



**JOB TITLE:** Quantitative Fisheries Biologist

**EXPECTED SALARY:** \$55,000 - \$75,000 DOE

**JOB DESCRIPTION:**

Mount Hood Environmental is seeking a motivated Quantitative Fisheries Biologist to work with our interdisciplinary team to implement fisheries research, monitoring, and project evaluation. This position would support tributary fish habitat restoration initiatives including watershed assessments, and statistical and analytical tasks such as fish abundance, growth, migration timing, survival, movement, and population dynamics. The individual would work alongside collaborators including engineers, geomorphologists, biologists, statisticians, and field staff. The ideal candidate is a proficient writer with a solid foundation in statistical concepts, is proficient in computer programming (e.g., R, Python), and has demonstrated experience working with clients or interagency collaborators to propose projects and develop deliverables. In addition, this individual should have expertise in anadromous and resident salmonid biology with an in-depth knowledge of appropriate peer-reviewed literature and reports.

The Quantitative Fisheries Biologist will work with MHE senior scientists, statisticians, and fisheries biologists on fish-habitat models to estimate tributary habitat carrying capacity to evaluate benefits of prospective stream rehabilitation projects. Potential tasks include developing and leveraging a variety of aquatic habitat models to identify species and life stages that may be limiting population recovery, using information from fish-habitat models to inform actions that may remove limitations, and implementing habitat monitoring protocols and evaluating habitat uplift. Projects may also include monitoring fish response from restoration actions and evaluating long-term population- and watershed-scale changes in fish growth, survival, migration timing, and abundance. The position may also require implementation of life cycle or individual-based models to determine actions that maximize benefits to diminished salmonid populations.

**EXAMPLE OF POSITION RESPONSIBILITIES:**

- Project management and leadership
- Develop proposals, scopes of work, and deliverables for clients,
- Collect, organize, QA/QC, and analyze complex datasets,
- Contribute to and understand scripts and analyses,
- Regular meeting attendance with clients and collaborators to stay up-to-speed on relevant issues in target project areas,
- Conduct literature reviews,
- Lead- and co-author written reports and publications,
- Data visualization and distribution through the development of applications or websites,

- Attend and present at regional scientific meetings,
- Assist and lead field efforts.

#### **MINIMUM REQUIREMENTS:**

- Bachelor's degree in Fisheries, Biology, Quantitative Ecology, Statistics or an equivalent field, and four years of related experience,
- **OR** Master's degree in any of the above or an equivalent field, and two years of related experience,
- **OR** Doctoral degree in any of the above or an equivalent field.
- Demonstrated experience implementing scientific hypothesis testing and problem solving.
- Lead authorship on technical reports and/or publications with an ability to concisely communicate results and outcomes.
- Proficient using Microsoft Office suite (Word, Excel, Powerpoint, etc.).
- Demonstrated ability to meet with collaborators and clients including effective verbal communication.

#### **DESIRED QUALIFICATIONS:**

- Proficient using R and/or Python and working in the Git environment.
- Track record of meeting with clients or research collaborators and presenting at professional meetings.
- Knowledge of anadromous fish life history and biology, specifically Columbia River stocks.
- A unique fisheries skillset that adds to the breadth of our interdisciplinary team.
- Demonstrated experience conducting data analyses such as mark-recapture abundance, survival estimation, growth and bioenergetics, stock-recruitment, fish population dynamics modeling, or similar.

**LOCATION:** Boise, ID preferred, but locations elsewhere within the Snake River basin negotiable. Many of the current and anticipated projects occur in the Upper Salmon, Clearwater, and Grande Ronde subbasins and nearby. However, this position would be expected to contribute to existing projects throughout the Columbia River basin, and beyond.

#### **ABOUT US:**

MHE is a multi-disciplinary contract research and aquatic services company specializing in fisheries, environmental chemistry, water quality, and ecology. Our scientific evaluations aim to address our clients' needs with applied research, monitoring, and analysis. Our capabilities span study design, data collection, research review, quantitative analysis, dissemination of findings, and regulatory compliance.

**Fisheries:** MHE fisheries scientists have conducted studies in watersheds throughout the Pacific Northwest and California that include data collection and analysis projects for various salmonids and non-salmonid species. We are well-versed in population dynamics modeling, instream flow studies, fish abundance and survival estimation, dam passage

and migration behavior evaluations, and stream habitat assessments. We also specialize in applied genetics including stock identification, genetic tagging, and effective population size monitoring to track individuals and monitor populations. Additionally, we have extensive experience working with engineers and geomorphologists to design stream restoration projects to maximize benefits to salmonid species.

**Toxicology & Water Quality:** MHE's scientists are experienced with aquatic and terrestrial toxicological risk assessments and monitoring. Data collection, synthesis of existing data, and literature review are used to inform operational or compliance concerns related to agriculture, forestry, and industrial practices. Our laboratory diagnostics include various capabilities in toxicity testing and rapid nutrient quantification as well as third-party chemical analysis according to EPA standards.

**Technical Services:** MHE designs statistically robust studies. We have experience conducting meta-analyses, parametric & non-parametric analyses, Bayesian modeling, population and life-cycle modeling, and spatial data analysis. We also offer clients analytical solutions through Amazon web services, R, Shiny, and GIS applications.

**Regulatory Process:** MHE scientists are experienced with ESA consultations, Biological Assessments, and Habitat Conservation Plans. We have a deep understanding of the regulatory processes and have supported agency and private sector clients through numerous ESA consultations with emphasis on designing Biological Effects Analyses.

**BENEFITS:**

- Competitive pay
- Health care stipend
- IRA employer match
- Paid time off
- Ability to work remotely

**WEBSITE:** <https://mthoodenvironmental.com/>

**CONTACT:** Address any questions regarding this position to Bryce Oldemeyer, Quantitative Fisheries Scientist, [bryce.oldemeyer@mthoodenvironmental.com](mailto:bryce.oldemeyer@mthoodenvironmental.com), 208-571-5080

**TO APPLY:** Please send cover letter, CV, three references, and a writing example to [info@mthoodenvironmental.com](mailto:info@mthoodenvironmental.com)

**CLOSING DATE:** May 19, 2023