Postdoctoral Scientist Opportunity in Freshwater Ecology and Habitat Modeling

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

Responsibilities – Post-doctoral researcher sought to support ongoing research projects with goals to investigate the resilience of boreal aquatic ecosystems to wildfire 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 change. 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. We have developed an integrated modeling framework that links spatially-explicit climate, fire, vegetation, permafrost, geomorphic, hydrologic, and stream temperature models parameterized for interior Alaska. The post-doc will be expected to utilize model output to quantify future impacts of fire and climate change on boreal aquatic habitats and populations, model salmon habitat distributions across two large boreal river basins, and assist with stakeholder engagement and fire management scenario development using structured decision-making processes.

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, fluvial geomorphology, species distribution modeling, and vulnerability analyses are desired, and strong quantitative and communication skills are required.

Salary – Commensurate with qualifications plus health benefits for 1 year with opportunities to extend.

Closing date – Until filled, preferred starting period is Autumn/Winter 2021. Application link: <u>https://careers.alaska.edu/en-us/job/518222/research-post-doctoral-fellow</u>

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Weblinks - Falke lab: https://uaf-ffel.weebly.com/

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

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