

HISTORY IN THE MUCKING

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AGRICULTURE

Circa 1880



Circa 1910





WETLAND LOSS



CHANNELIZATION



1940



1950



1940



1950



SHORELAND DEVELOPMENT



TIMELINE

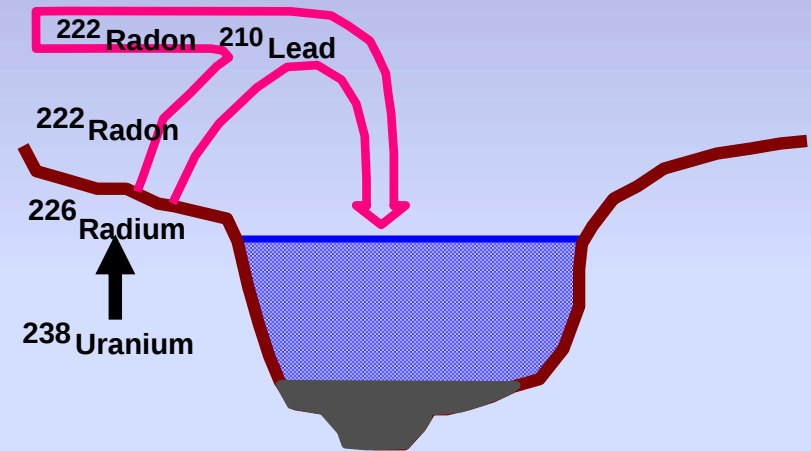
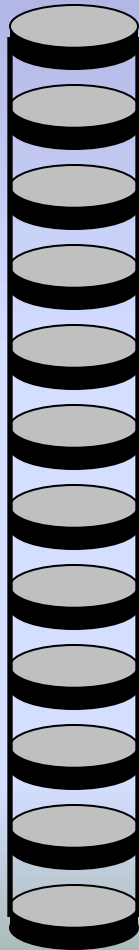
- **1835** Original land survey conducted
- **1840s** Settlement began—George Dow from Scotland
 - Lake called Lake Dow
 - Colonies west and south of the lake
- **1900s** Lake became a popular summer resort area
- **1924** 2 large hotels, 3 smaller hotels, many privately owned cottages
- **1940s** Agricultural became increasing mechanized which included farming larger fields, draining wetlands, channelizing streams, commercial fertilizers
- **1990s** Watershed became a priority watershed
- **late 1990s** Watershed improvements:
 - plugged drainage ditches
 - stream length reduced from 4.2 to 2.5 miles
 - ditch banks repaired
 - $\frac{3}{4}$ mile lake shoreline stabilized





