Solid Precipitation Protocol
Lab Guide

Task
Determine the liquid water equivalent of new snow fall and total snowpack.

Determine the pH of the new snow and the snowpack.

What You Need
- ❑ Samples from the field (pH and rain equivalent for new snow and snowpack)
- ❑ The small measuring tube from your rain gauge
- ❑ Appropriate *Precipitation pH Lab Guide*
- ❑ *Integrated 1-Day Data Sheet*

In the Lab
1. Once your snow samples are indoors, allow them to melt. Be sure they are covered to prevent evaporation.
2. Pour the melt water from the “new snow” sample into the measuring tube of the rain gauge (you may want to use the rain gauge funnel to help).
3. Read and record the rain equivalent in millimeters to the nearest 10th of a millimeter.
4. If there is more water than can fit into the measuring tube, empty the tube and repeat steps 2 and 3 and add the amounts.
5. Record this as the rain equivalent on your *Data Sheet*.
6. Pour melted snow water back into the sample jar.
7. Perform the appropriate *Precipitation pH Lab Guide* (depending on which type of pH measuring device and salt you are using) on the pH sample.
8. Repeat steps 2-7 for the “snowpack” sample.