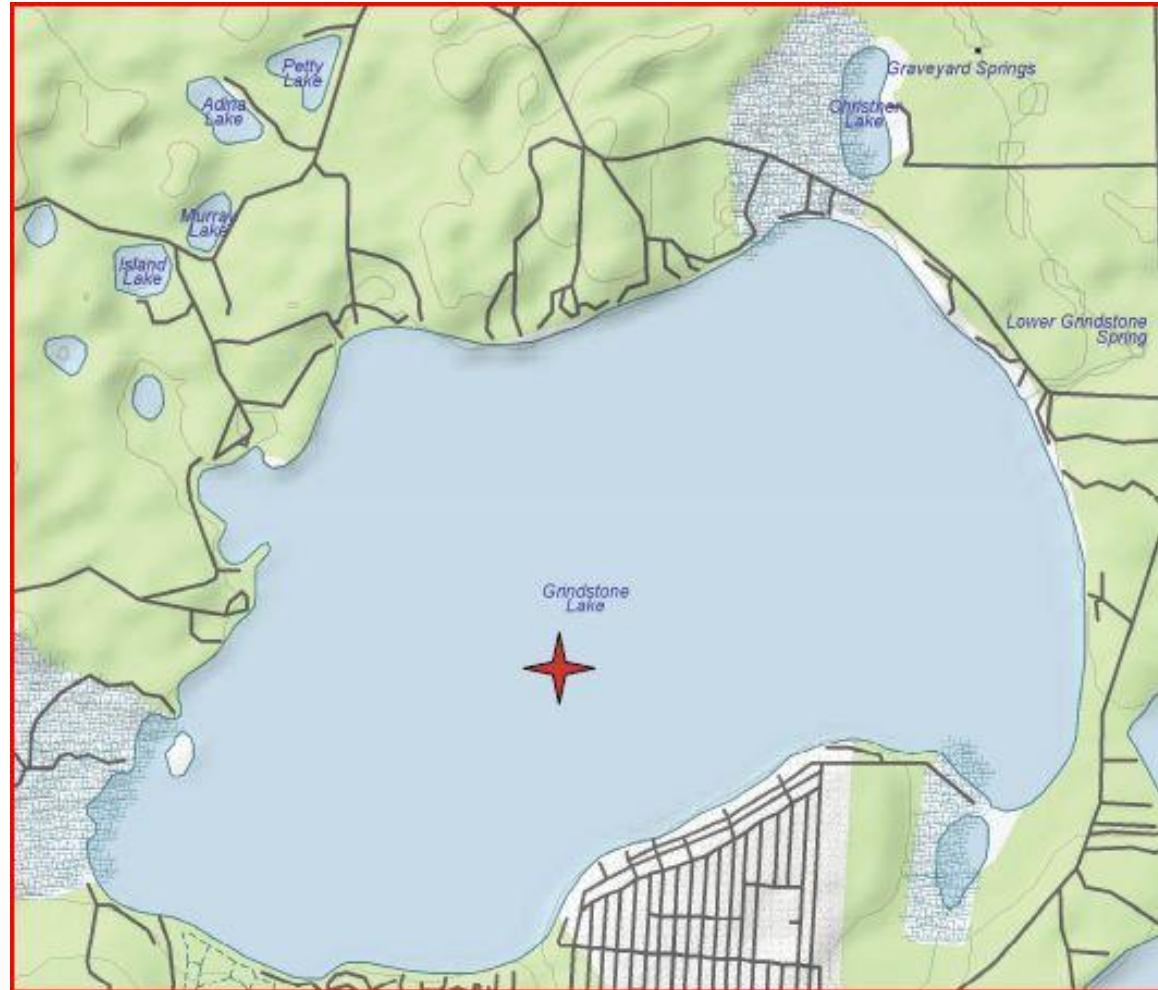


# **Grindstone Lake Protection and Planning Workshop**

## **Water Quality**

**Dan