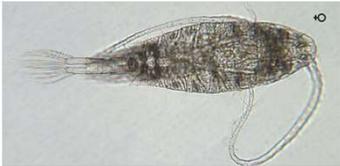
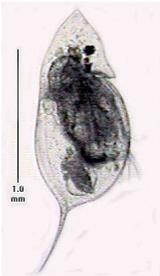
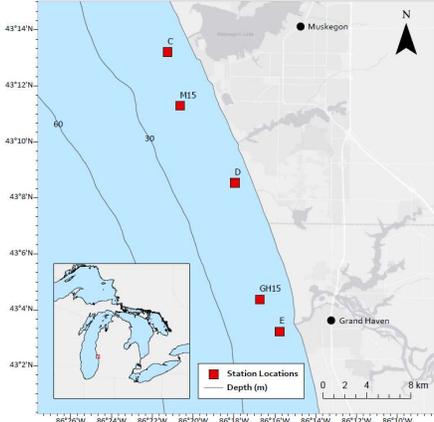
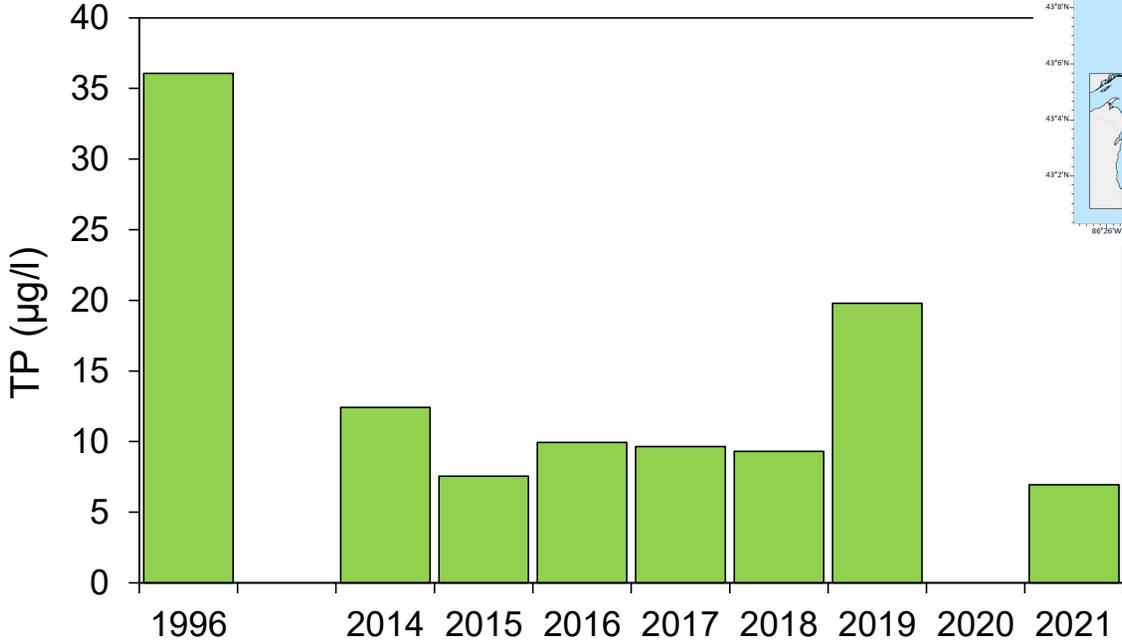


