

Ph.D. Graduate Research Assistantship
Stream Drying, Drought, and Aquatic-Terrestrial Subsidies

University of Nevada, Reno – Nevada Cooperative Fish and Wildlife Research Unit

Responsibilities – We are seeking a Ph.D. student to investigate the interactive effects of land management, climate warming, and drought on Great Basin dryland aquatic ecosystems. This research will be carried out through empirical and modeling studies focused on characterizing physical and biological mechanisms driving aquatic habitat dynamics and productivity. We expect the incumbent to design and carry out a multi-scale field and/or experimental research project to investigate interactions between hydrologic regimes, flow permanence, and stream productivity (e.g., in-situ invertebrate production, reciprocal subsidies, fish growth and biomass) and develop approaches for mapping the distribution of cross-ecosystem subsidies that can be applied across watersheds to track changes in ecological water availability as affected by drought.

This position is part of a broader effort led by USGS to develop a fully integrated socio-ecological watershed condition and drought vulnerability assessment approach for the Western U.S. Project personnel include aquatic and terrestrial ecologists, climate and social scientists, graduate students, and support staff including a lab manager and undergraduate field and lab technicians. The incumbent will work closely with university, state, federal, and tribal partners, so strong communication skills will be critical to project success.

Qualifications – M.S. in fisheries biology, aquatic ecology, or closely related field. Experience with sampling freshwater invertebrates, fishes, and aquatic and riparian habitats in the field is preferred. Interest in ecohydrology, aquatic food webs, and freshwater fish ecology are desired, and strong quantitative and communication skills are required. Applicants with practical field and laboratory research experience and evidence of, or commitment to, publication and dissemination of research findings will be highly competitive for this position.

Salary – Full support including stipend plus tuition waiver and student health benefits for 4+ years.

Closing date – Until filled, but I will review applicant materials around October 1. Preferred start date is January 2025.

Contact – Send cover letter describing your professional interests and experience, CV, unofficial copies of transcripts, plus contact information for three references to: Dr. Jeff Falke (jfalke@unr.edu). Additional project information is available upon request.