Temperature Script

(0:00) *Peggy Compton*: Knowing the temperature of the water in a stream or river can give you insight into many other characteristics of that body of water because water temperature influences other things, such as, plant growth and dissolved oxygen. Now here's Kris Stepenuck, volunteer stream monitor coordinator, to tell you more about stream temperature and how to measure it.

(0:21) *Kris Stepenuck*: As Peggy mentioned, monitoring water temperature is important for several reasons. Less oxygen can be dissolved in warm waters than can be dissolved in cold waters. Respiration rates of both plants and animals are increased in warmer waters so they can use up oxygen more quickly. So, organisms that require more oxygen for survival might be found in colder waters where there's more oxygen available to them.

(0:44) To monitor temperature, you'll need several items: hip boots, a thermometer, a data sheet and pen, a marking flag, and a cup. The first thing you want to do when you monitor temperature is to mark your site so that you can return to the same place time and again. A good way to do this is by using a marking flag.

(1:06) Then, you want to monitor air temperature. To do this, be sure to hold your thermometer at the top. Bring it up to eye level and read it straight on. Record your data on your data sheet. Then, you can monitor your water temperature. To do this, you want to move to where the water is moving in the main current and immerse your thermometer about four inches down into the water. You'll hold it here for about two minutes. Then, you'll read the temperature on the thermometer. Rather than needing to immerse yourself in the stream, a way to read that thermometer straight on is by bringing along a cup where you can put it into the water and lift the thermometer out up to eye level. Read that temperature. Record that on your data sheet.

(1:52) In summary, to monitor temperature:
- Mark your site
- Measure air temperature
-Measure water temperature
-Record that information on your data sheet

(2:05) *Peggy Compton*: Measuring and recording stream temperature is a simple process that can provide immensely valuable information. Management decisions and stream classifications are often closely tied to water temperature. So, don't discount the importance of collecting this information. If you would like to know more about water temperature, view the stream ecology section of this DVD series.