

Post-doctoral research opportunity modelling cumulative effects on fish populations

We are seeking candidates for a 6-month term post-doc position to begin immediately with possible extension to two additional years pending funding. The goal of the project is to begin developing freely available open-source software as a framework for modelling cumulative impacts to freshwater fishes to guide recovery planning and adaptive management based on integration of taxon-specific stressor-response functions. The intended outcome is a flexible and easily used modelling tool that can be applied by managers to assess the long-term consequences of cumulative spatial and temporal stressors and the outcomes of different management interventions.

Core modelling objectives will be *i)* the development of a flexible framework that integrates spatial habitat data with a size-structured population model and stage-specific stressor-response functions, and *ii)* a matching interface that allows real-time exploration of different management scenarios or stressor-response functions in a workshop setting. Model development will take place in collaboration with provincial, federal, and university scientists (B.C. Ministry of Environment, Alberta Environment and Parks, Fisheries and Oceans Canada (DFO), Simon Fraser University). Candidates should have strong modeling and software development/programming skills, and a solid foundation in population modelling and applied ecology. Salary will range between \$29,721 and \$34,413 over the six months depending on experience, start date would be as soon as possible. Research would be based out of the Dept. of Biological Sciences, Simon Fraser University <https://www.jonwmoore.org/> , DFO's Riverine Ecology Laboratory in Winnipeg, <https://profils-profiles.science.gc.ca/en/profile/eva-enders> , or the University of British Columbia <http://www.aferu.ca/rosenfeld-lab> (although remote work is the most likely scenario during the current pandemic). For more information or to forward a CV, applicants should contact either Dr. Jonathan Moore (jwmoore@sfu.ca), Dr. Jordan Rosenfeld (604-222-6762, Jordan.rosenfeld@gov.bc.ca) or Dr. Eva Enders (Eva.Enders@dfo-mpo.gc.ca , <https://profils-profiles.science.gc.ca/en/profile/eva-enders>).