Students Supply Data to Research Community through National Hydrologic Database

McCall Outdoor Science School Cyberlearning website connects students to the research community.

Outcome:	A new website (http://mossi.tfhsbruins.com) allows teachers and students to integrate place-based citizen science with climate change education and research. It provides: • Teaching tools that will broaden participation in, and understanding of, computational thinking and climate change science; • Greater access for students to interactively use educational versions of climate models to test various climate change scenarios; • Strengthened middle and high school extracurricular science education programs, allowing them to reach more teachers and students.
Impact/Benefits:	A new website supports teaching and learning about water resources in a changing climate for students and teachers across Idaho. Doing hands-on science in a local environment helps students relate science directly to their personal experience. This project expands Cyberinfrastructure (CI) awareness, increases use of CI, and better integrates quantitative reasoning, data analysis, and climate change modeling with education. This is one of the first examples of citizen science contributing to the database known as CUAHSI HIS (CUAHSI - Consortium of Universities for Advancement of Hydrologic Science, Inc. and HIS - Hydrologic Information System). It helps create a standardized way to store and share hydrologic data nationwide. By contributing to HIS, students learn the importance of data quality.
Explanation:	The McCall Outdoor Science School (MOSS) received funding from the Western Tri-State Consortium to create an internet-based, cyberlearning website to help students understand the impact of climate change on water resources in Idaho. This is done through internet-accessible curriculum and education materials developed for middle and high school students. Lesson plans are created for outdoor field settings to give students experience collecting water-related data. Students can upload data to a database through the website from wherever their school is located. Their ability to share data with peers and to contribute to a national database helps students understand the broader relevance of their work.