

# **Water Quality Project Description – Upward Bound, Summer 2017**

## **Background**

Water quality is a continuous concern, not only for drinking water but for source water, as well. We depend on individuals in our communities to maintain a minimum quality of natural water resources. We also depend on clean water provided by the local government. To find out if these efforts are working, our class will be testing three water samples and compare the results.

## **Water Samples**

The three water samples we will test are:

1. Missouri river water, collected at the nearby Clay County Park
2. Vermillion tap water
3. Distilled bottled water

## **Testing Details**

Testing strips are one of the easiest ways to get a large amount of information from a single test. There are more accurate and detailed methods, but these are expensive and time-consuming. Because of this, our class will use a test strip that tests for the following:

- Total alkalinity
- pH
- Total hardness
- Iron
- Copper
- Lead
- Nitrate
- Nitrite
- Free chlorine

## **Data Analysis**

Each group of students will report their data. The instructor will assist with building graphs. Finally, students will compare their results to the results of the other groups. This comparison will allow us to check our results for accuracy.