

# Hydrology and Water Resources

This research group will facilitate research on physical, chemical, ecological, and socioeconomic processes of hydrology and water resources system by hosting interdisciplinary seminars, graduate journal clubs, and producing collaborative proposals at multiple levels.

Current research in the group includes alpine hydrology, aquatic ecology, fluvial geomorphology, groundwater hydrology, hydroclimatology, lake and reservoir studies, riparian ecology and management, stream restoration, urban hydrology, water education, water quality modeling and analysis, water use analysis, watershed process and management, and water resource management. Faculty expertise in SOE is complemented by other researchers on campus and

## Faculty and staff

Dewey
Rueter
Sytsma
Yeakley
Bulman
Cummings
Fountain
Perkins
Chang
Burns
Lafrenz
Pan

## PhD Students

Anthony

## Affiliated centers or institutes

Center for Lakes and Reservoirs
Center for Integrated River Basin
Environmental Professionals Program
Student Watershed Research Project
Student Watershed Research Group

The hydrology and water resources research group (HWRRG) within the SOE attempts to serve as a powerhouse of various aspects of water research on campus and the region and beyond. Faculty expertise and synergy create transformative research questions to solve complex water issues. Our faculty serves leading roles in local, regional, national, and international organizations by providing various professional services (examples?) Students enrolled in this research group will learn theoretical and applied sides of water resource research by working with agency scientists and community partners. We anticipate expanding our program by seeking active collaboration with various local, regional, and international partners. To help achieve this goal, we propose to hire new faculty lines in coming years such as ecohydrology and hydrogeology.

## Example Graduate Courses

ESM 524	Wetland Ecology
ESM 525	Watershed Hydrology
ESM 526	Ecology of Streams and Rivers
ESM 527	Watershed Biogeochemistry
ESM 573	Phytoplankton Ecology
ESM 575	Limnology and Aquatic Ecology
G 543	Ground Water Geology