Tyrolt, LCO Conservation  
Department**

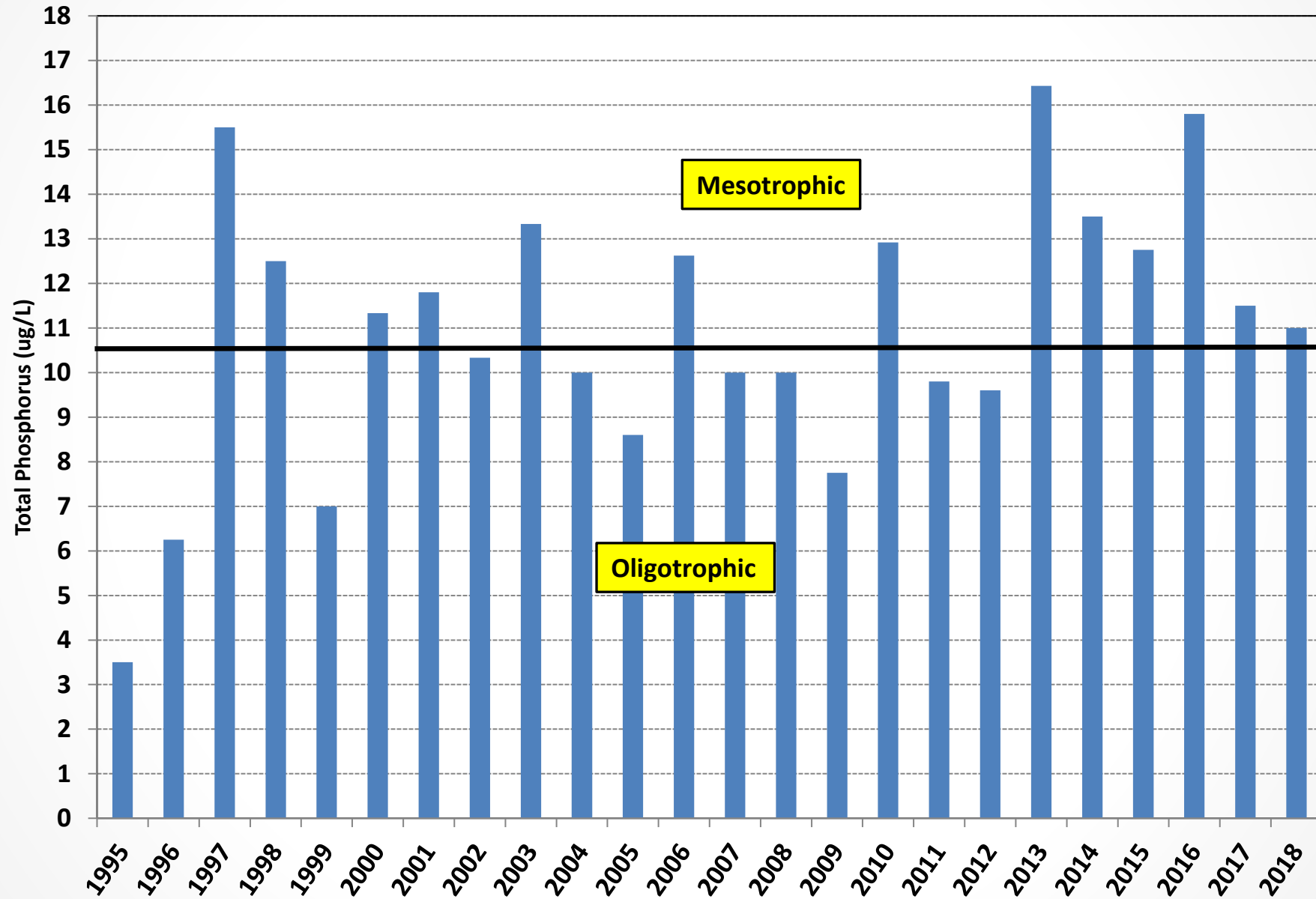
# Grindstone Lake Sampling Site – Deep Hole



