

Freshwater Monitoring – Conductivity

Aim: To measure how well water can conduct an electrical current.

<p>Equipment</p> <ul style="list-style-type: none"> • conductivity meter • bucket • Stream Health Monitoring Data Recording Sheet 	<p>Method</p> <ol style="list-style-type: none"> 1. Rinse the bucket with stream water. 2. Fill the bucket with stream water to be tested. 3. Remove the cap from the bottom of the probe. 4. Switch it on and check that it reads 0 while held in the air. 5. Place the probe in the water sample. Ensure the water does not go above the grey line as this can damage the instrument. 6. Wait for a few seconds for the reading to stabilise. 7. Record the result on the data recording sheet. 	<p>Things to discuss:</p> <ol style="list-style-type: none"> 1. Show the students the conductivity meter. Ask them if they know what it is. 2. Explain that it is a piece of equipment that measures how well water can conduct an electrical current. 3. Discuss conductors of electrical current in everyday settings – copper wire, for example. 4. Explain that streams tend to have a relatively constant range of conductivity. Significant changes in conductivity (increase in salt content such as chloride, bicarbonate, sodium, calcium) could suggest that a discharge or some other source of pollution has entered a stream.
	<p>Notes:</p> <p>When placing the probe in the water sample, ensure the water does not go above the grey line as this can damage the instrument.</p>	<p>Reflect</p> <p>If there is a change in conductivity, how could we find out what might be responsible for the change?</p> <p>Is this something we should do? Or should we leave it up to someone else to do?</p> <p>Who should we contact about the change?</p>

