

## Problem Statement

AWQUARIuS, Autonomous Water QUAlity Reporting System, will be a system that allows researchers / scientists to set-up personalized, flexible water monitoring studies in freshwater lakes and streams. The sensors will assess acidity, salinity, temperature, flow rate, and conductivity within 1% accuracy. Scientists will be able to monitor and retrieve data from a web interface that updates every hour, with measurements recorded at every minute. The module will weigh 10 pounds, be able to run on battery power for 15 hours with a solar back-up, free-floating or anchored and cost less than \$500.00.