

## Meet Lizzie Jossie: Working to Guide Management and Conservation of the Teton River



*Lizzie Jossie is an MS student at ISU majoring in biological sciences.*

Growing up in the Pacific Northwest, Lizzie Jossie always had a lot of interest in the outdoors, public lands, and nature, and always wanted to work with fish and wildlife.

Jossie moved from Oregon to Idaho ten years ago and completed bachelor of science degrees in both fisheries and wildlife resources at the University of Idaho. Her interests led her to Idaho State University (ISU) where she is currently a graduate student majoring in biological sciences and part of the Idaho GEM3 team working closely with stakeholder groups in the Teton Valley.

Her research explores the outcomes to changing stream connectivity for both stakeholders and Yellowstone cutthroat trout and will help provide guidance for management of fisheries, water, and habitat in the Teton River. Her work also integrates social and ecological

science and will improve stakeholder engagement and collaboration driven by GEM3, ISU, and Teton Valley stakeholders.

Jossie states, “Interview results suggest that the social-ecological outcomes to changing stream connectivity become increasingly complex as we consider more and more diverse stakeholder perspectives. Considering a wide range of stakeholder perspectives may be important for future decision-making.” In addition, as Jossie notes, modeled outcomes for Yellowstone cutthroat trout populations depend on the presence of migratory behavior, reproductive separation from rainbow trout, and control of non-native species such as brown and brook trout. Managing for those factors may be important for Yellowstone cutthroat trout persistence in the Teton River drainage.

*“The results from my research can contribute to the management dialogue surrounding native and non-native fisheries, stream habitat, and water use in the Teton River drainage.”*

Jossie is co-advised by Colden Baxter (Dept of Biological Sciences at ISU) and Morey Burnham (Dept of Sociology, Social Work, and Criminology at ISU). She also works with Travis Seaborn (post-doc in Dept of Fish & Wildlife Sciences at University of Idaho). Her work also includes participation in the Teton Valley Stakeholder Advisory Group, and works with Friends of the Teton River and Idaho Department of Fish and Game; who have been helpful in sharing local knowledge as well as fisheries-related data.

According to Jossie, “The results from my research can contribute to the management dialogue surrounding native and non-native fisheries, stream habitat, and water use in the Teton River drainage. It can highlight gaps in knowledge, as well as areas of agreement, between different types of stakeholders and strengthen collaborations between various stakeholder groups in the region.”

Upon graduation, Jossie wants to find a job with a non-profit organization or government agency with a mission of conservation and hopes to contribute to the management and conservation of Idaho’s unique natural resources.