

GREAT LAKES FISHERY COMMISSION

INSTRUCTIONS TO PEER REVIEWERS

2100 Commonwealth Blvd., Suite 100, Ann Arbor, Michigan 48105

Tel. (734) 662-3209 / FAX (734) 741-2010

Thank you for agreeing to provide a peer review of a research proposal submitted for funding. For a description of the Great Lakes Fishery Commission's (commission) programs, please review the web site www.glfsc.org.

Proposals are reviewed based on four general criteria.

Peer review of proposals – Every research proposal submitted to the commission is subjected to a review by scientific peers. A recommendation to the commission for funding a project will be highly dependent upon positive, favorable reviews of the proposal.

Relationships to fishery agency and commission programs – Research projects will have a high priority for funding if they relate directly to the [Convention on Great Lakes Fisheries](#), the [commission's Strategic Vision](#), [Fish Community Objectives](#), or the research priorities identified in State of the Lake conferences, by the [Lake Committees](#), or by the [Sea Lamprey Control Board](#). Most projects supported by the commission's Fishery and Sea Lamprey Research Programs are organized under broad research theme areas that describe topics important to fishery or sea lamprey management in the Great Lakes. These theme areas establish key research questions and hypotheses that become the focus of specific projects. Research themes for the Fishery Research Program can be found at <http://www.glfsc.org/fishery-research.php>. Research themes for the Sea Lamprey Research Program can be found at <http://www.glfsc.org/sea-lamprey-research.php>.

Importance to conservation, rehabilitation, and sustainability of fisheries – Research projects will have a high priority for funding if they relate to a species of conservation or rehabilitation concern or if they are critical to the achievement of healthy Great Lakes ecosystems.

Past performance – Project leaders should have demonstrated technical expertise to complete the project or have co-investigators or appropriate partnerships with other organizations to meet all the requirements of the project. Projects must be non-duplicative with other projects. Principal and co-investigators should have had successful experience with similar projects.

Please read the attached conflict-of-interest statement for peer reviewers. If you are not sure whether a conflict of interest exists, please notify the appropriate research program associate (frp@glfc.org or slrp@glfc.org) before you decline to review.

Peer reviews are completed by answering a number of questions in an online form. A template for these questions is provided for your convenience below. Explanations for your answers are critically important to help project leaders revise and improve their proposals. Yes / No answers and scores with no explanation are not helpful. Reviews will be shared with the investigators, but your identity will not be revealed.

Thank you for your assistance in the commission's research program.

GREAT LAKES FISHERY COMMISSION

CONFLICT OF INTEREST STATEMENT FOR PEER REVIEWERS OF RESEARCH PROPOSALS AND TECHNICAL REPORTS

As a peer reviewer, you are asked to review a research proposal that will assist with Great Lakes Fishery Commission (commission) funding decisions. The performance of your review requires that you be aware of potential conflicts of interest. Please read the examples of potentially biasing affiliations or relationships below.

If you cannot conduct this review due to a conflict of interest, please contact the appropriate research program associate. Conflicts of interest are not accusations and do not imply that a reviewer's judgment is compromised.

The proposal must be kept in strict confidence. If, as a peer reviewer, you gain access to information not generally available to the public, you must not use that information for your benefit or make it available for the benefit of any other individual or organization without the permission of the authors. You are not to discuss a proposal or manuscript with its authors or other colleagues. Questions about the proposal are to be discussed only with the person coordinating the review of this proposal or with commission's science director.

The commission receives proposals and manuscripts in confidence and protects the confidentiality of their contents. For this reason, you must not quote or otherwise disclose or use material from any proposal or manuscript that you review (until it is published).

Potential Conflicts of Interest for Great Lakes Fishery Commission Peer Reviewers

Competitor for funding:

1. Direct involvement with a research proposal currently competing for funding from the same commission research program.