Lead-210 Dating

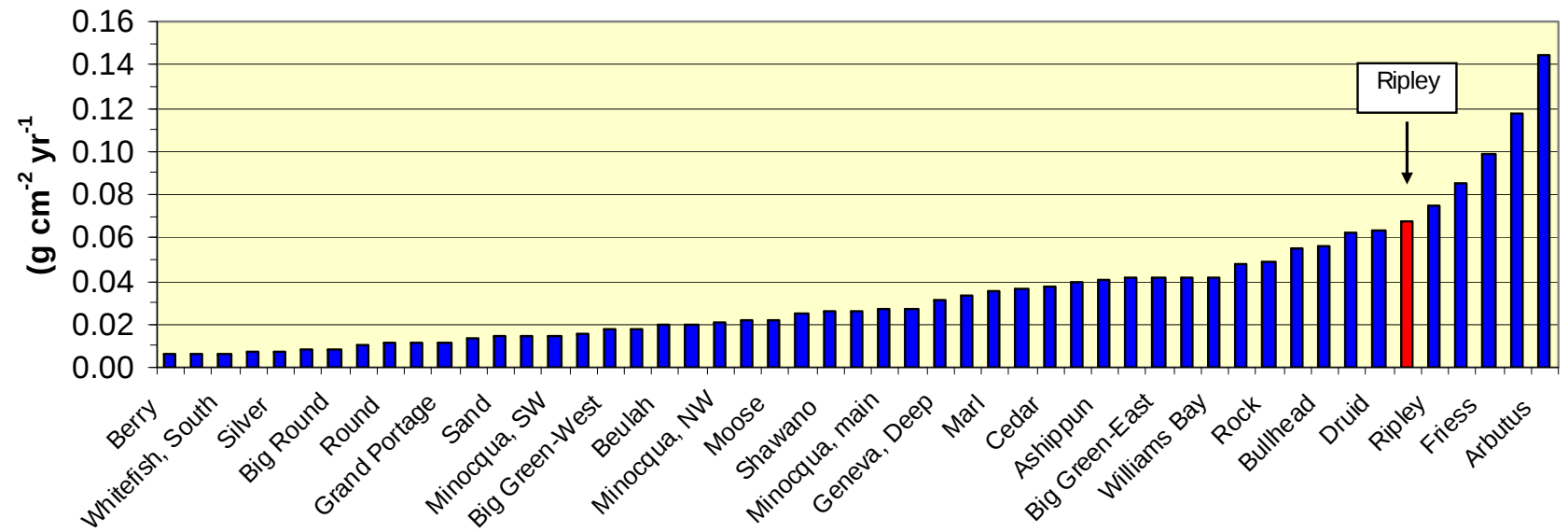
Full core

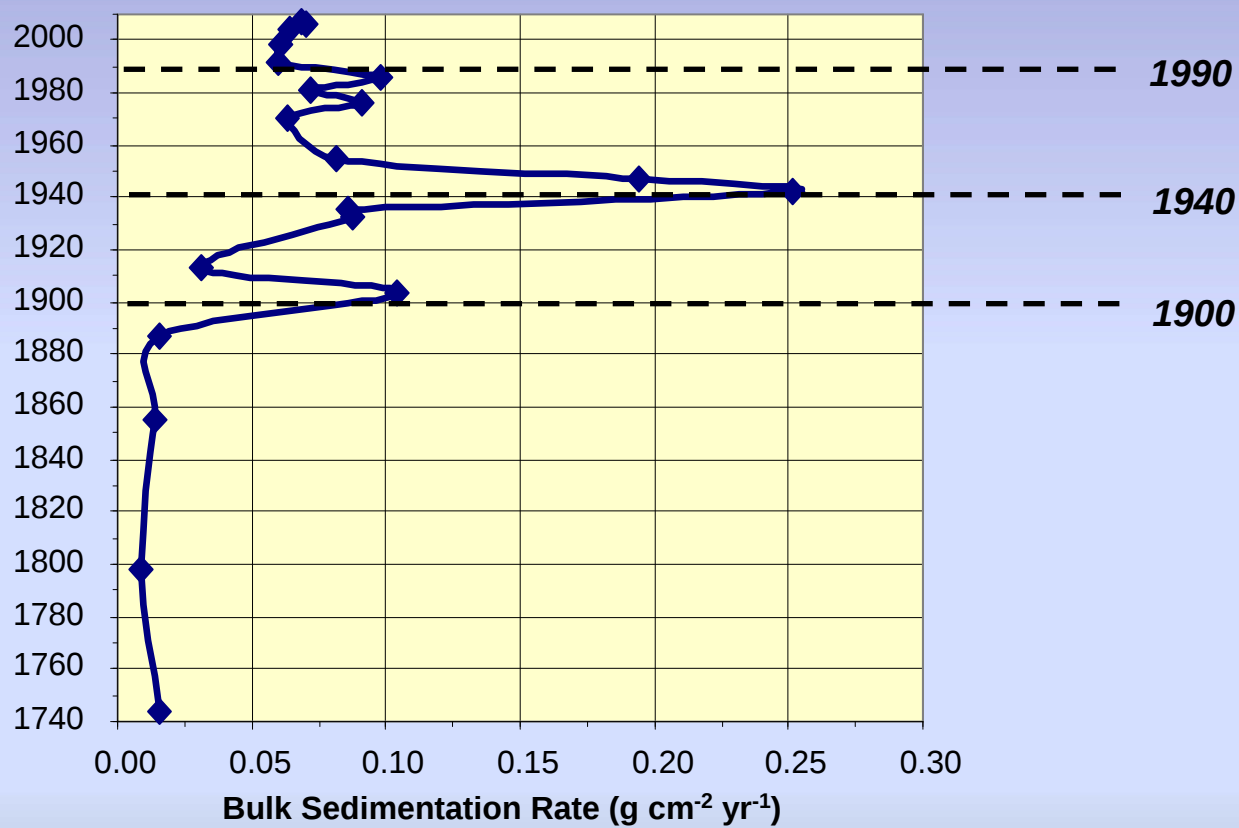


