

The Department of Geological and Environmental Sciences (GEOS)  
and  
The Association of Geology and Environmental Students (AGES)

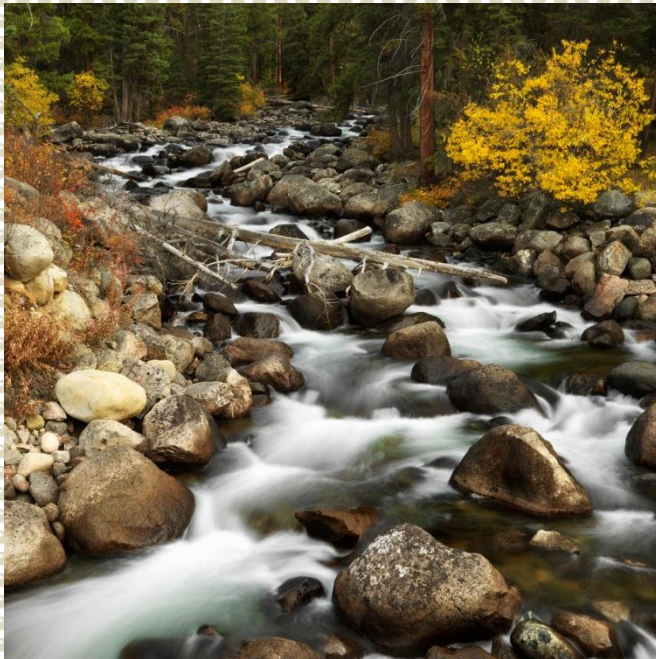
Present GASS...the  
**GEOS/AGES Seminar Series**

**Tuesday, April 23 – 5:00 p.m. - PHSC 109**

**Dr. Steffen Mehl**

Department of Civil Engineering, College of Engineering, Computer  
Science, and Construction Management ~ CSU Chico

**“Modeling Stream-Aquifer Interactions: Considerations for  
Sustainability”**



✚ Freshwater streams and the ecosystems they support are a vital natural resource, but simulation of these interconnected systems can be challenging even for robust numerical models. This work examines how stream-aquifer interactions are represented in models of groundwater flow using both coarse and highly refined

grids and single and multi-layer models.

- ✚ Additional concerns are the spatial and temporal characteristics involved with stream leakage and what factors (slope, hydraulic conductivity, etc.) make a stream more likely to go dry and/or become disconnected from the groundwater system.
- ✚ Last, different frameworks are explored to determine how pumping wells can be managed to sustainably capture water from stream-aquifer systems.