# Recent Trends for Lake Michigan Lower Trophic Levels



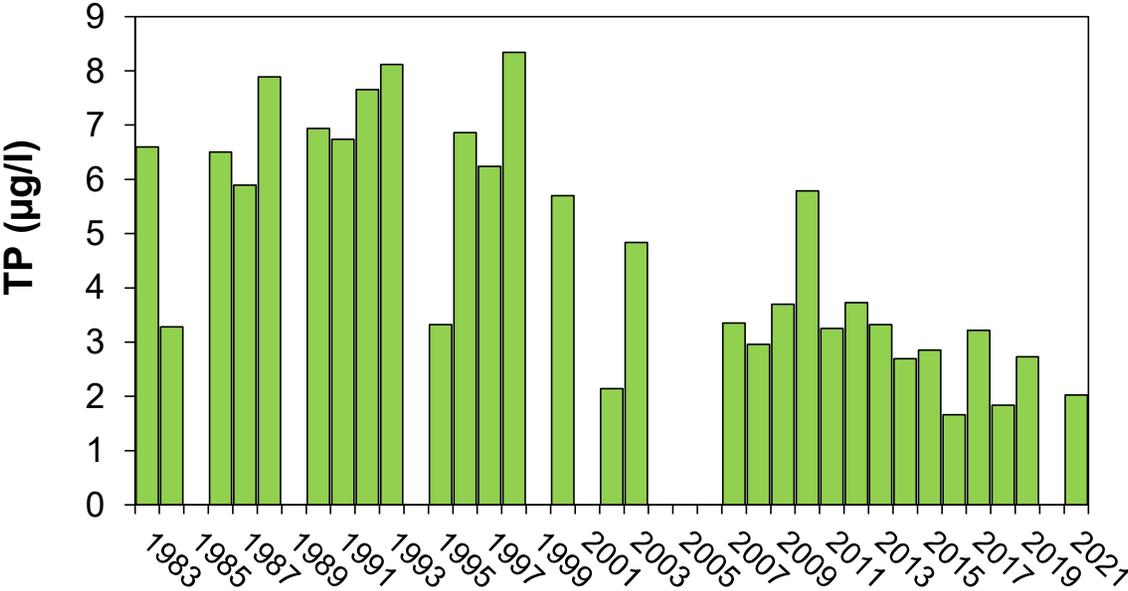
Great Lakes Environmental Research Laboratory

# May Nearshore Total Phosphorus Muskegon-Grand Haven



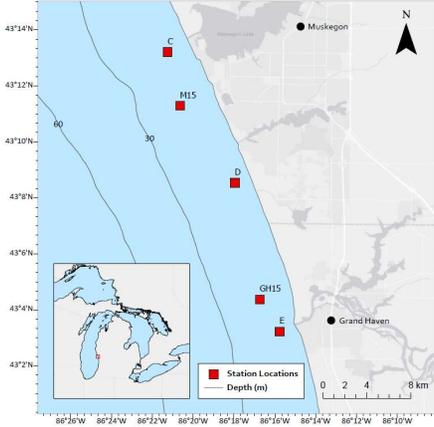
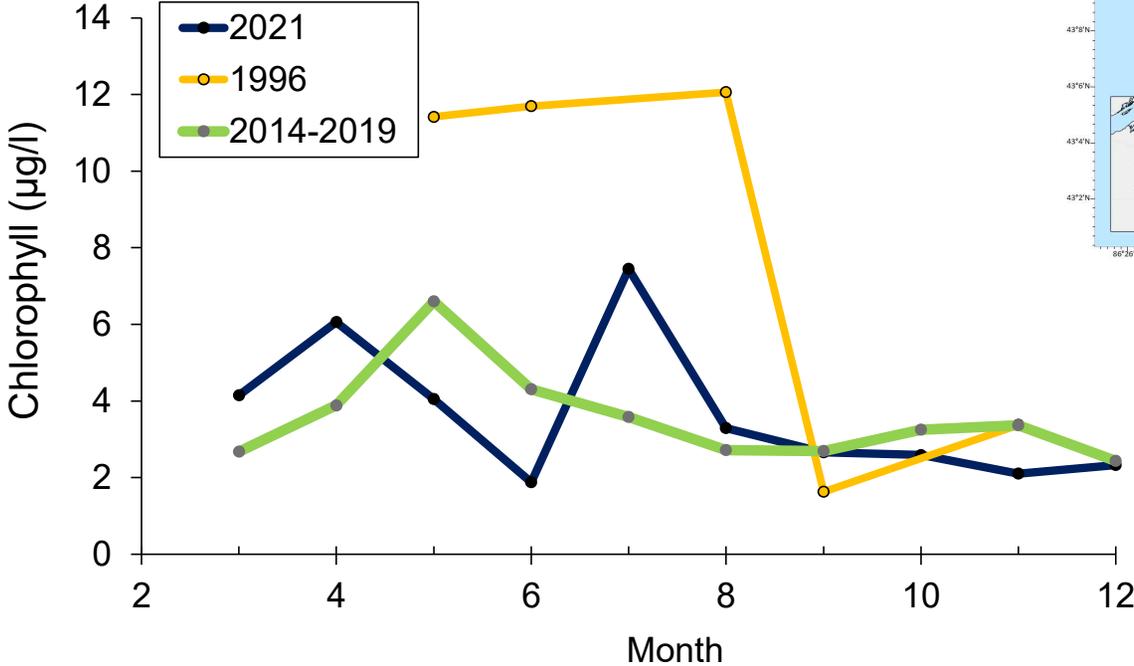
Offshore spring total phosphorus has declined substantially since the 1980s and 1990s.

