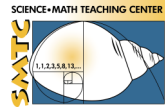


DECEMBER 1,  
2016

# EPSCoR Wyoming Water Workshop



Teacher Learning Center  
ENGAGING TEACHERS. INVIGORATING EDUCATION



## Upstream/Downstream: The headwaters of the Wind River to the Missouri River Watershed

On November 5, 2016, in partnership with the Teton Science Schools and the University of Wyoming's Science and Math Teaching Center, Wyoming EPSCoR hosted "Upstream/Downstream: The headwaters of the Wind River to the Missouri River Watershed" on the Wind River Reservation, home to the Northern Arapaho and Eastern Shoshoni tribes. It brought together educators from the region to discuss the cultural and scientific aspects of water, as well as how to bring that information into the classroom in engaging and meaningful ways. The day began with a discussion of the cultural aspects of water, specifically for Native Americans on the reservation. Sergio Maldonado, State of Wyoming Tribal liaison to the Northern Arapaho tribe and tribal member, offered a prayer and spoke about the spiritual connection that the Native American tribes have

### Topics:

- *What is a watershed?*
- *Point and non-point source pollution*
- *Groundwater and aquifers*
- *Water quality testing for dissolved oxygen, turbidity, and dissolved solids*
- *Macroinvertebrates*
- *Using NGSS to plan lessons*

to water. Tribal member Fernando Roman informed the group about the current uses of the water that flows from the Wind River Mountains through Reservation territory. He highlighted possible sources of pollution that threaten the river both at its headwaters and throughout its journey to the Gulf of Mexico. Afterward, Jason Baldes, Executive Director of the Wind River Native Advocacy



Michelle Oberly and Deb Smith from Fort Washakie School

Center, spoke to the group about legal issues surrounding water- and land-use rights on and near the Reservation. These discussions were followed by several hands-on lessons in which participants learned important concepts and vocabulary about watersheds, pollution, and water quality testing. Claire Ratcliffe and Tootsie Jablonski, graduate students funded through EPSCoR, modeled the lessons and provided educators with resources

to implement back in the classroom immediately. The 17 participants represented four local schools as well as a variety of grade levels K-12 and alternative classrooms. A great time was had by all, and EPSCoR is looking forward to seeing how the lessons and information will be translated into high-quality instruction for the students on and near the reservation.

· Tootsie Jablonski ·

Photo by Jennifer Wellman