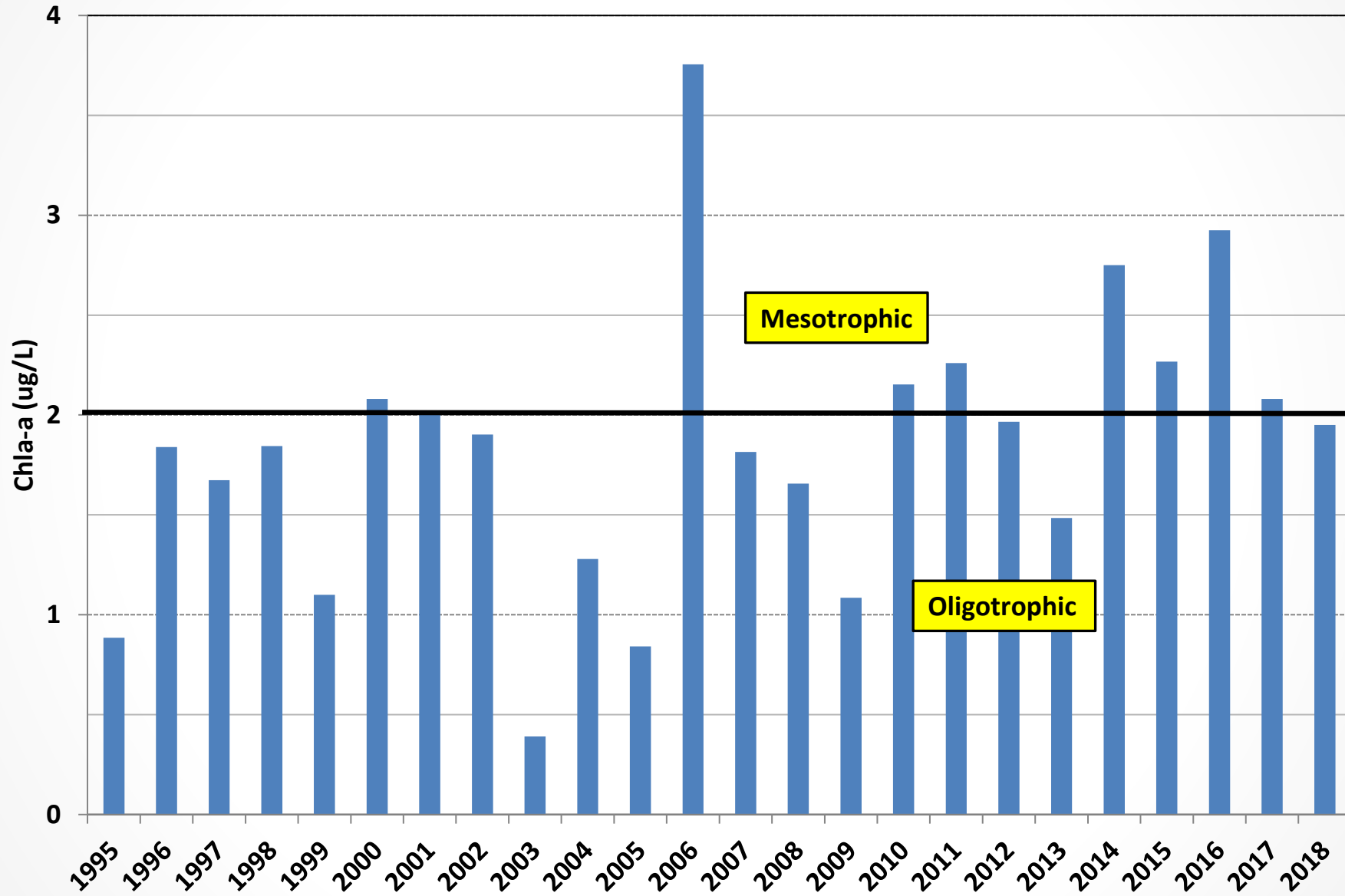
# Sampling Parameters

- Total Phosphorus (6/15 – 9/15)
- Chl-a (7/15 - 9/15)
- Secchi disk depth
- Profiling
  - Temperature
  - Dissolved Oxygen
  - pH
  - Specific conductivity
  - Total Dissolved solids
- Phytoplankton
- Zooplankton
- Macro-invertebrates (critters on the bottom)
- Cyanobacteria

