

Streamside Monitoring: Important in More Ways than One

By Ericka Brechbill

Seeley-Swan High School has a unique location. Just a few hundred yards from the building, Morrell Creek babbles along. Not only is it a picturesque stream, Morrell Creek a very important habitat for many aquatic species, including the threatened native bull trout.

This past fall, I and several fellow students had the privilege of walking down to the stream to help Fish, Wildlife, and Parks perform a fish monitoring project, with a focus on bull trout. The results were fantastic. There were high populations of juvenile bull trout present in the short section of the creek we sampled. With such a concern around this species, it was a very promising sign. Bull trout are habitat specialists. They require cold, clean, fast streams with clean gravel beds. For this species of fish to be so prevalent in Morrell Creek, it shows that it is a very healthy habitat.

With water quality being such an important factor, streamside monitoring allows researchers to judge the health of the environment the creek provides. Flow, velocity, turbidity, and pH are all tested. While all of this sounds very scientific (and it is!), hydrology is not limited to trained professionals. Tonya Smith, the science teacher at Seeley-Swan High School, has collaborated with many local scientists to teach students the basics of streamside monitoring. This idea came to fruition three years ago. Streamside monitoring allows students to engage in hands-on learning and critical thinking. It also gets kids out of the basic sit-down classroom setting, which increases interest and retention of information learned.

Monitoring is going on currently. The most recent data gathered correlates with what can be seen by just standing on the bridge and looking down on Morrell Creek. It is raging and muddy, at a height of 3.25 feet. The velocity is about 410 cubic feet per second. That is equivalent to 410 basketballs floating by in each cubic foot of water every second! Obviously, this number fluctuates throughout the year. It is very interesting for students, teachers, and researchers alike to study Morrell Creek, and streamside monitoring is the perfect opportunity to do just that.