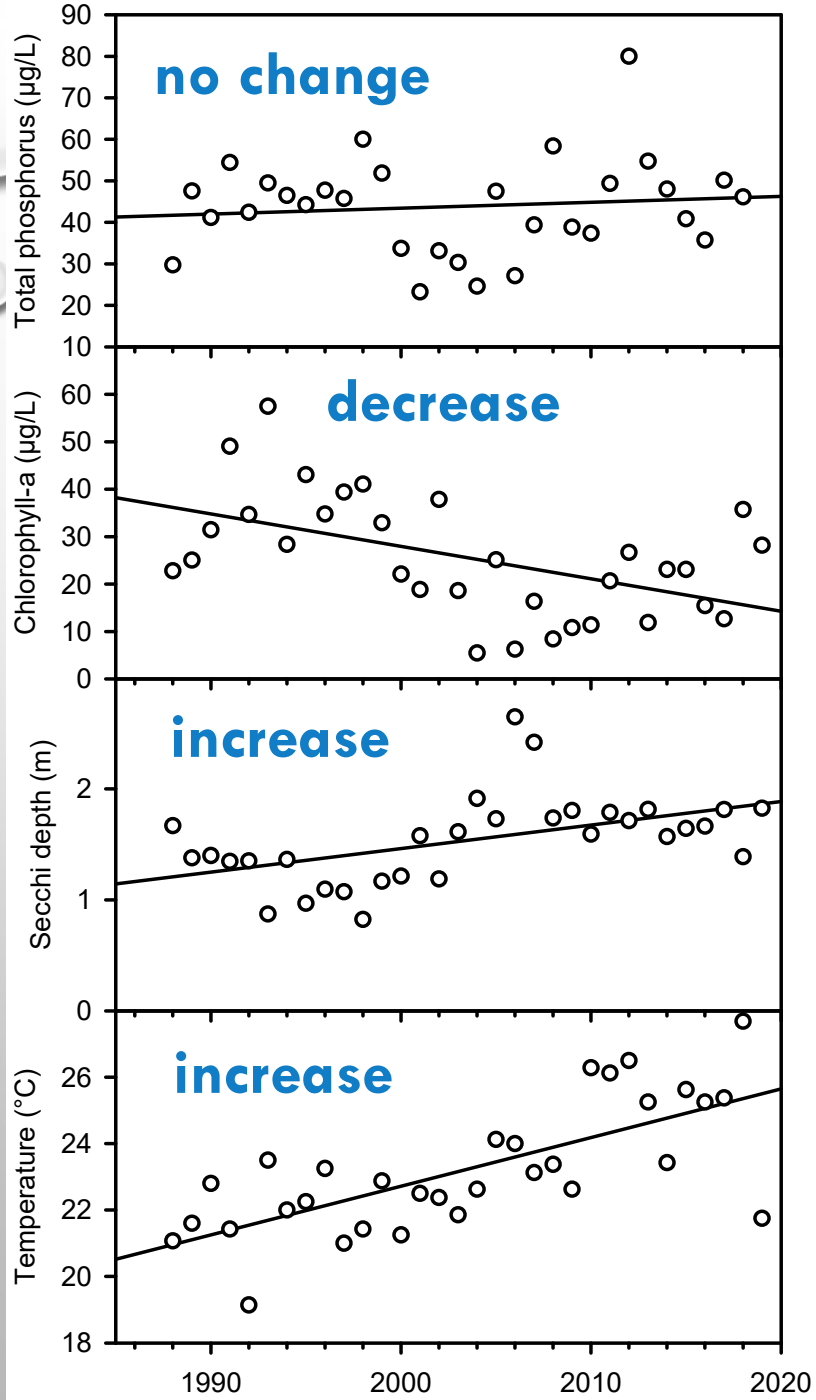
