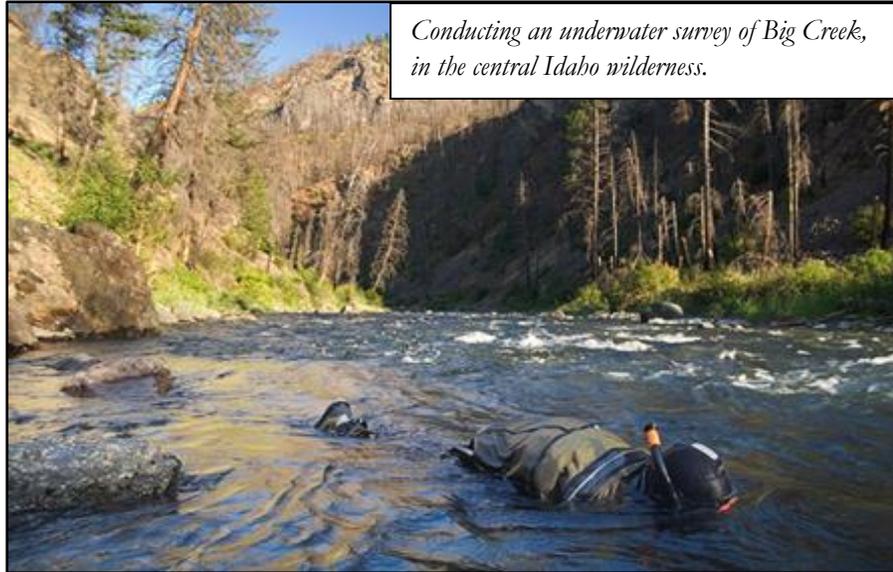


The [Idaho State University Stream Ecology Center](#) is recruiting to fill up to 4 graduate student positions (combination of MSc or Ph.D.) to start in summer or fall of 2024. Research opportunities for these positions are described below. Funding support has been secured or is expected for these projects, including support for graduate research assistantships, field and lab assistants, and study expenses.

1. One project is linked to long-term studies conducted in the central Idaho wilderness (Middle Fork Salmon River region) investigating riverine biodiversity, stream-riparian food webs and communities, and ecosystem processes in the context of this large, free-flowing river system. This wilderness is being influenced by disturbances like wildfire, shifting flow regimes, and other manifestations of climate change, along with changing animal populations such as declining salmon runs, increases in beaver populations, and ongoing changes in terrestrial predator-prey (e.g., wolf-ungulate) interactions, all of which set the stage for research questions with broad applicability to natural resource management in the western US.



Conducting an underwater survey of Big Creek, in the central Idaho wilderness.

2. A second position, supported by Wyoming Game & Fish Dept. and a suite of partnering organizations, will focus on the ecology of the upper Snake River in Grand Teton National Park, specifically the effects of management of flows from Jackson Lake on river and floodplain habitats, fish populations, and the invertebrates on which they depend. A MSc student will work with a team to complete a study that yields recommendations for improving flow management, particularly for annual ramp-down of flows that occurs in fall.



The upper Snake River and floodplain habitats in Grand Teton Natl. Park.

3. A third position exists to work in partnership with the Shoshone-Bannock Tribes to understand effects of flow management and habitat restoration efforts on the ecology of the Snake River and its floodplain habitats located on the Tribes' Fort Hall reservation. This work is part of ongoing efforts intended to co-design research and educational activities that engage with and are responsive to the Tribal community, its needs, values and culture.



Underwater scene and mayfly close-up, floodplain springbrook on Tribal lands.

4. A fourth student opportunity involves a linked social-ecological science collaboration between the U.S. Forest Service, ISU, and North Dakota State University, focused in the Teton and Salt watersheds of the upper Snake River basin. This student project (co-advised with Dr. Morey Burnham, ISU Sociology) will engage communities and stakeholders to investigate how social processes (e.g., human attitudes and behaviors) interact with ecological and genetic processes to mediate how landscape features, restoration activities and environmental stressors influence interactions among native and nonnative salmonid fishes. The student's work (supported by funding for a research assistantship and study expenses) will contribute to developing models informing management and conservation of fish populations in the region.



Meeting of the public (left) in upper Snake Basin to discuss concerns regarding habitat and management of prized cutthroat trout (right).

Contact Dr. Colden Baxter (coldenbaxter@isu.edu) to express interest and/or ask questions about these opportunities. For information regarding the ISU graduate degrees in Biology, and directions for applying, visit the ISU Biology Department [web page](#). Applications are open now, and are encouraged asap for priority consideration, but will be accepted throughout winter 2024.