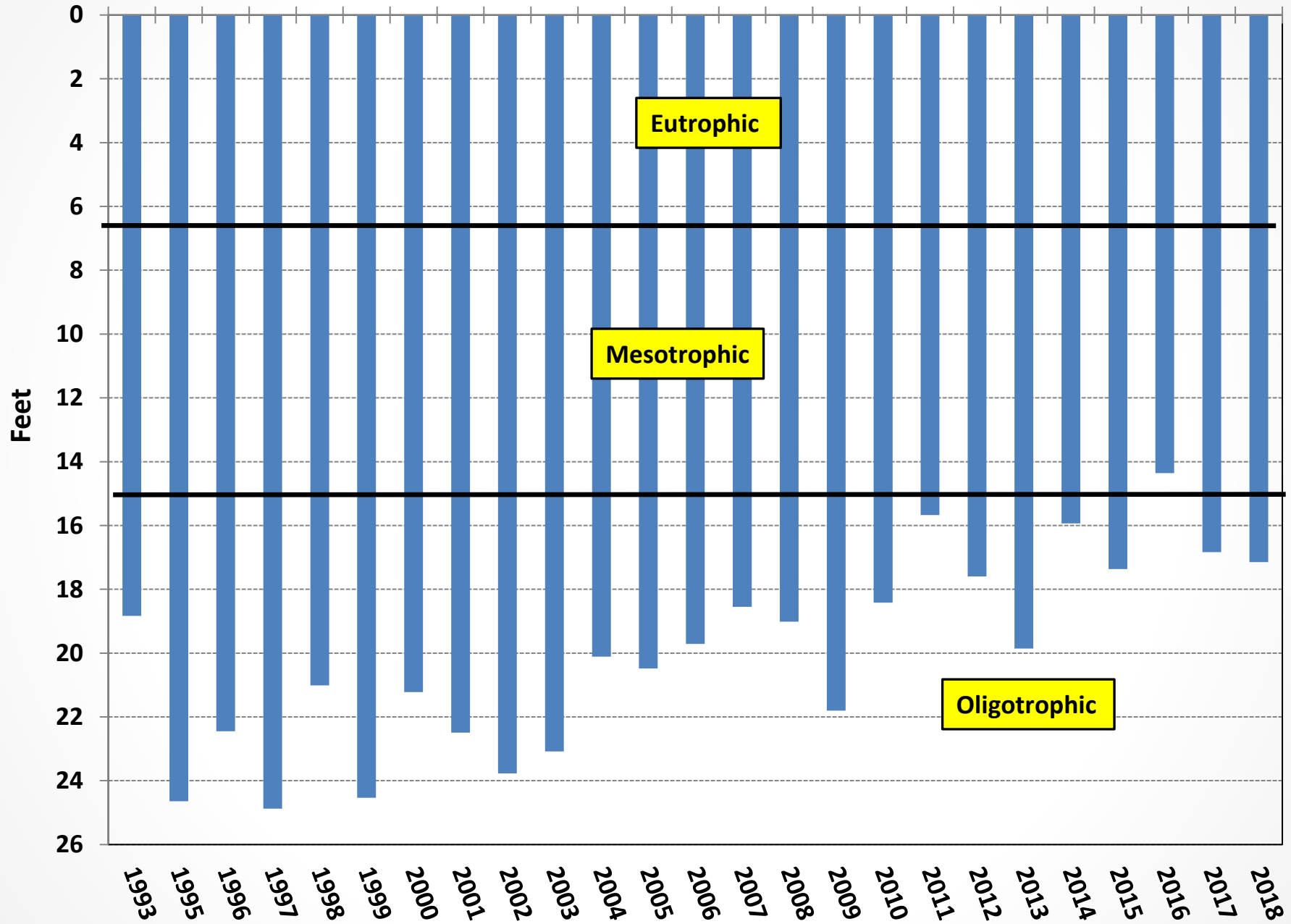
# Grindstone Lake Annual Average Summer Total Phosphorus Values