## May Offshore Total Phosphorus-Muskegon

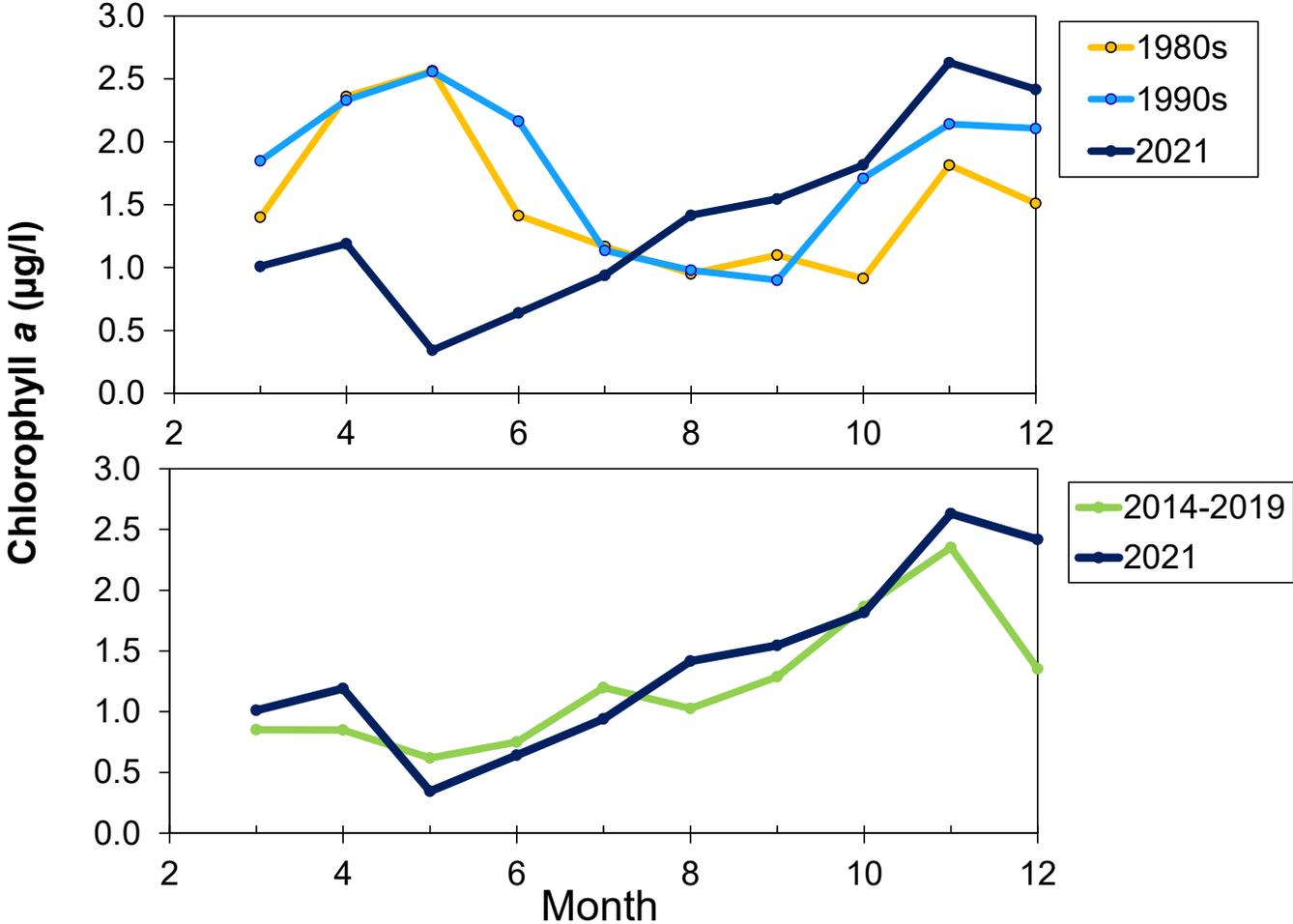


Offshore May total phosphorus has declined substantially since the 1980s and 1990s. Values have fallen from over 5.5 to under 3.0 reducing the overall productivity of Lake Michigan