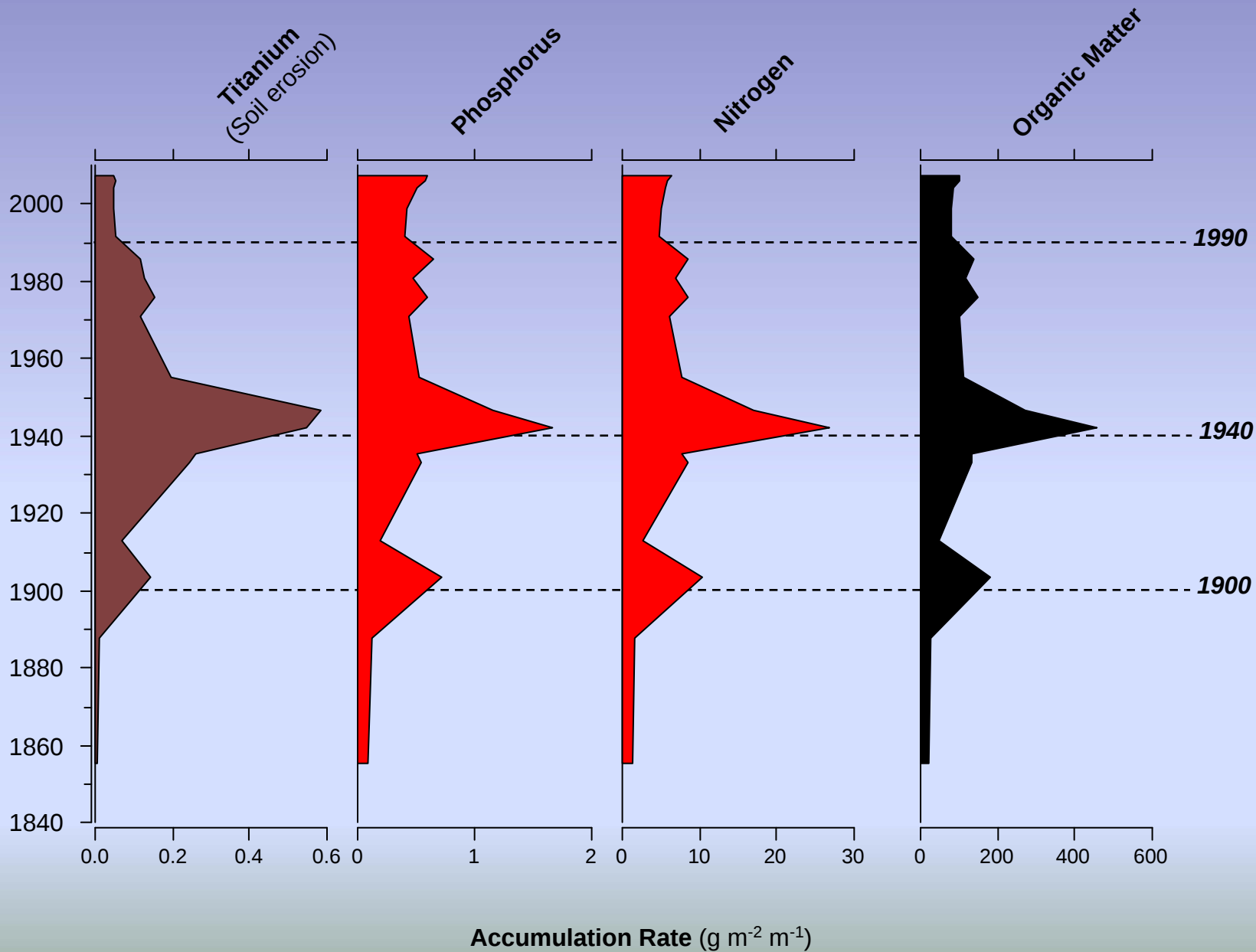
HALF LIVES

$^{226}\text{Radium}$	1024 yr
$^{222}\text{Radon}$	3.8 days
$^{210}\text{Lead}$	22.26 yr

