

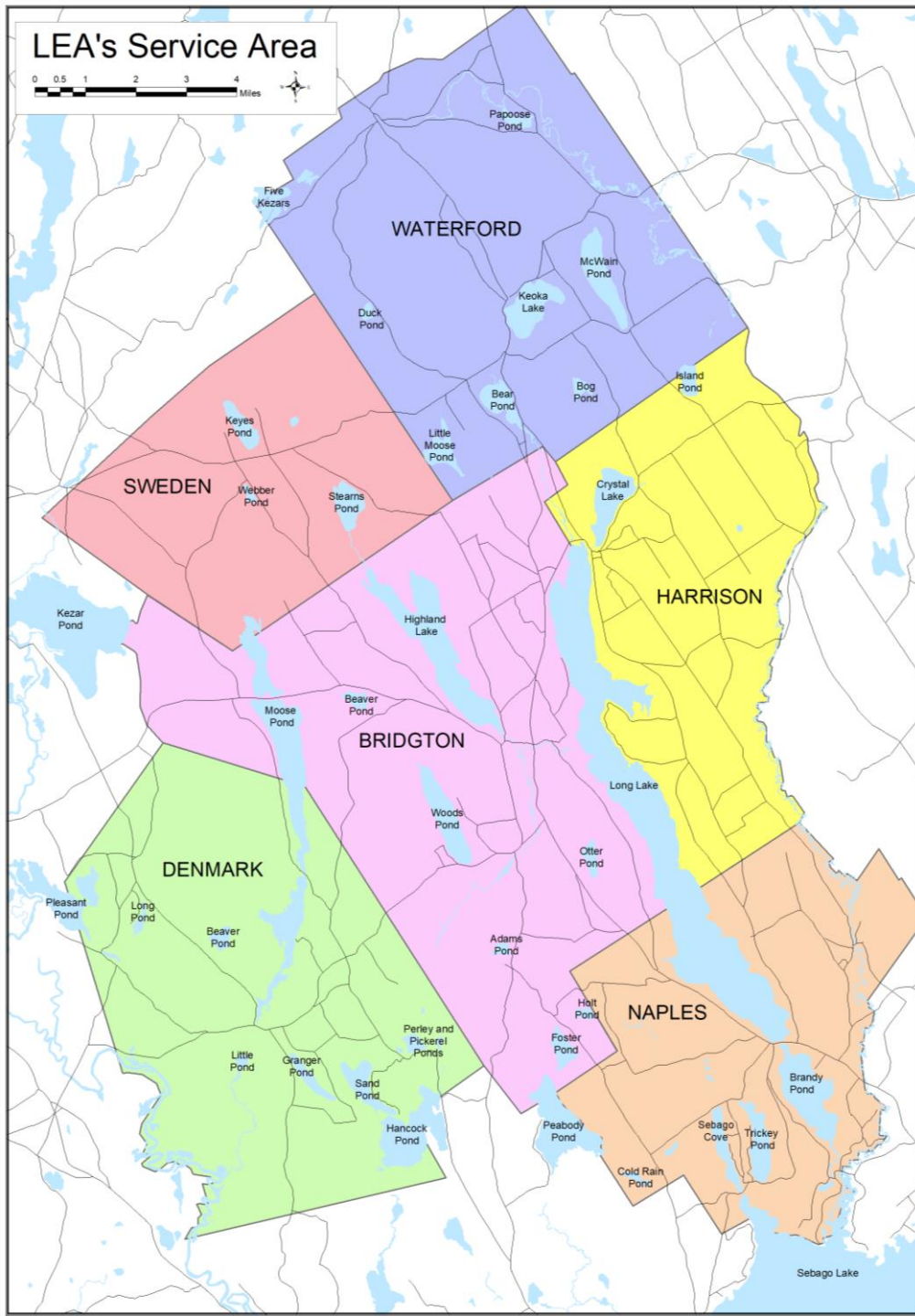


LAKES ENVIRONMENTAL ASSOCIATION

Protecting Maine Lakes Since 1970



2021 Casco Bay Monitoring Network Update
Maggie Welch – Biologist – Lakes Environmental Association



Monitoring Program Overview

Long-term monitoring program

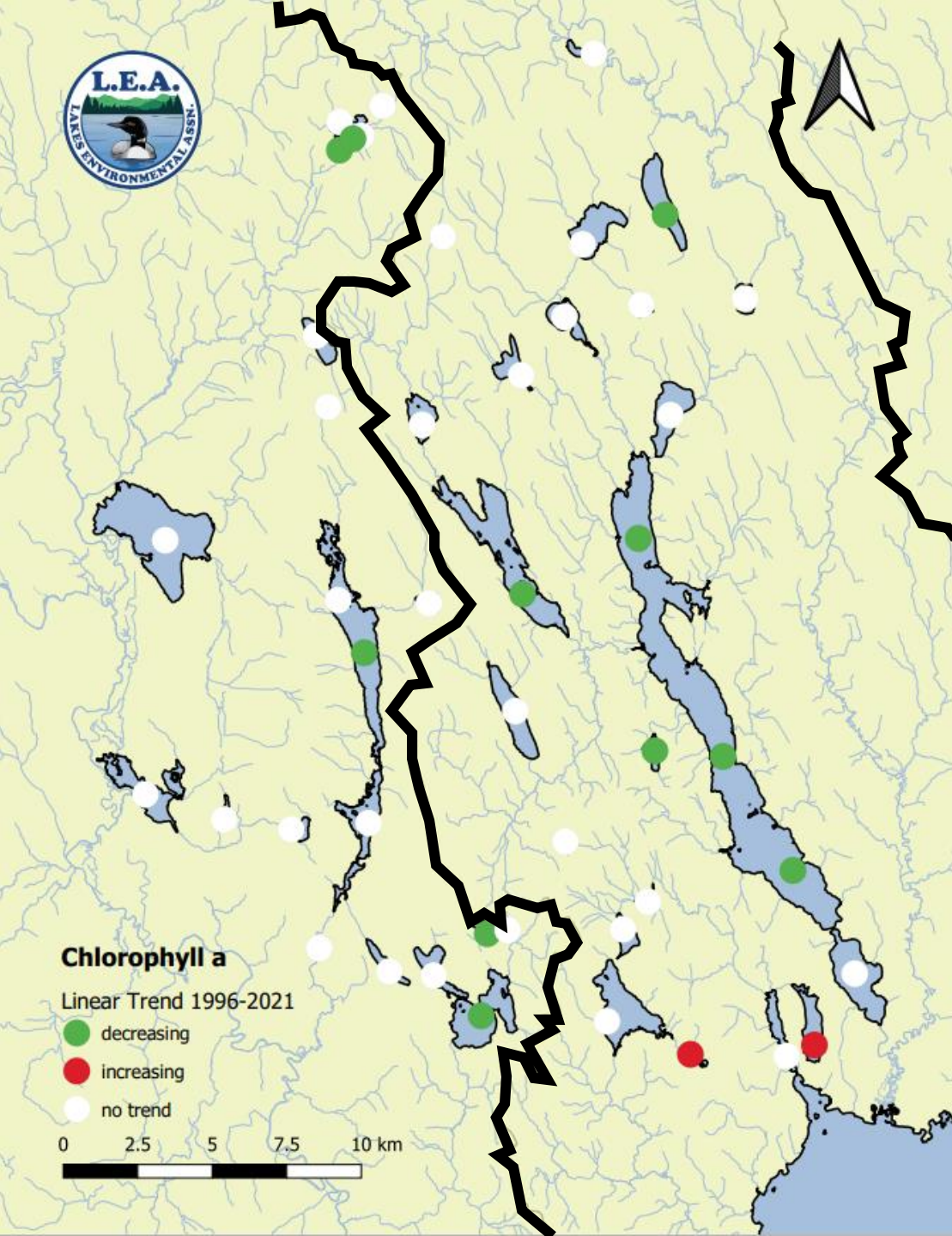
Total phosphorus, chlorophyll-a, oxygen, clarity, temperature, pH, color, conductivity, alkalinity

Additional monitoring programs

High resolution temperature monitoring, flourometer, loon productivity, acid rain monitoring

Maine Lake Science Center

GLEON automated buoys, winter lake monitoring, bathymetry, nutrient analysis, flow imaging microscopy, Gloeotrichia monitoring, sonde profiles, photosynthetically active (or available) radiation (aka: 'light') profiles



