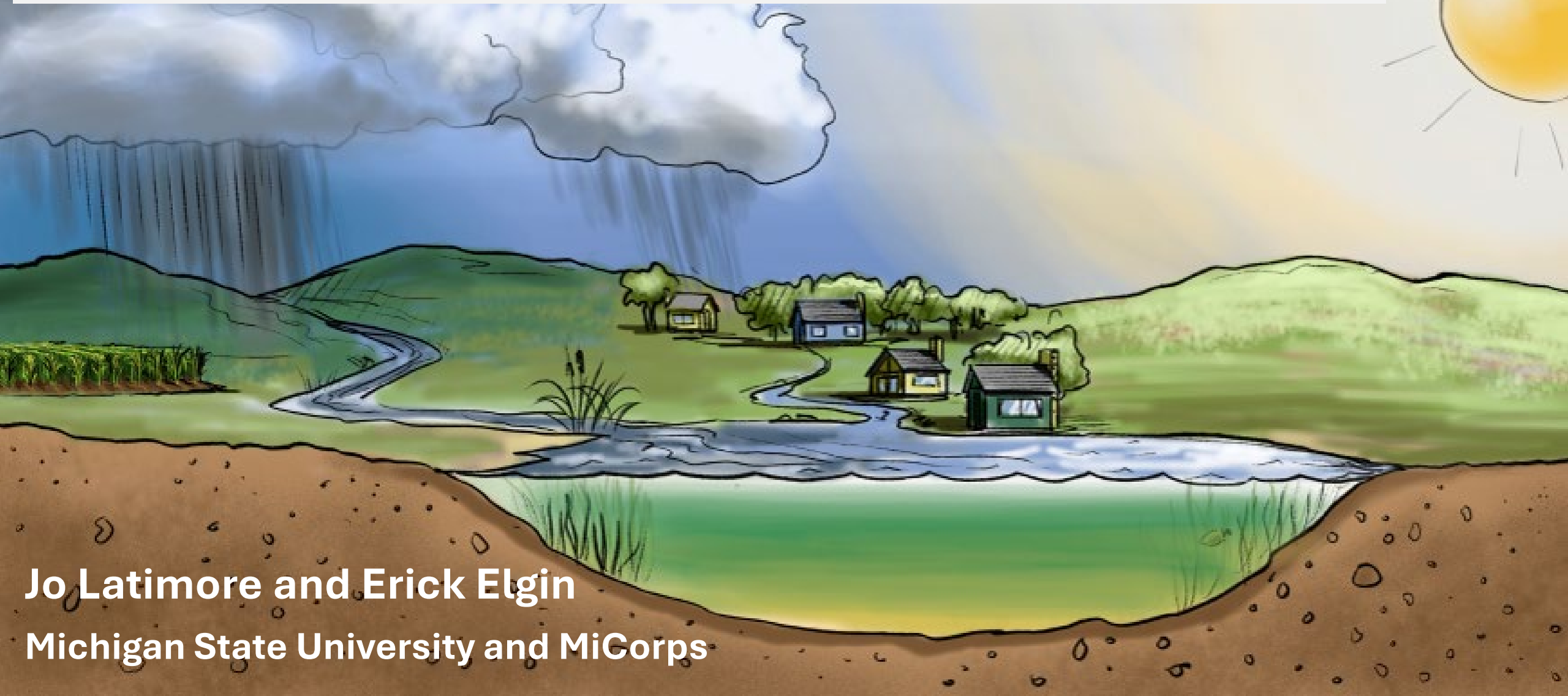


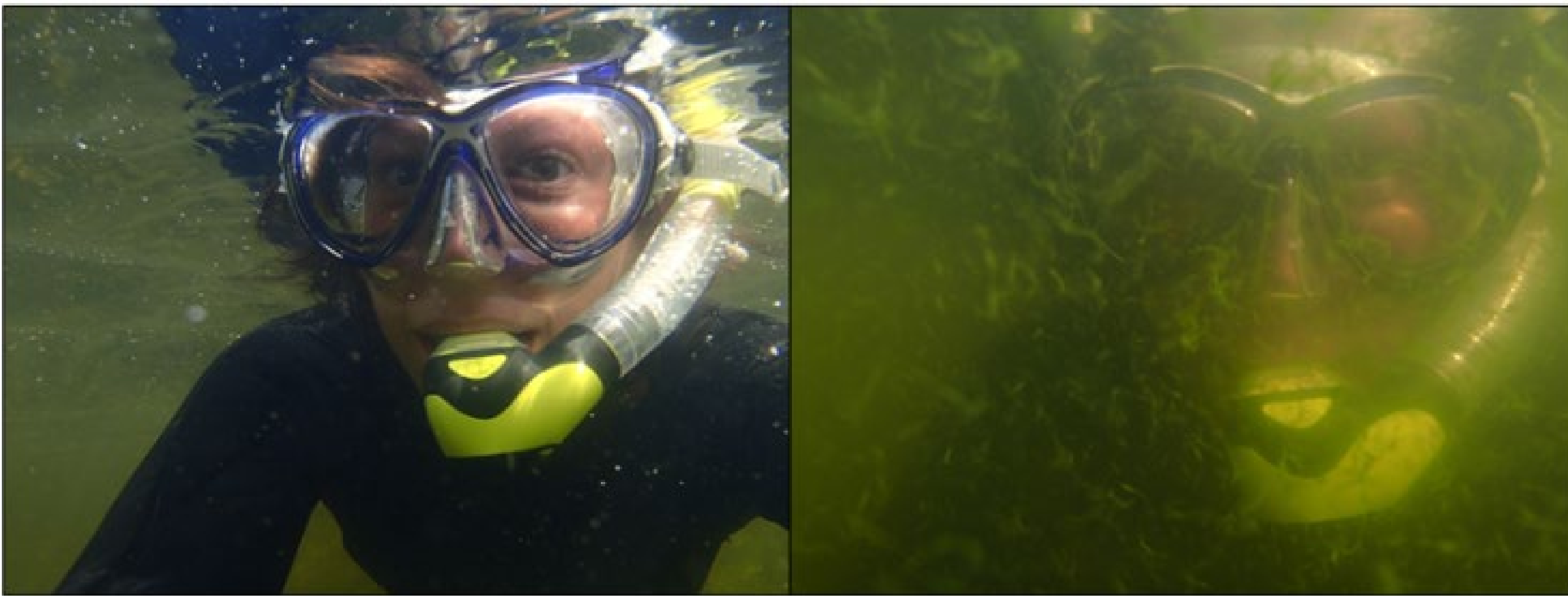
Using CLMP data to inspire action: Trophic State – Secchi, Total Phosphorus, and Chlorophyll-a



Jo Latimore and Erick Elgin
Michigan State University and MiCorps

Great baseline data for your lake

- Water transparency
- Total phosphorus
- Chlorophyll a



Carlson's Trophic Index

Oligotrophic

Low nutrients -> Low algae/plant growth -> Low productivity -> Clear water



<0.010 mg/L
Summer P

<2.2 ug/L
Chla

> 15 feet
Secchi

Mesotrophic

Moderate nutrient levels -> More algae/ plants -> Moderate productivity -> Lower clarity



0.01 – 0.02 mg/L
Summer P

2.2 - 6 ug/L
Chla

7.5 – 15 feet
Secchi

Eutrophic

Higher nutrients -> Higher amounts of algae -> High productivity -> Low water clarity