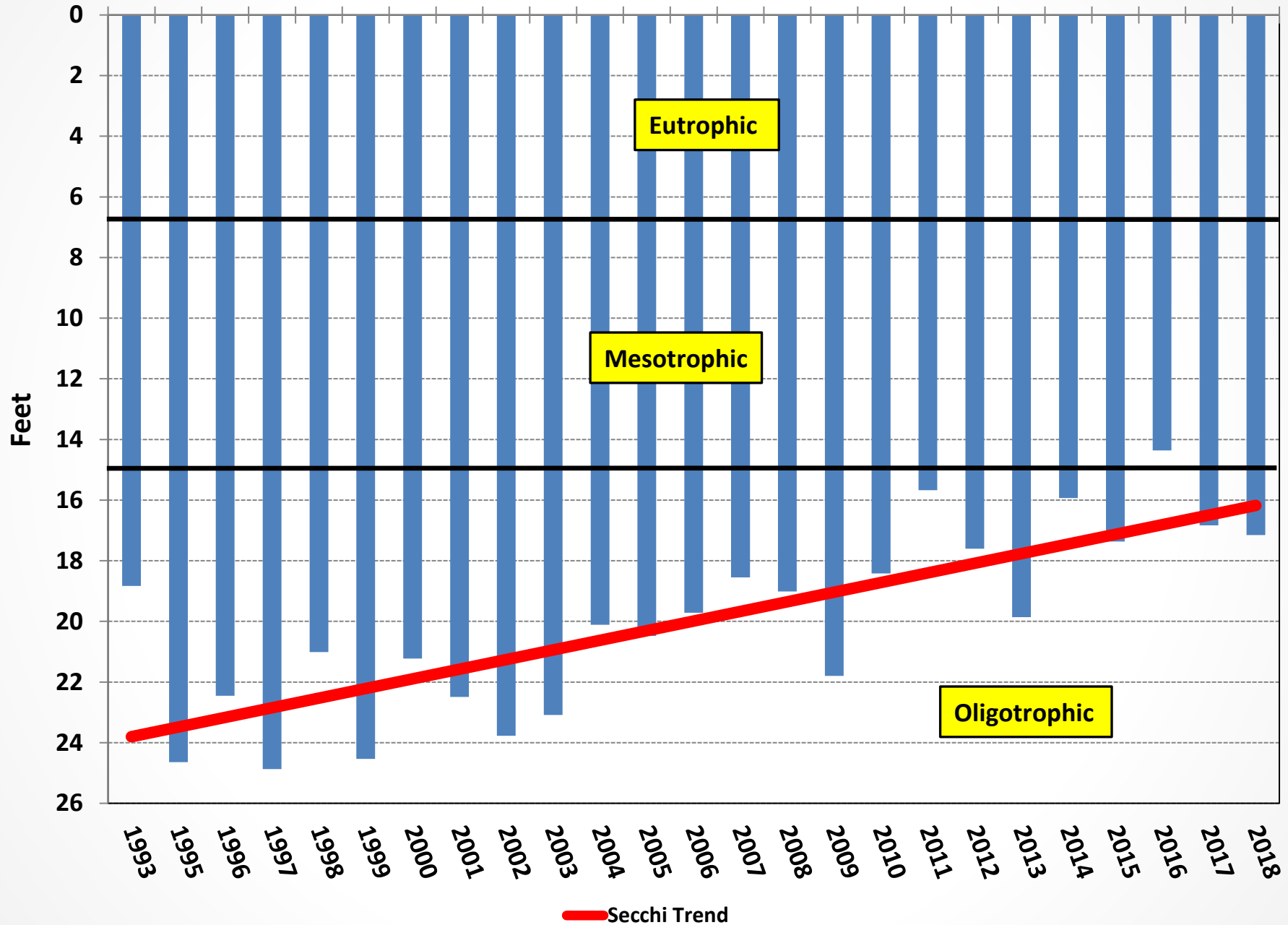
Grindstone Lake Annual Average Summer Chl-a Values