# Seasonal Nearshore Chlorophyll

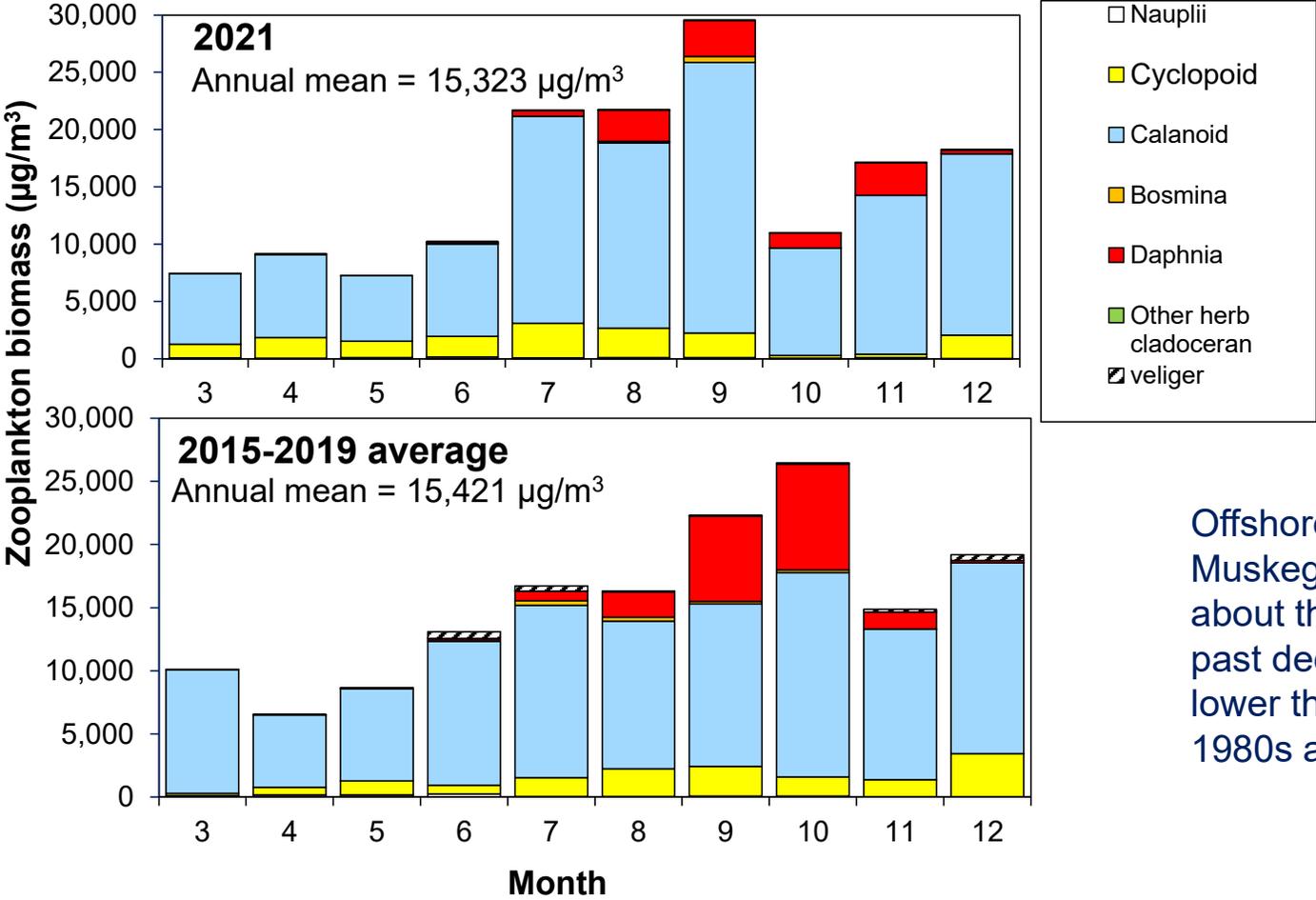


### Seasonal Offshore Chlorophyll-Muskegon



Offshore Chlorophyll levels have dropped since 1980s in the spring, showing that this declining level of chlorophyll have led to reduced spring algae blooms a key component for fish production.

### Seasonal offshore zooplankton (Muskegon 110-m)



Offshore zooplankton at Muskegon has remained at about the same levels the past decade but remains lower than observed in the 1980s and 1990s