Relationship to applicant institution:

1. Current employment at the institution associated with the proposal or manuscript as professor, adjunct professor, visiting professor, or similar position (including multi-campus institutions).
2. Employment with the institution via consulting, an advisory arrangement, re-employment arrangement, or you are being considered for employment with the institution.
3. Employment at the same institution within the last 12 months.
4. Ownership of the institution's securities or other evidences of debt.
5. Holder of any office, governing board membership, or relevant committee chair in the institution.
6. Current enrollment as a student in the department or school of the institution that originates the proposal or manuscript.
7. Received an honorarium or award from the institution within the last 12 months.

Relationship with an investigator, author, project director, or other person who has a personal interest in the proposal or manuscript.

1. Family or close personal relationship including marriage, civil union, or other partnership.
2. Business or professional partnership.
3. Past or present relationship as a graduate committee member or graduate student.
4. Collaboration on a project or on a book, report, or paper within the last 48 months.
5. Other relationships, such as close personal friendship, that may affect your judgment or be seen as doing so by a reasonable person familiar with the relationship.

Confidentiality of Peer Reviews and Reviewer Identities

The commission's policy is that reviews and peer reviewer identities will not be disclosed, except that verbatim copies of reviews (without name and affiliation of the reviewer) will be sent to the principal investigator or lead author.

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RESEARCH PROPOSAL EVALUATION

2100 Commonwealth Blvd., Suite 100, Ann Arbor, Michigan 48105
Tel. (734) 662-3209 / FAX (734) 741-2010 Web: www.glf.org

Title of Proposal: _____

Name of Investigator: _____

Please respond to the questions below under four categories: (1) rationale; (2) scientific merit; (3) budget, logistics, and qualifications; and (4) summary of proposal. For each question, choose from the provided descriptions one which best describes your assessment of that element of the proposal. Please then provide an explanation to support your choice.

Rationale:

NOTE: Relevance of the proposed research to the Commission and its partner mandates, missions, vision, and objectives has been established by the Board of Technical Experts or Sea Lamprey Research Board at the pre-proposal stage and should not be considered in your review.

1. How important is the proposed research to advancing knowledge and understanding within its own field or across different fields (**please explain**)?

Research fills a key gap and could significantly advance field; could advance knowledge **across a range of disciplines**.

Research **addresses a key uncertainty and relates to other ongoing or required efforts in field**.

Research **further a line of inquiry or is a necessary next step, but will not likely provide major advances in the field**.

Research **not likely to advance field**.

2. Does this proposal adequately review the related scientific literature (**please explain**)?
If not, what key publications have not been cited and reviewed (**please list**)?

Literature extensively reviewed. **All key publications are referenced**.

Adequate literature review; some **additional literature could improve proposal**.

Literature review limited; **some key publications missing**.

Inadequate literature review; background knowledge **weak**.

3. Does the proposal demonstrate awareness of similar work being conducted elsewhere (**please explain**)? Please describe any related projects not addressed in the proposal and include, if possible, names and organizations involved.

Related and ongoing research **explicitly referenced and proposed research integrated.**

Acknowledges related and ongoing research, but does not explicitly link proposed research to these efforts.

Acknowledges some current related or ongoing research, but proposal could be improved by **referencing additional related work or integrating with related efforts.**

No demonstrated knowledge of related or ongoing research.

Scientific Merit:

1. Are the research objectives clear and focused? Are objectives presented correctly as statements related to scientific understanding based on interpretation of data analyses (rather than methodological steps such as collect data, conduct experiments, analyze data, write report). Do the objectives identify a pattern, process, or relationship among variables to be examined? Can the objectives be used to evaluate project progress? Do objectives reflect the research questions to be answered, the hypotheses to be tested, or the processes to be examined (**please explain**)?

Research objectives **are clearly stated, focused and correctly expressed** as statements related to scientific understanding based on interpretation of data analyses rather than expressions of methodological steps.

Research objectives **are understandable and correctly expressed** as statements related to scientific understanding based on interpretation of data analyses rather than expressions of methodological steps.