Mean Sedimentation Rate



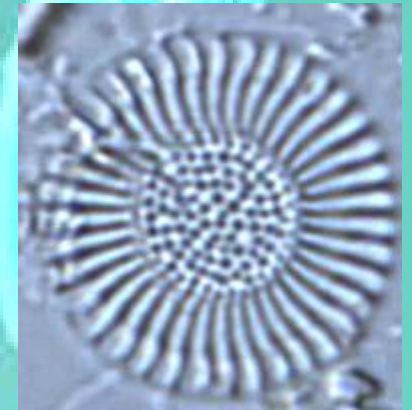


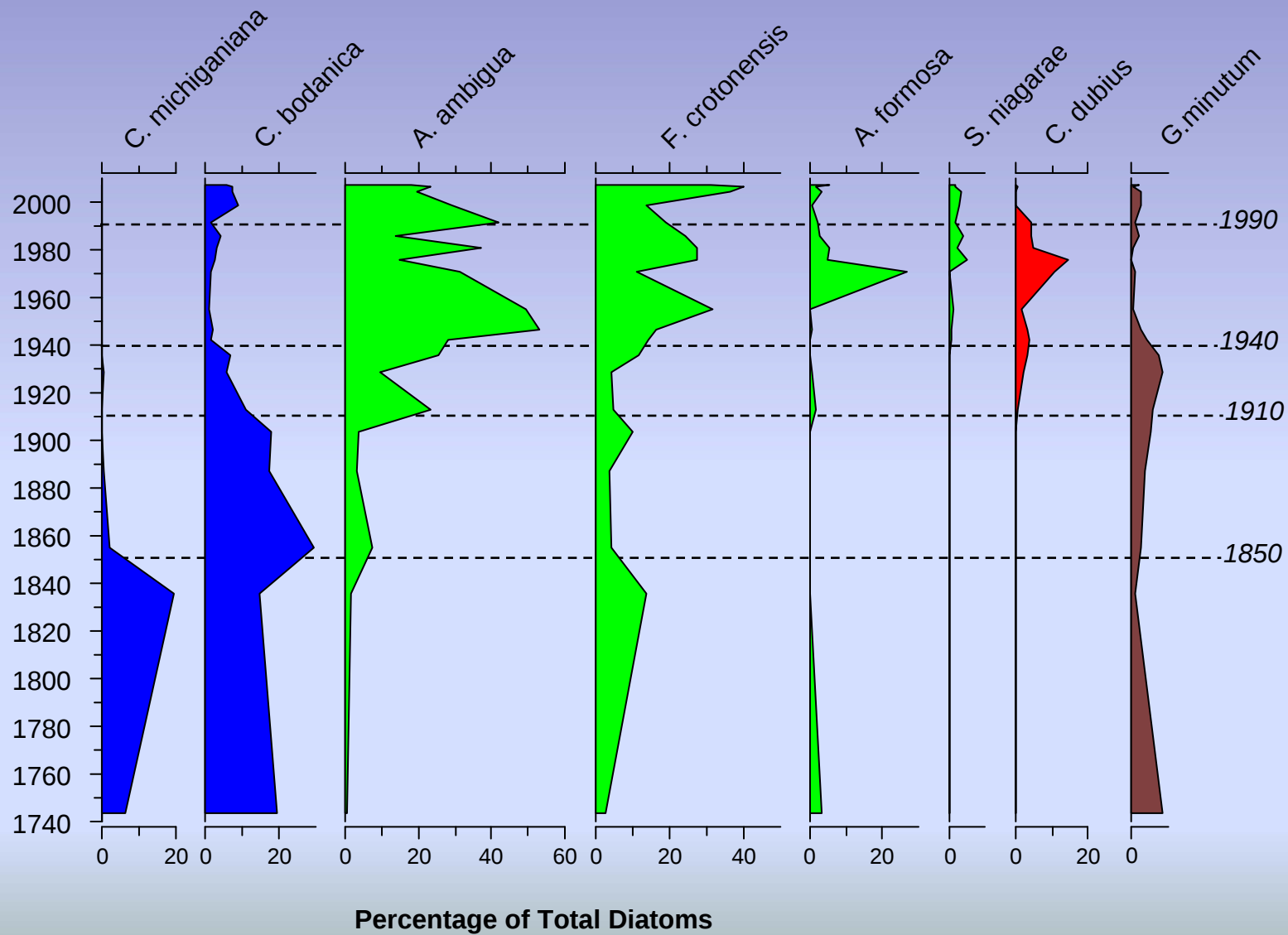


WHY DO WE CARE ABOUT PHOSPHORUS?

