

## **Postdoctoral Scientist Opportunity in Freshwater Fish Ecology and Habitat Modeling**

University of Alaska Fairbanks – Alaska Cooperative Fish and Wildlife Research Unit

**Responsibilities** – Post-doctoral researcher sought to lead a research project to investigate vulnerability of boreal aquatic ecosystems to fire and climate change. Fire is a dominant, natural, and widespread ecological disturbance process in boreal forests, yet fire frequency, size, and severity are increasing in Alaska owing to climate warming. Interactions among fire, climate, permafrost, vegetation, hydrologic, and watershed processes are poorly understood, yet critical for conservation and management of boreal aquatic habitats in a changing environment. The incumbent will be expected to develop an integrated modeling framework by linking spatially-explicit climate, fire, vegetation, permafrost, hydrologic, and stream temperature models parameterized for interior Alaska. Model output will be used to quantify future impacts of fire and climate on boreal aquatic habitats and population vulnerability, and inform fire management scenario development using structured decision making.

This position is part of a larger project with goals to develop a better understanding of the effects of fire and climate change on boreal aquatic ecosystem dynamics. Project personnel include aquatic and terrestrial ecologists, hydrologists, climate scientists, graduate students, and support staff including a lab manager and undergraduate field and lab technicians.

**Qualifications** – PhD in fisheries biology, aquatic ecology, or closely related field. The successful candidate will be a highly productive, self-directed, and motivated individual with a strong record of scientific research and publication. Experience working in freshwater ecosystems is preferred. Applicants with interest in ecohydrology, spatial modeling, and vulnerability analysis are desired, and strong quantitative and communication skills are required.

**Salary** – Commensurate with qualifications plus health benefits for 2 years with opportunity to extend.

**Closing date** – Until filled, preferred start date is late Spring or early Summer 2018.

**Contact** – Dr. Jeff Falke, U.S. Geological Survey, Alaska Cooperative Fish and Wildlife Research Unit, University of Alaska Fairbanks, Fairbanks, Alaska, 99775-7020. Office: 907.474.6044; Email: [jfalke4@alaska.edu](mailto:jfalke4@alaska.edu).

**Weblinks** – Falke lab: <https://uaf-ffel.weebly.com/>

Institute of Arctic Biology: <https://www.iab.uaf.edu/>

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