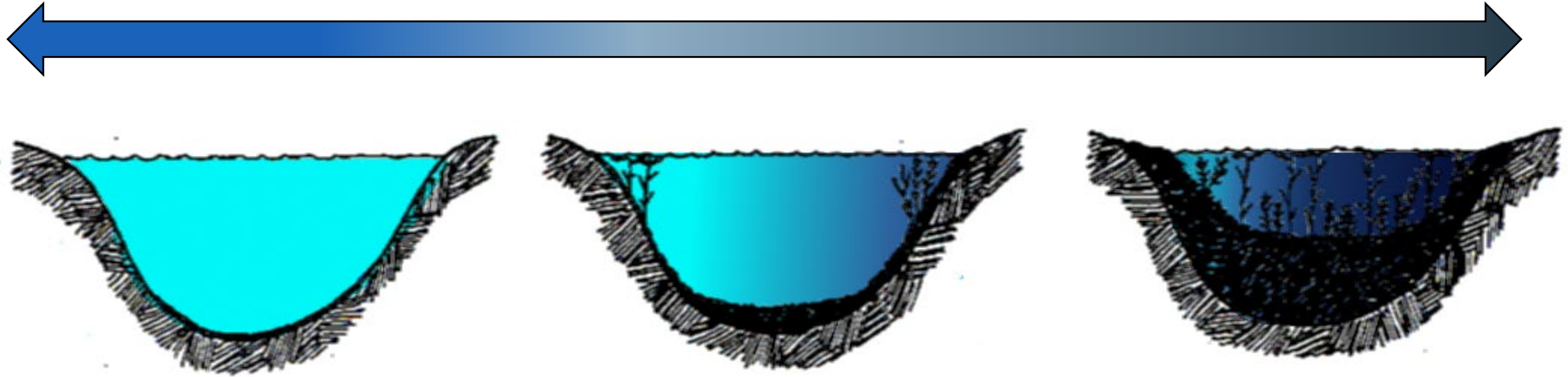


0.021-0.05 mg/L
Summer P

6.1 - 22 ug/L
Chla

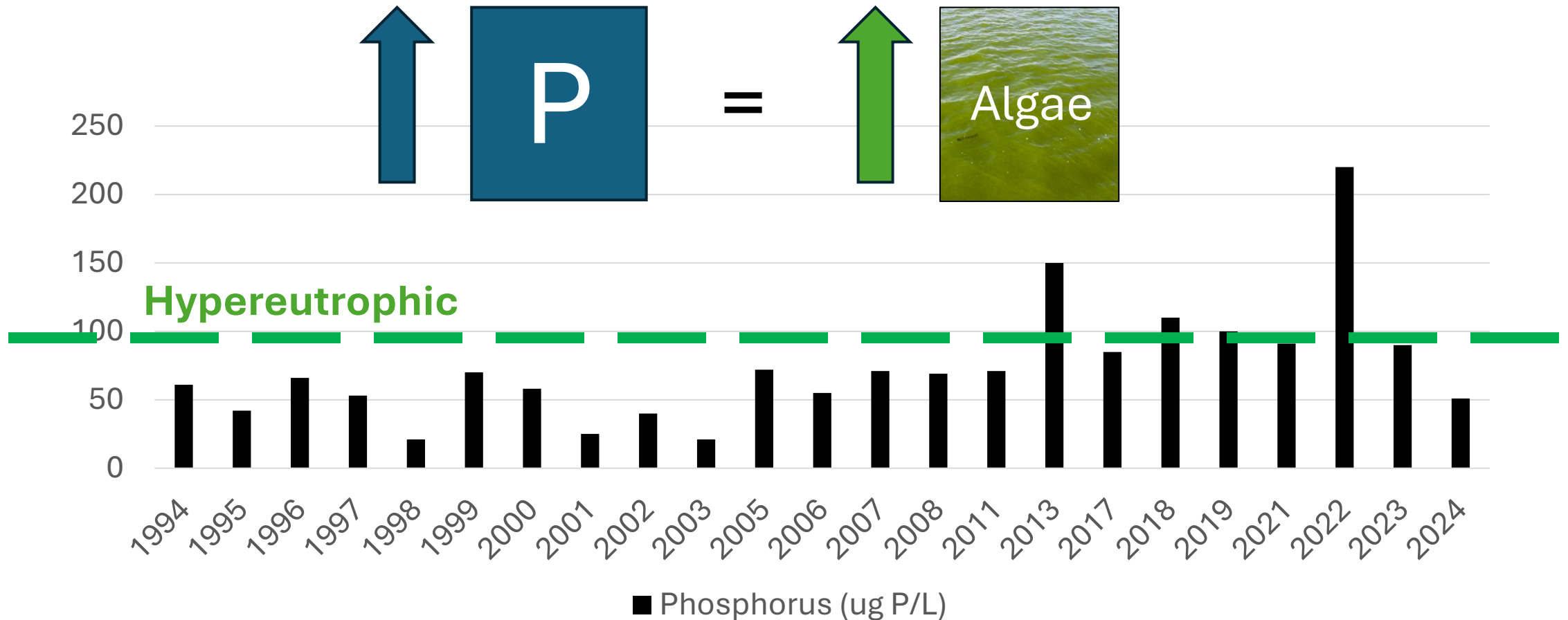
3 - 7.5 feet
Secchi

Changes in Trophic Status

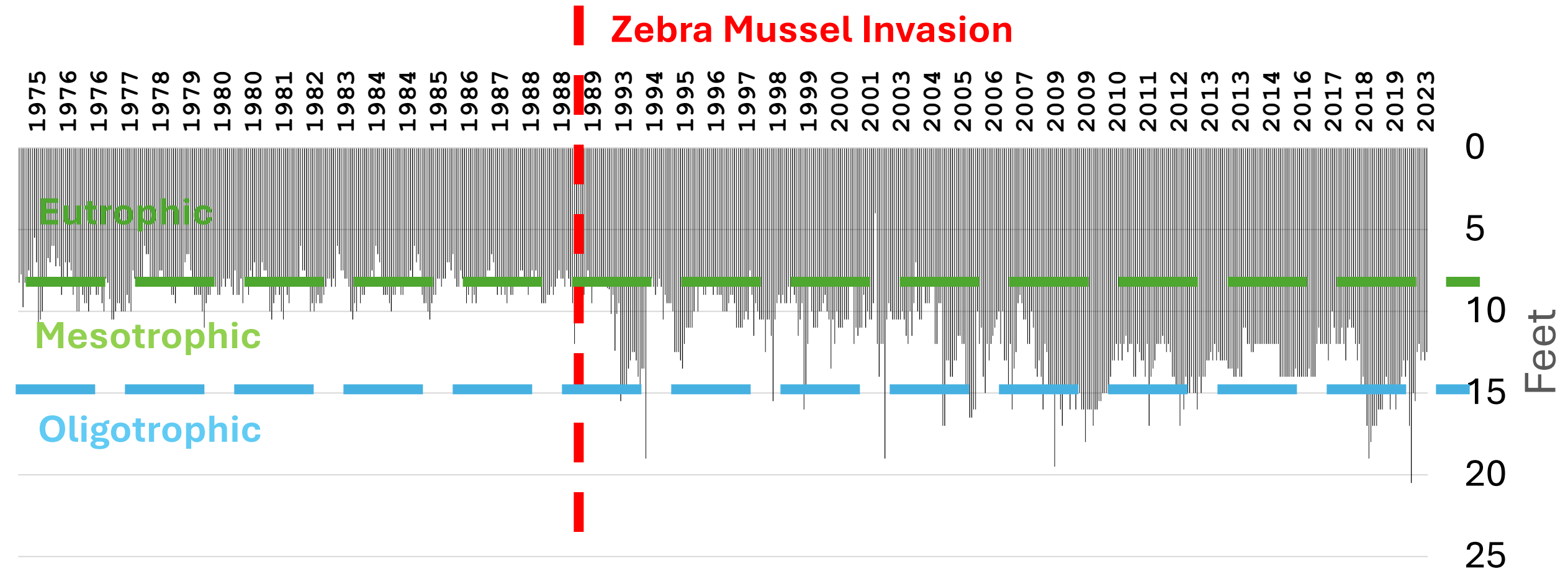


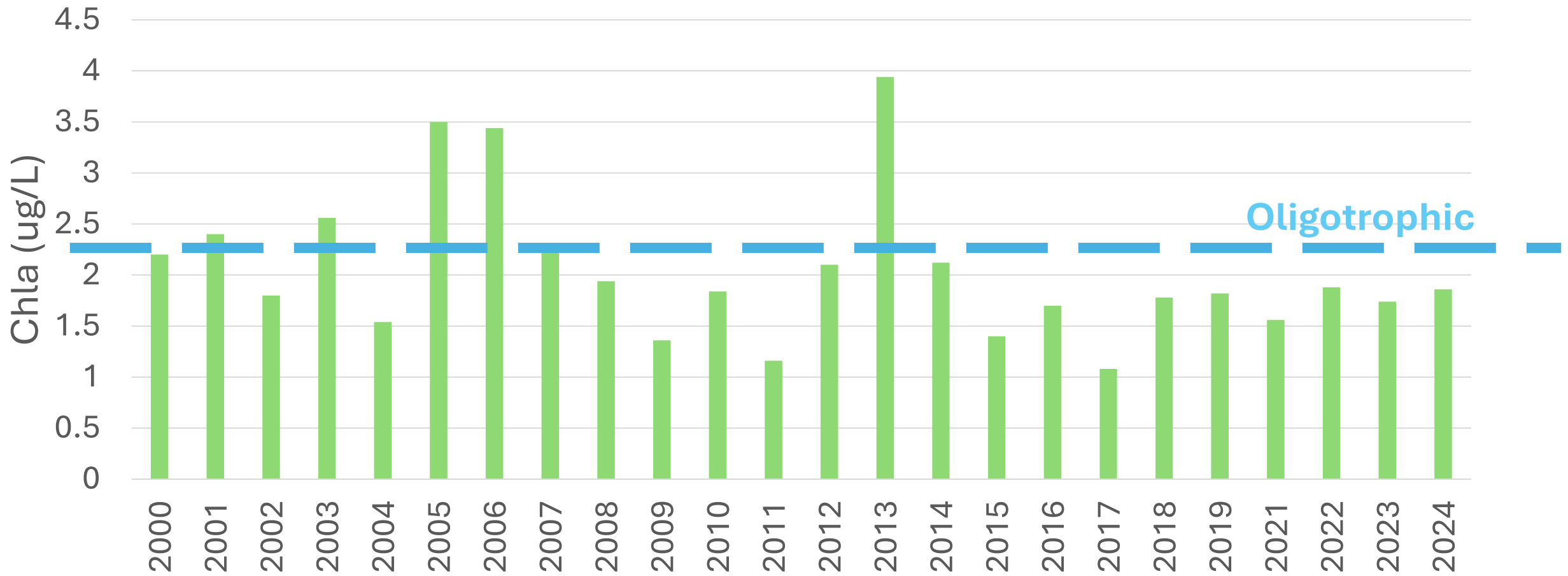