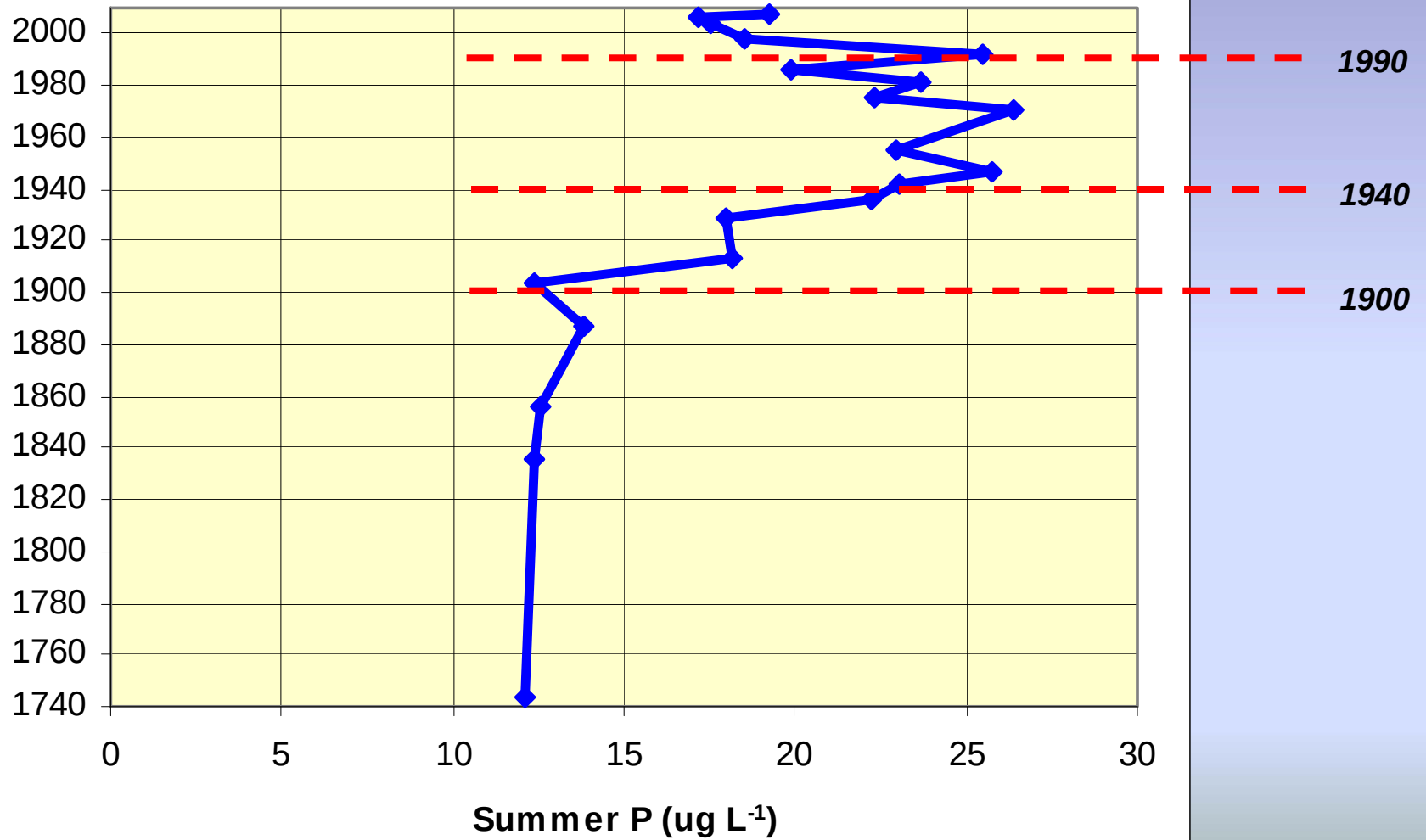


DIATOMS

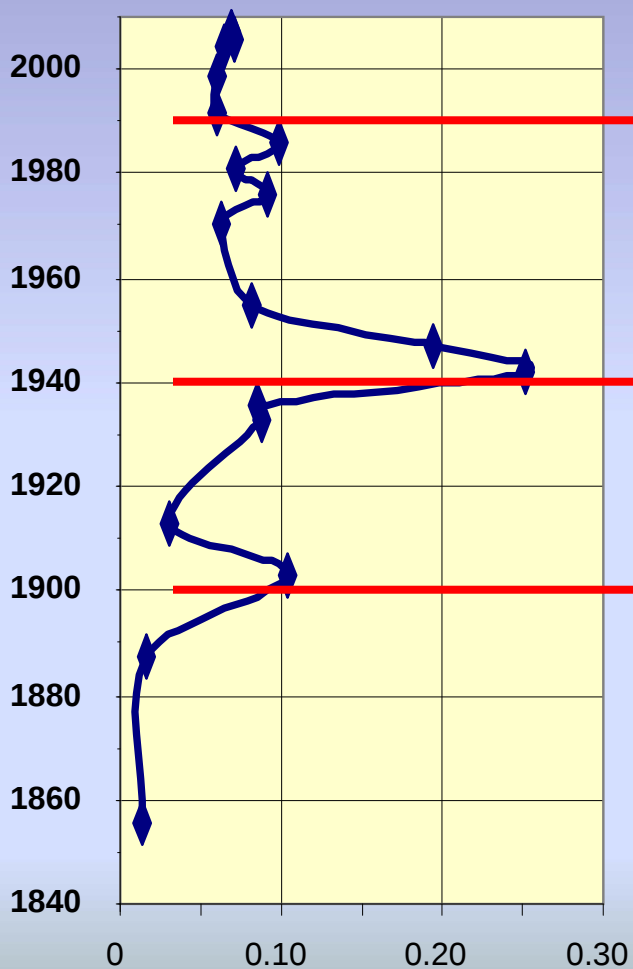




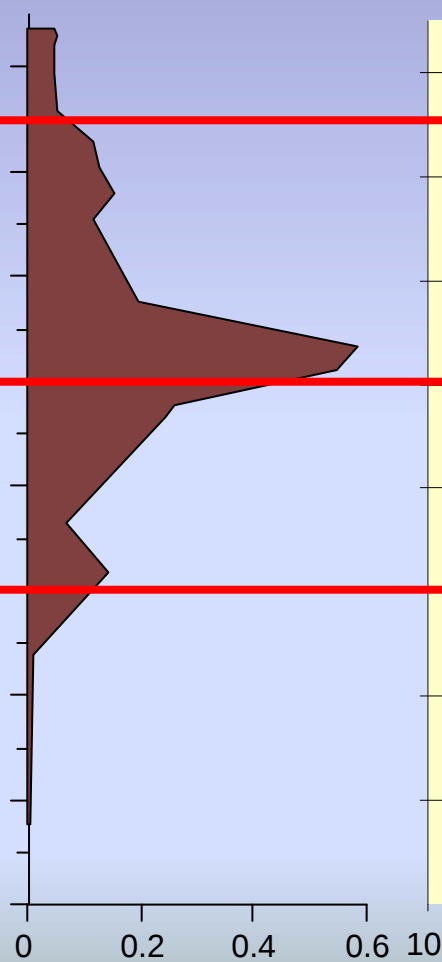