Research objectives **are understandable, but may lack focus and/or clarity or may not directly relate to scientific understanding.**

Research objectives **require clarity and focus and must be linked to scientific understanding rather than methodological steps.**

2. Will the proposed methods accomplish the objectives? Is the experimental design correct (e.g., sample size, sampling frequency, spatial/temporal distribution of sample collection)? What modifications should be incorporated (**please explain**)?

Experimental or investigative methods proposed to achieve the objectives **are appropriate.**

Experimental or investigative methods **sufficient** to achieve the objectives, **but alternative procedures may be more appropriate.**

Experimental or investigative methods could benefit from **updated/alternative procedures.** An **inappropriate method** may be present, but is not considered a "fatal flaw." Methods **incompletely documented.**

Experimental or investigative methods **flawed and not appropriate** to achieve objectives. Experimental methods **inadequately detailed.**

3. Are the proposed statistical tests appropriate and sufficient to achieve the objectives? What other types of analyses should be considered (**please explain**)?

Statistical methods are **up to date and appropriate** to achieve objectives. **No** additional/alternative analyses required.

Statistical methods are **appropriate** to achieve objectives; **however, additional and/or alternative approaches** could improve the power of the study.

Statistical methods **could partially achieve objectives**; however, **additional and/or alternative approaches** could improve the power of the study.

Statistical methods **flawed and/or inappropriate**. Statistical methods **inadequately detailed**.

4. Is the proposed research feasible? What is the probability that the objectives will be achieved (**please explain**)?

Attainment of objectives is **feasible**.

Attainment of objectives is **likely** feasible; may be ambitious or some uncertainties exist.

Attainment of objectives **may be feasible with revised sampling and/or analytical design**.

Attainment of objectives is **not feasible** as proposed.

Budget, Logistics, and Qualifications:

1. Is the budget appropriate for the research proposed? (**please explain**)

Budget **appropriate and cost efficient**.

Budget **appropriate**, but some uncertainties exist.

Budget **differs from expected**; some line items deficient in detail; unanticipated costs; or missing costs.

The budget is **inappropriate** or lacking sufficient **details**; **budget not linked to methods**.

2. Are the proposed research personnel (e.g., graduate students, technicians, postdocs) and equipment (e.g., lab facilities) appropriate to achieve the objectives? Are the test subjects or specimens available or can they easily be collected? Is the schedule for completion reasonable? What is the probability that the objectives will be achieved in the time frame proposed (**please explain**)?

Resources (personnel and equipment) **appropriate and available**. Expertise, relevant organizations, or investigators appropriate to achieve objectives. Research team **highly qualified** with required experience in relevant fields.

Resources (personnel and equipment) **acceptable**; **however**, team could be strengthened by additional expertise in particular field; samples or equipment may not be available.

Resources (personnel and equipment) may not be adequate to achieve project objectives. **Additional expertise, relevant organizations, or investigators required**. Research team **minimally capable** of achieving objectives.

Resources (personnel and equipment) to achieve project objectives **inadequate or unavailable**.

3. To what degree are the investigators qualified by education, training, and/or experience to conduct the proposed research? Are there other investigators, collaborators, or agencies that should be involved in this project? If so, what organizations, or types of expertise, are missing and what are your recommendations for dealing with this deficiency (**please explain**)?

The proposed objectives are appropriately scheduled and are **very likely to be achieved within the time frame proposed**.

Proposed objectives are appropriately scheduled and are **likely to be achieved within the time frame proposed**; some **minor resolvable** issues in program delivery schedule.

Questionable whether the **schedule** to complete the proposed objectives is feasible.

Objectives **not likely** to be achieved within the proposed time frame.

Summary of Proposal:

1. Does this proposal contain any critical flaws that would affect the feasibility, applicability, and/or timely completion of the proposed research (**please explain**)?
2. Does the proposal apply new conceptual or technological approaches to solving problems or investigating processes (**please explain**)?
3. Given your overall impression of the proposal, would you fund this project? YES NO