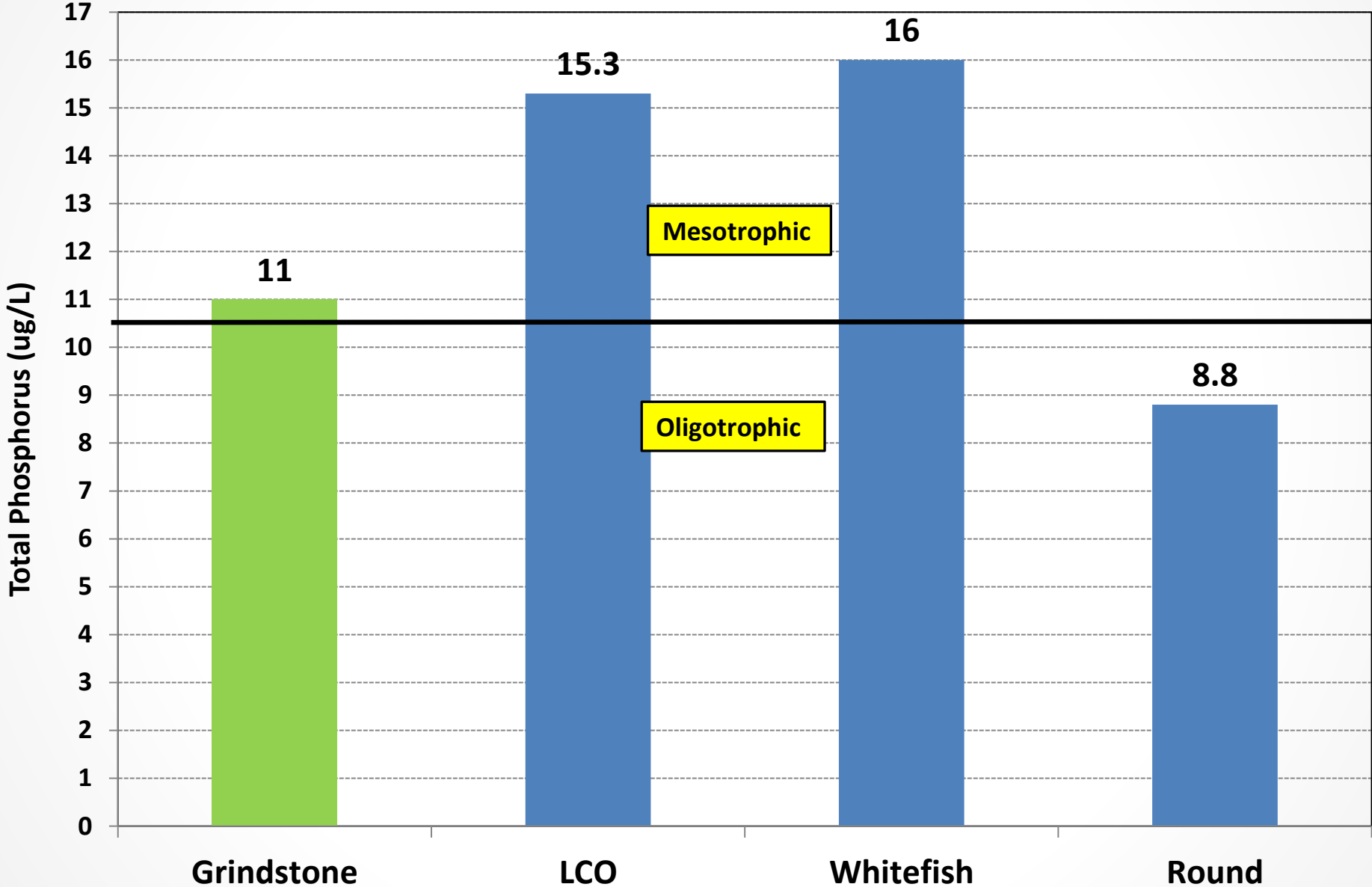
# Grindstone Lake Annual Average Summer Secchi Disk Values