Lake Ripley



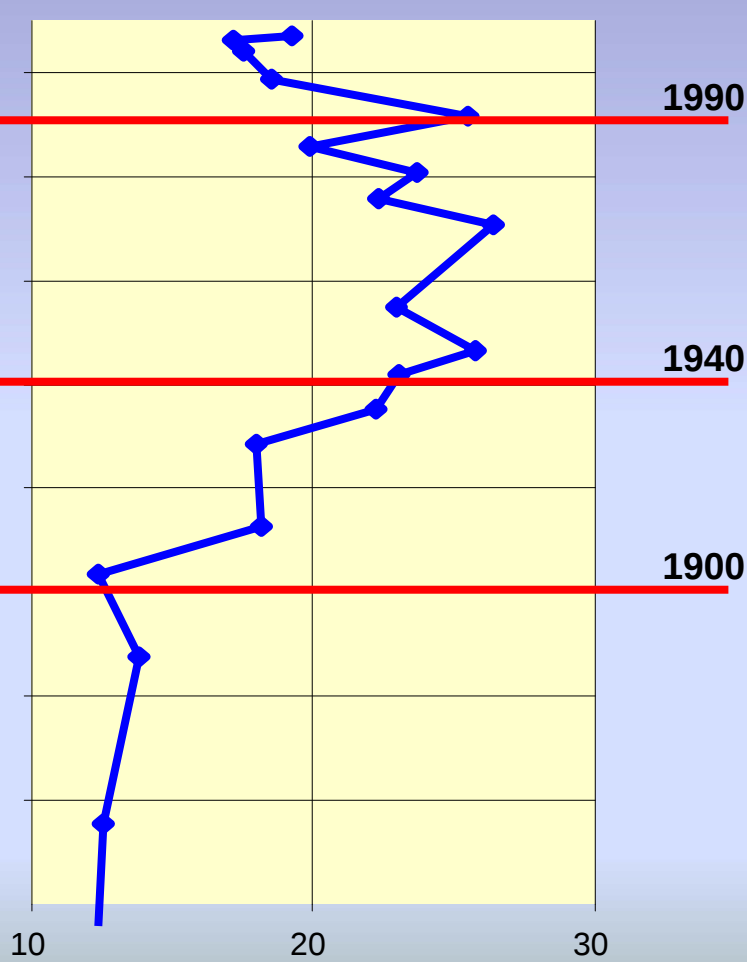
Sedimentation Rate



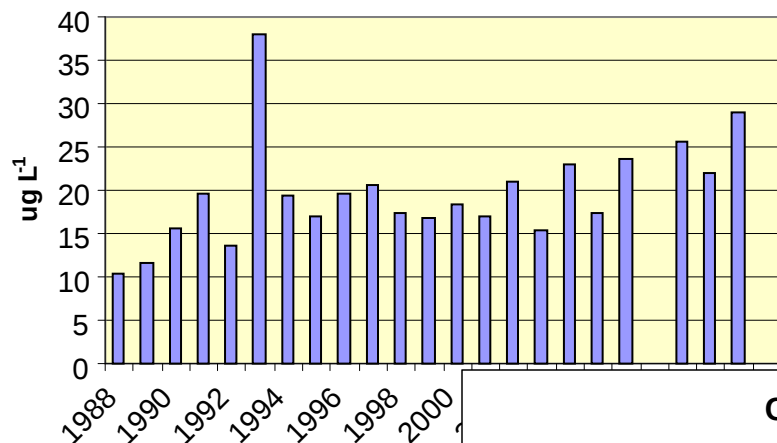