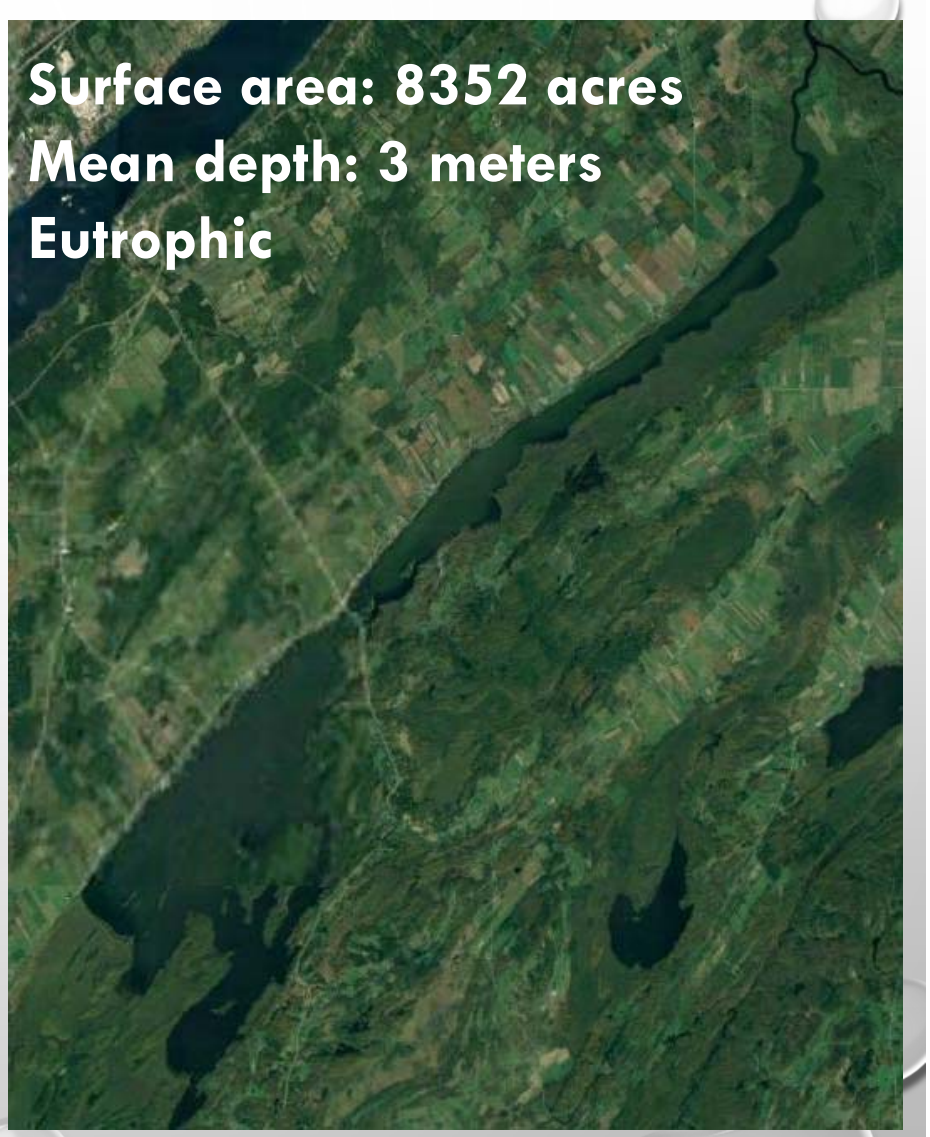