- Eutrophication (cultural)– Becoming more eutrophic
- Oligotrophication- Becoming more oligotrophic

Tracking lakes through time is invaluable to inspire lake awareness and action



Tracking lakes through time is invaluable to inspire lake awareness and action





Using CLMP data to inspire action

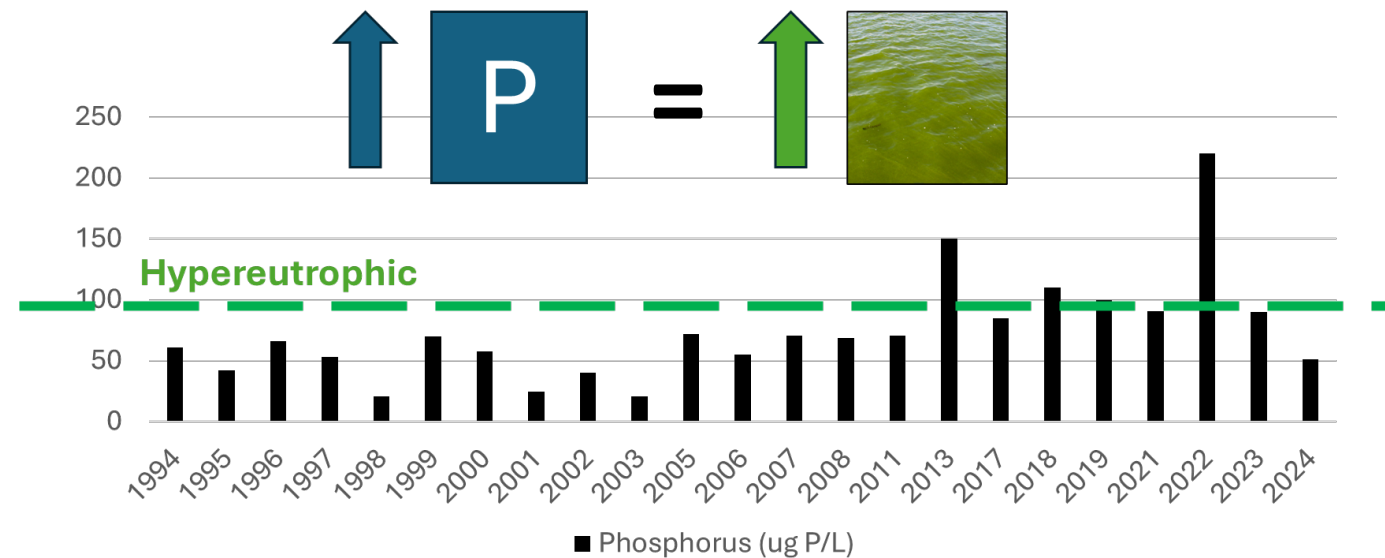
- To preserve what is good
- To improve what is degraded
- Community engagement and support is necessary for sustainable, watershed-scale conservation.