Titanium Soil Erosion



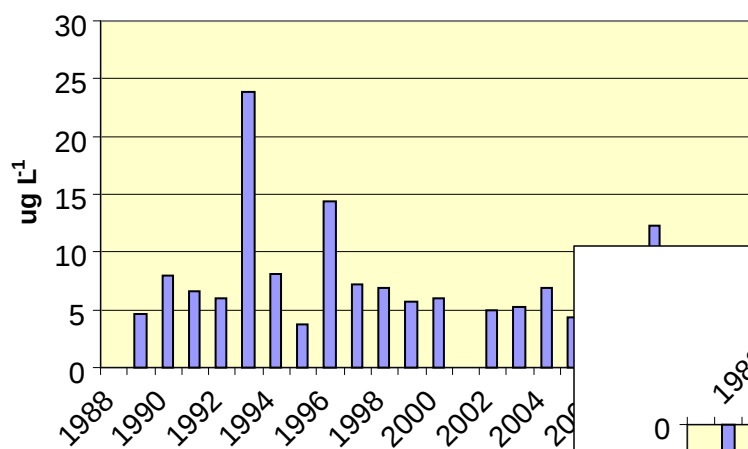
Phosphorus



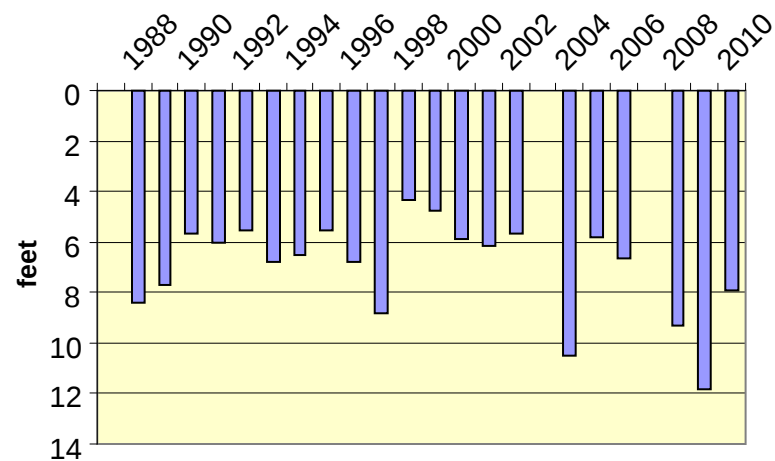