Chlorophyll-a Trend

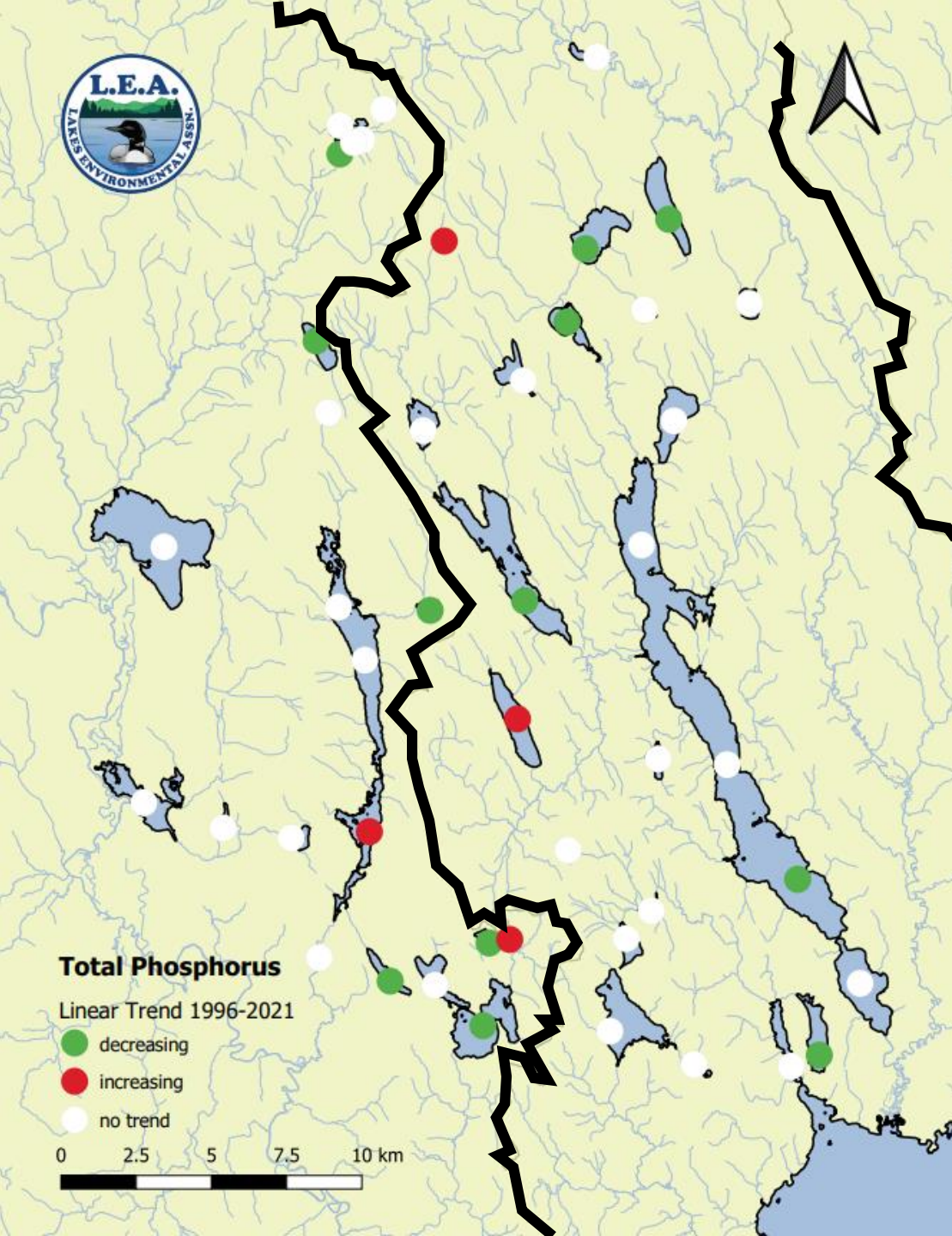
26 test sites visited 8 times each

19 test sites visited 1 time each

chl-a samples analyzed in 2021: 227

Mean chl-a concentration for all lakes:
2.8 PPB

Chl-a concentration range:
1 PPB – 16 PPB



Total Phosphorus Trend

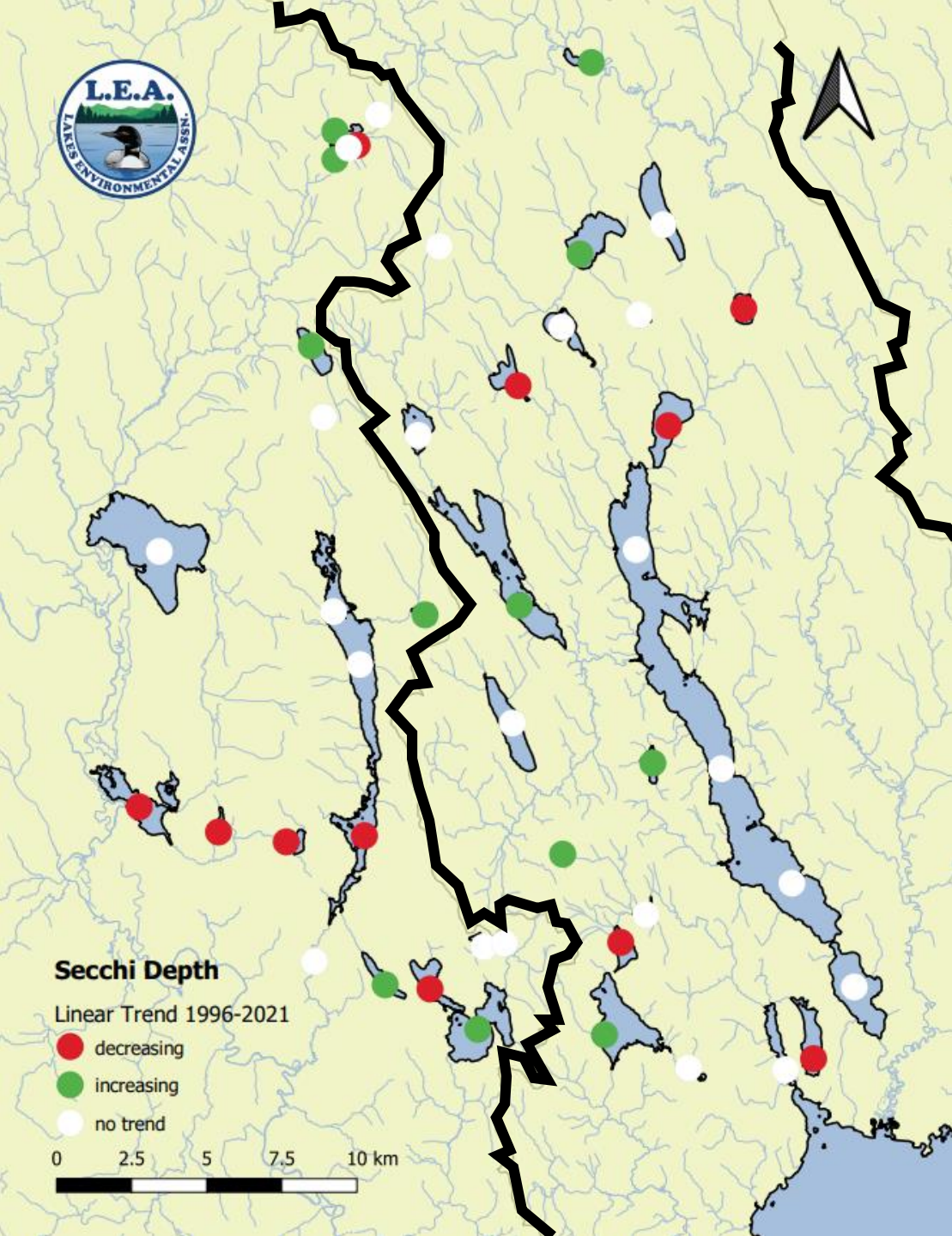
26 test sites visited 8 times each

19 test sites visited 1 time each

total phosphorus samples analyzed in
2021: 227

Mean total phosphorus concentration
for all lakes: 7.1 PPB

Total phosphorus concentration range:
4 PPB – 30 PPB



Clarity Trend

26 test sites visited 10 times each

19 test sites visited 1 time each

secchi readings in 2021: 278

Mean secchi for all lakes: 6.3 meters

Secchi range: 1.5 meters – 11.25 meters

Go to website for info about specific lakes and ponds or to see out water testing reports

Water testing reports

<https://mainelakes.org/water-testing-report/>

Near real-time buoy data for Long and Highland lakes

https://mainelakes.org/news_article/view-live-water-quality-data/

Information about individual lakes

<https://mainelakes.org/lake-information/>