

Great Lakes Fishery Commission – Fish Passage



Position: Fisheries Quantitative Research Biologist

Location: Traverse City, MI

Background: The Great Lakes Fishery Commission (GLFC) is a bi-national organization dedicated to sustaining the productivity of fish stocks in the Great Lakes and controlling invasive sea lamprey populations. We lead cutting-edge research and foster collaboration among federal, state, tribal, and academic partners to protect and enhance one of the world's most vital freshwater ecosystems. The GLFC is leading the bi-directional selective fish passage (FishPass; <https://www.glfc.org/fishpass.php>) project at the Boardman/Ottaway River's Union Street Dam in Traverse City, MI, a multi-agency collaboration aimed at providing up- and down-stream passage of desirable fishes while simultaneously blocking or removing undesirable and invasive fishes. FishPass is currently under construction, and on-site selective fish passage research is expected to begin by 2027. Once constructed, the top priority for research at FishPass will focus on the testing and evaluating fish movement and efficiency of sorting mechanisms in the fish-sorting channels of FishPass (Priority 1 of the [FishPass Assessment Plan](#)). We are seeking a motivated and experienced Fisheries Quantitative Research Biologist to lead in-channel experimental studies and quantitative evaluations of fish sorting technologies, under the direction of the FishPass Principal Engineer/Scientist and FishPass Advisory Board.

Responsibilities: The Fisheries Quantitative Research Biologist (Biologist) will design and lead advanced quantitative and computational research concerning selective passage studies in support of Priority 1 of the [FishPass Assessment Plan](#) – testing and evaluating fish movement and efficiency of sorting mechanisms in the fish-sorting channels of FishPass. The Biologist will complement the work of the Assessment Biologist to support Priority 2 of the [FishPass Assessment Plan](#) – assessment of overall fisheries productivity in the Boardman/Ottaway River and broad scale effects of selective fish passage. The Biologist will apply advanced quantitative statistical techniques to analyze fish behavior and movement data, as well as sorting mechanism efficiency to develop and optimize selective fish passage. The Biologist will assist the Principal Engineer/Scientist in implementing the FishPass agreements, guidelines and protocols for FishPass operation and maintenance, and provide support to implement the FishPass Research Plan. The Biologist will also assist in constructing, operating, testing, and repairing electronic and scientific test equipment used at FishPass, and assist in the construction and modification of new and prototype fish sorting devices. The Biologist will be responsible for writing scientific manuscripts, technical reports, briefing notes, data summaries, or other internal publications that include recommendations for changes, elimination, or improvement of operations and analyses supporting development of annual FishPass research plans.

Qualifications: The ideal candidate will have an advanced degree (MS minimum, PhD preferred) in biology or ecology (with focus on fisheries and/or animal behavior) or alternatively in statistics, mathematics, or engineering with a background in biology or ecology, and two (2) years of professional experience in relevant fisheries research. Demonstrated experience in project leadership, implementing advanced quantitative analyses, and maintain/operate experimental systems (i.e., fish guidance technologies, monitoring equipment) within a controlled research setting. Candidates must also have a proven record of publishing in peer-reviewed scientific journals and providing oral presentations at international scientific meetings.

Applicants are encouraged to submit a cover letter, CV, relevant publications, and names and contact information for three references to Dan Zielinski (dzielinski@glfc.org) by **December 22, 2025**. Position grading will be dependent on experience, but will be equivalent to a GS-12 (salary \$88,621 plus benefits). The anticipated start date for the position is January 19, 2026 or sooner. The position will be stationed at the Great Lakes Fishery Commission office at 310 W. Front Street, Traverse City, MI. Learn more about the Great Lakes Fishery Commission and FishPass [here](#).



Great Lakes Fishery Commission

POSITION DESCRIPTION **Fisheries Quantitative Research Biologist** **(Equivalent GS-0401-12)**

I. Introduction

The Great Lakes Fishery Commission has two primary responsibilities: 1) to develop coordinated programs of research on the Great Lakes to recommend measures which will permit the maximum sustained productivity of stocks of fish of common concern; and 2) to formulate and implement a program to eradicate or minimize sea lamprey populations in the Great Lakes.

The Great Lakes Fisheries Act authorized the appointment of advisors to the U.S. Section of the Commission to examine and be heard on all proposed recommendations, programs, and activities relating to the lake they represent. The U.S. Section appoints advisors from each lake from a list provided by the Great Lakes state governors. The Commission executes its management responsibilities with a Secretariat staff located in Ann Arbor, Michigan. The Secretariat serves as the primary interface between the Commission and those with whom the Commission interacts, directs program and business management efforts, and provides decision support on a wide range of issues.

Under direction of the Commission's Principal Engineer/Scientist and the Science Director, the employee will collaborate with the Assessment Biologist to oversee the FishPass Assessment Plan and conduct research in support of FishPass. Employee will work closely with the FishPass Advisory Board, Science Team, and scientists and engineers to design and lead selective passage studies in support of Priority 1 of the FishPass Assessment Plan, which is focused on testing and evaluating fish movement and efficiency of sorting mechanisms in the fish-sorting channels of FishPass. The employee will complement the work of the Assessment Biologist to support Priority 2 of the FishPass Assessment Plan, which is focused on overall fisheries productivity in the Boardman/Ottaway River and broad scale effects of selective fish passage. Employee will apply advanced quantitative statistical techniques to analyze fish behavior and movement data, as well as sorting mechanism efficiency to develop and optimize selective fish passage. Employee will supervise and train technicians and students as required. Employee assists the Principal Engineer/Scientist in implementing the FishPass MOU and MOAs, implementing guidelines and protocols for FishPass operation and maintenance and provides support to help implement the FishPass Research Plan. Employee assists the Principal Engineer/Scientist in constructing,

operating, testing, and repairing electronic and scientific test equipment used at FishPass, and assists in the construction and modification of new and prototype fish sorting devices. The employee will be responsible for writing scientific manuscripts, technical reports, briefing notes, data summaries, or other internal publications that include recommendations for changes, elimination, or improvement of operations and analyses supporting development of annual FishPass research plans.