Phosphorus



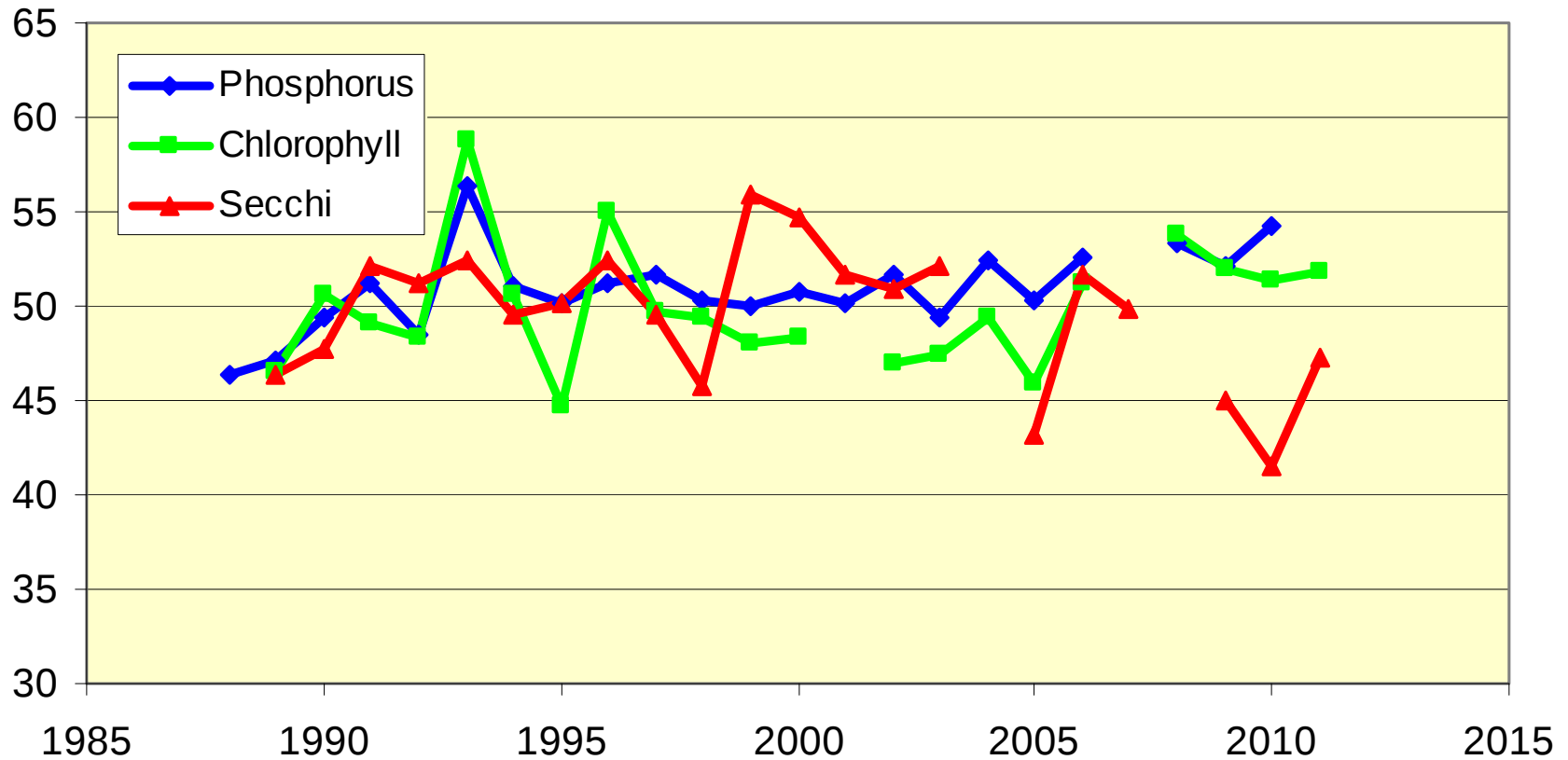
Chlorophyll a



Secchi



Trophic State Index



QUESTIONS