Awareness does not equal action

1. Understand the situation
2. Promote behavior
3. Remove barriers
4. Secure commitments
5. Provide reminders
6. Develop a culture

1. Understand the situation

- Long-term data and storytelling
- Community member values



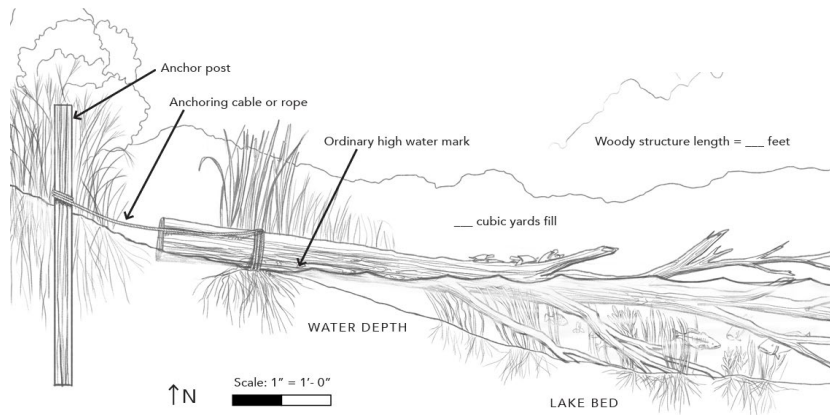
2. Promote behavior

- Clear descriptions of desired action
- Connect to community values



3. Remove barriers

- Financial constraints
- Lack of know-how
- Lack of access to tools
- Policy barriers



Recommended Rain Garden Native Plants

These are the top Michigan native perennial plants used successfully in Southeast Michigan, vetted by Master Rain Gardeners and community members like YOU!
Learn More at TheRouge.org/PlantsForRainGardens



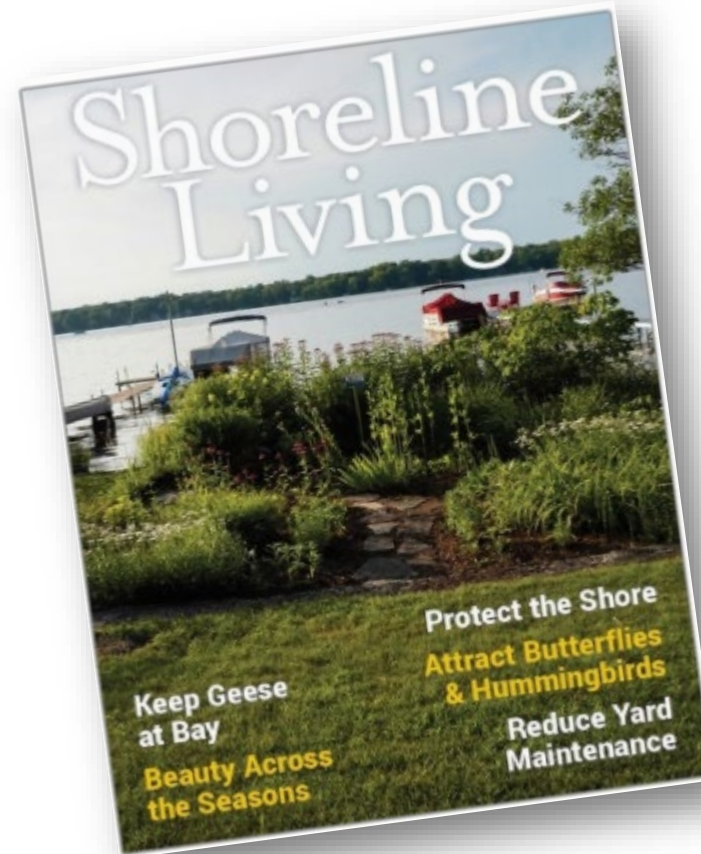
4. Secure commitments

- Can be informal



5. Provide reminders

- Ongoing communication
- Signage
- Take-home reminders



6. Develop a culture

- Individual actions as part of a larger community effort
- Lake conservation becomes the norm





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