# Grindstone Lake Annual Average Summer Secchi Disk Values

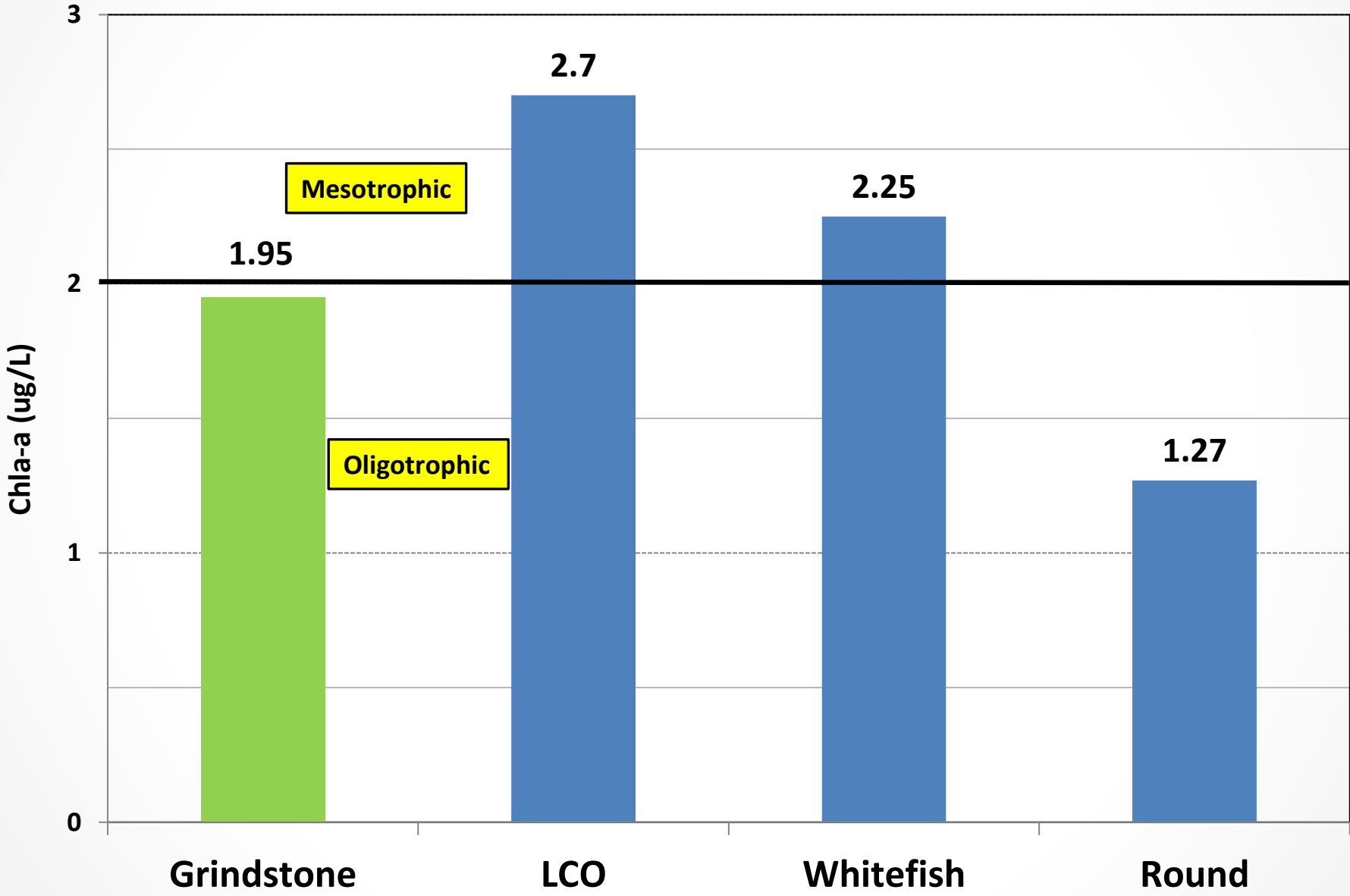


# 2018 Total Phosphorus Comparison

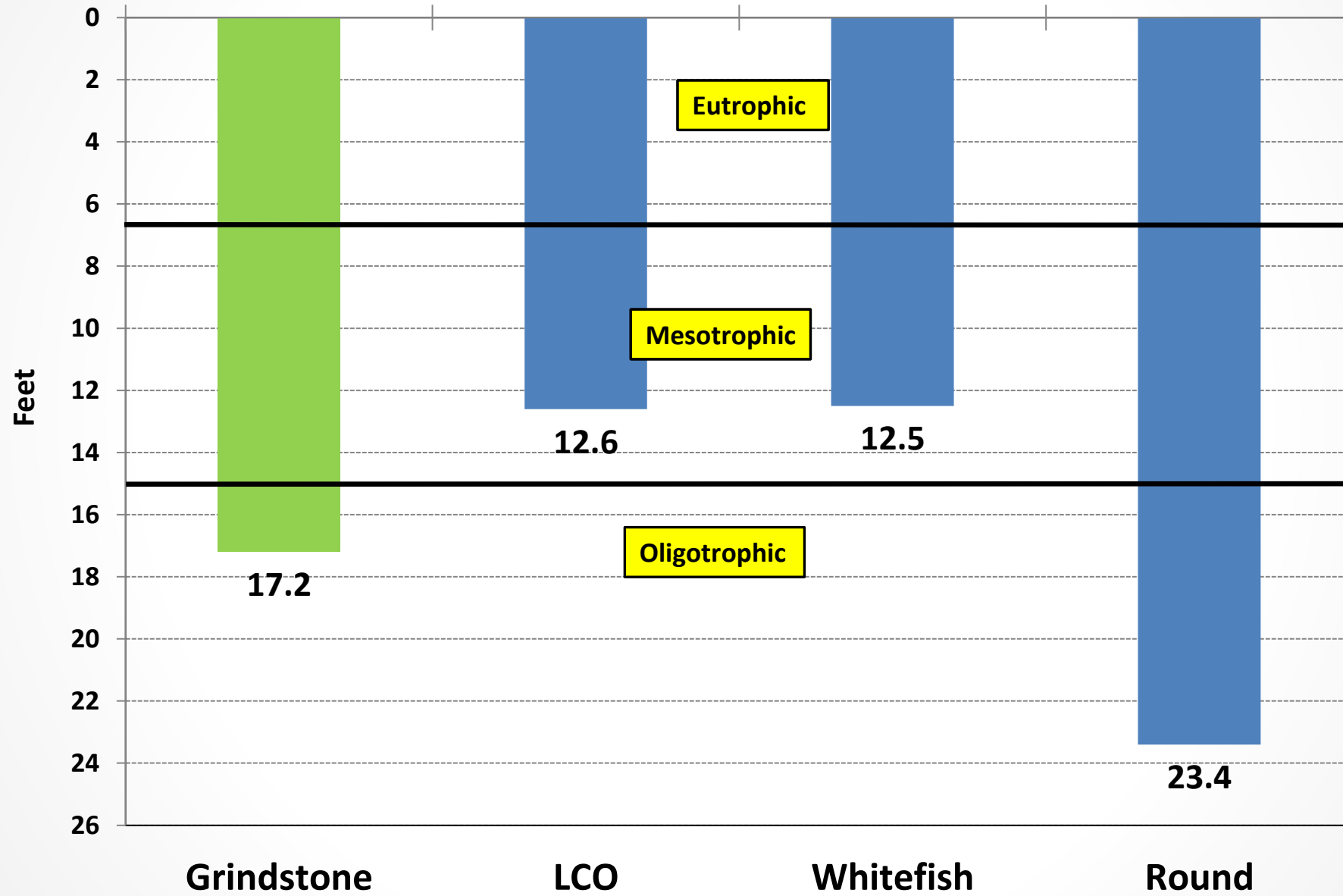




# 2018 Chla-a Comparison



# 2018 Secchi Disk Comparison



# Future LCO Conservation Efforts

- **Continue with baseline monitoring and trend analysis**
- **Evaluate available oxy-thermal habit**
- **Establish Site Specific Criteria (SSC) for phosphorus to help protect oxy-thermal habitat if needed**