Duty station for the position is Traverse City, Michigan.

II. Major Duties and Responsibilities

All Duties _____ 100%

Research Programs – Guides, administers, and delivers Priority 1 of the FishPass Assessment Plan – development and implementation of selective fish passage – and annual plan of research. Collaborates with the Assessment Biologist to coordinate broad fish movement studies in the Boardman/Ottaway River. Responsible for the deployment and monitoring of telemetry systems within and approximate to the fish-sorting channels, installation and operation of sorting mechanisms, evaluation of fish behavior and sorting success, and data analysis, storage, and dissemination of results. Provides technical support to the Principal Engineer/Scientist to implement the FishPass Research Plan. Assists Principal Engineer/Scientist and project partners to implement the Operation and Maintenance Plan. Will participate and contribute to weekly FishPass staff meetings and regular FishPass Advisory Board and Science Team meetings.

Leads and conducts advanced quantitative research concerning selective fish passage. Develops and deploys data-collection systems including new automated tools for annual and in-season data summary and analysis, in-depth analysis of complex multivariate datasets, and resolves novel technical challenges using innovative scientific approaches. Responsibilities also include formulating major research plans, estimating resource requirements, and recommending modifications to research objectives in alignment with the mission of FishPass. The incumbent adapts and modifies standard methodologies to address obscure or conflicting requirements, establishes new techniques, and conducts program analyses to support fish passage and ecosystem management goals.

Produces technical reports, data summaries, and contributes to internal publications. Maintains accurate records of experiments, databases, and analyses performed, conducting relevant literature searches and maintaining an up-to-date knowledge of all current methods of experimentation. Contributes to the dissemination of knowledge gained through research by preparing and publishing findings (minimum 1 lead authored paper per year) and presenting findings in meetings with partners and at scientific conferences.

Human resources – Contributes to a work environment that encourages knowledge of, respect for, and development of skills to engage with those of other cultures or backgrounds. Assisting in the supervision and training of visiting researchers, technicians, and students as required. Represents the Great Lakes Fishery Commission and FishPass and maintains liaison with local

partners and related organizations. Works efficiently and effectively as a member of a multidisciplinary team and has well established communication abilities. Interacts closely with FishPass Assessment Biologist and coordinates workflows and reporting.

Finance – Under direction of the Science Director and Principal Engineer/Scientist, prepares and administers budgets associated with research projects supporting the FishPass Research and Assessment Plans.

Research and Management Partnerships – Coordinates, facilitates, and promotes cooperation among local state, tribal, federal, and provincial agencies, and academic institutions to implement FishPass. Assists Principal Engineer/Scientist to provide regular updates to project partners.

II. Specific Duties

This position performs specific tasks to accomplish the major duties listed above in addition to other duties as assigned by the Science Director and the Executive Secretary.

Research Programs

- Collaborates with the Assessment Biologist to implement and annually review the FishPass Assessment Plan.
- Leads and conducts advanced quantitative and computational research concerning selective fish passage.
- Develops and deploys data-collection systems, analyzes complex datasets, and resolves novel technical challenges using innovative scientific approaches.
- Develops automated workflows and data systems to digest routine monitoring data and facilitate timely in-season reporting of key metrics supporting FishPass decision making.
- Disseminates findings through technical reports, data summaries, presentations, internal publications, and peer-reviewed journals.
- Provides technical support to the Principal Engineer/Scientist to implement the FishPass Research Plan and provides technical, analytical, and logistical support to visiting scientists.
- Understands the principles of operation and maintenance of specialized scientific equipment at FishPass and teaches scientists and students how to operate the equipment.
- Assists the Principal Engineer/Scientist and FishPass project partners implement the Operation and Maintenance Plan.

Human Resources

- Participates in weekly FishPass update calls with Science Director and Principal Engineer/Scientist.
- Supervises and trains technicians and students as required.

Finance

- Oversees preparation of budgets associated with independent research projects and those supporting the FishPass Research and Assessment Plans.
- Works with Commission staff to seek and apply for internal and external funding for FishPass research and assessment.

- Provides financial reporting information to the Principal Engineer/Scientist for reporting and other financial audits.

Research and Management Partnerships

- Serves as a liaison among visiting academics.
- Represents the Commission at scientific meetings and public hearings and prepares and presents reports as necessary.
- Facilitates information exchange between the Commission and its cooperators.
- Performs peer reviews of papers and proposals on request from journals and funding agencies.
- Assists the Science Director and Principal Engineer/Scientist in keeping the Commission and its partners fully apprised of programs, progress, and problems related to FishPass.
- Maintains membership in professional societies.

Other duties

- Assists or leads non-recurring projects as directed by the Science Director or the Executive Secretary in support of the Commission vision statements and the Joint Strategic Plan.