



## Hydrolab®

**Abiotic** factors, the non-living parts of an **ecosystem**, such as temperature and sunlight, can have a huge impact on that ecosystem. Think about it. How do these abiotic factors impact you? Do you ever check the temperature before you go outside?

Scientists use instruments such as the **Hydrolab®** to measure abiotic factors in the lake. The Hydrolab® sensors measure temperature, pH, dissolved oxygen, **conductivity**, and **turbidity** levels in the water. It also measures **chlorophyll** a which is a **biotic** rather than abiotic factor.

Many living things in lakes or streams have a threshold for these abiotic factors—a maximum or minimum value where above or below they can't survive. For example, many fish can only live in a certain temperature range. Routine monitoring of Flathead Lake helps scientists see how these abiotic factors change during the year and if they change over many years.



Hydrolab® PC: Flathead Lake Biological Station