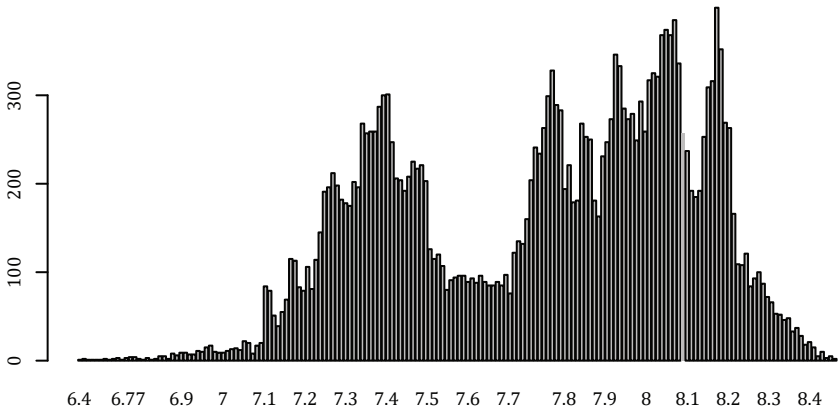


How Healthy is Lake Onondaga?

The purpose of this study was to gain a better understanding of how healthy Lake Onondaga is based upon the following factors: pH level (standard units), Chlorophyll-a level (algae content), and Dissolved Oxygen (milligrams per liter).

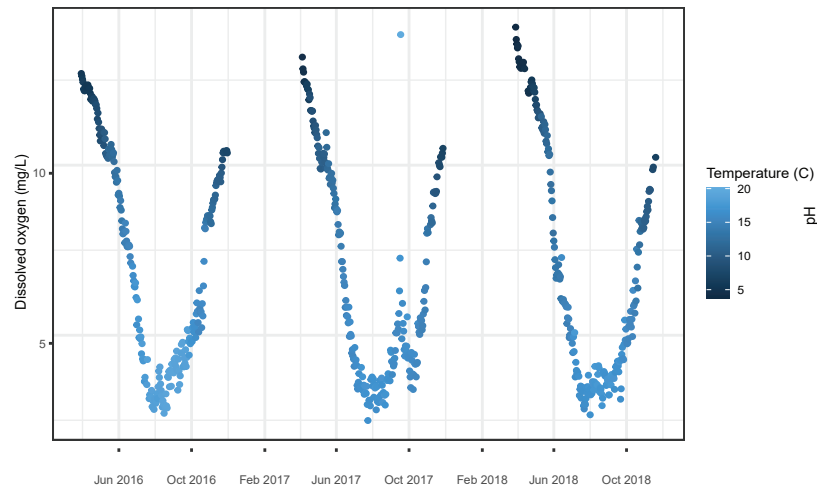
Team: Michael Armesto
N'Dea Jackson
Becky Matthews
Jose Reyes

Distribution of Lake Onondaga pH Levels

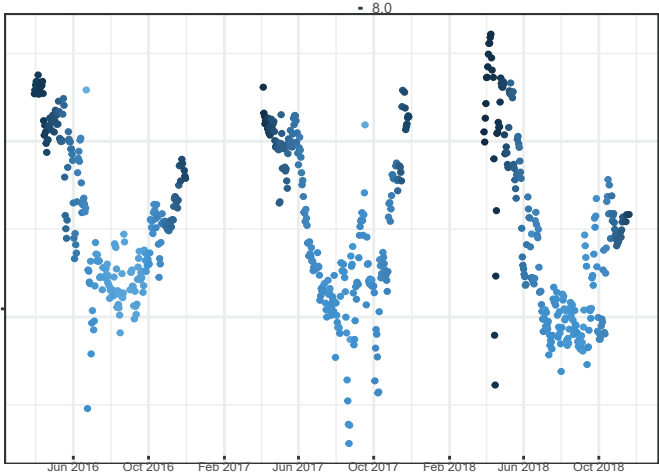


On average, freshwater lakes, ponds, and streams usually have a pH of 6-8. In deeper lakes, where stratification, or layering, often occurs, the pH of water is generally higher (7.5-8.5) near the surface and lower (6.5-7.5) at greater depths. Lake Onondaga is one of the most polluted lakes in the nation.

Time series of Dissolved Oxygen



Time series of pH Values



Adequate algae content and oxygen concentration is important for a healthy lake ecosystem. As seen in these plots, algae thrive at specific pH and oxygen concentrations levels which are changing over time. As these values all change, the lake's future may be adversely affected.