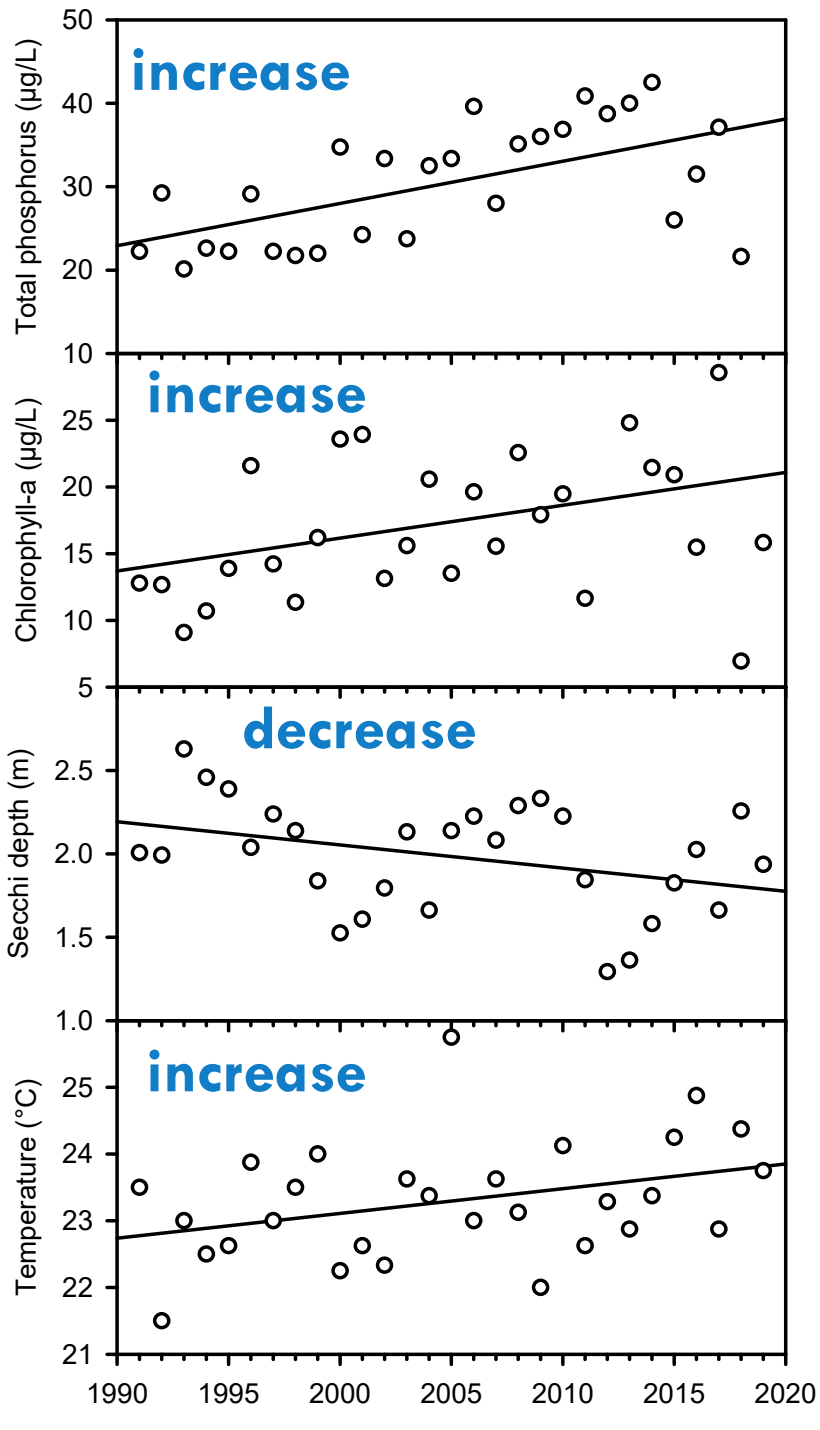


BLACK LAKE

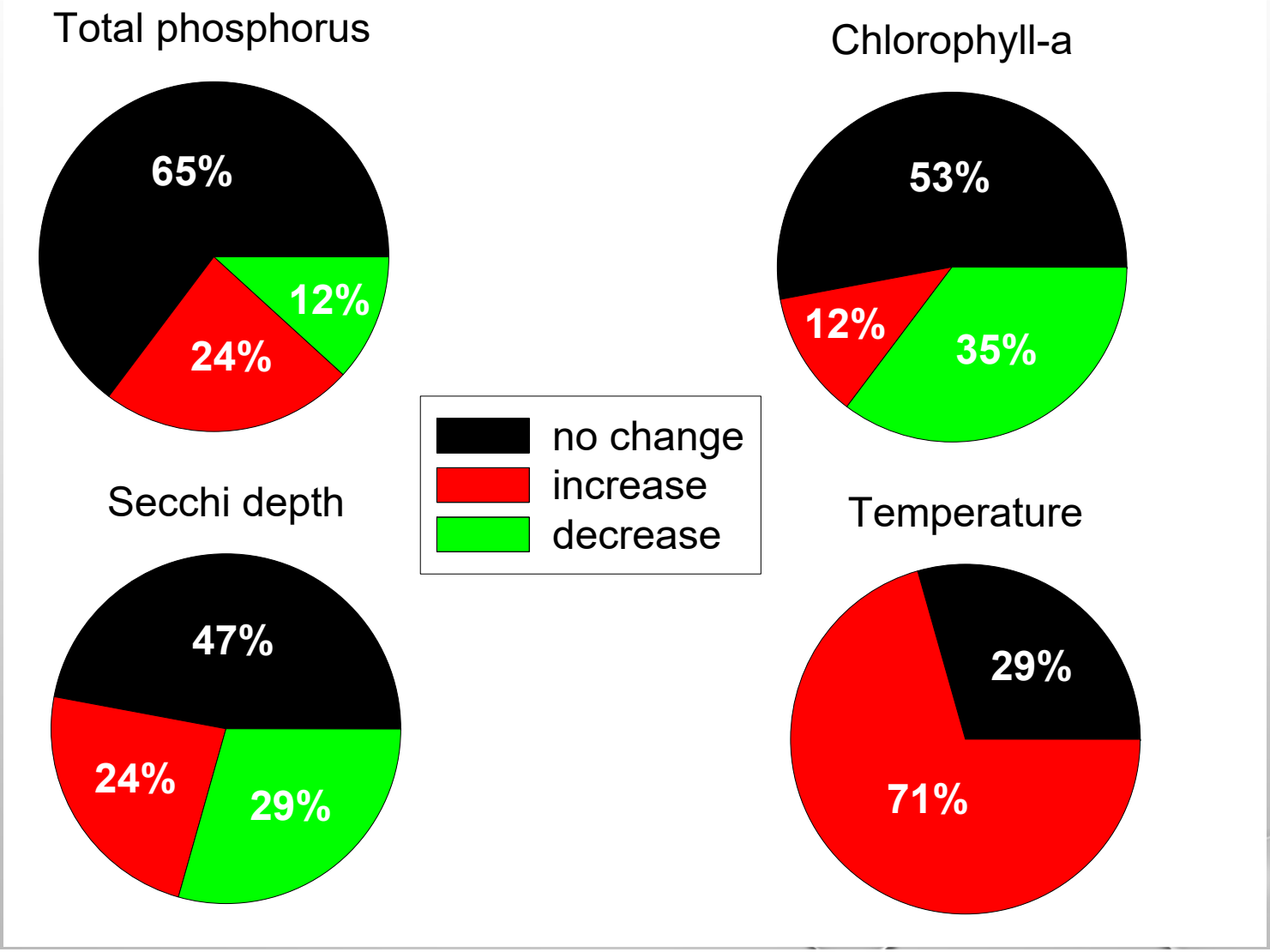

no change
Total phosphorus (µg/L)
90
80
70
60
50
40
30
20
10
decrease
Chlorophyll-a (µg/L)
60
50
40
30
20
10
0
increase
Secchi depth (m)
2
1
0
increase
Temperature (°C)
26
24
22
20
18
1990
2000
2010
2020


Surface area: 8352 acres
Mean depth: 3 meters
Eutrophic

BALLSTON LAKE



TRENDS ACROSS LAKES



SUMMARY

- MOST NYS LAKES ARE BECOMING WARMER, SOME RAPIDLY
- NO CONSPICUOUS STATEWIDE TRENDS IN TROPHIC STATE
- EVERY LAKE HAS ITS OWN STORY
- ANNUAL REPORTS ARE ONLY A STOP ALONG THE WAY
- THE POWER OF CSLAP LIES IN LONG-TERM CONSISTENT MONITORING OF NYS LAKES

A BIG ***THANK YOU*** TO THE CSLAP VOLUNTEERS, NYSDEC AND NANCY

QUESTIONS?
UPSTATE
FRESHWATER
INSTITUTE