BOARD OF TECHNICAL EXPERTS

of the

Great Lakes Fishery Commission

TERMS OF REFERENCE

Approved September 2015

NAME

Board of Technical Experts

PURPOSES

The Board:

- formulates an annual program of research, entitled "Fishery Research Program" to address the information needs for achieving healthy Great Lakes ecosystem vision statement, including the research priorities identified by lake committees and the Council of Lake Committees (CLC), Fish Health Committee, and other priorities as determined by the Commission.
- serves in an independent, expert, and professional capacity to advise the Commission about scientific and technical matters relevant to the Convention.
- identifies broad areas of research in the biological and social sciences that incorporate research priorities and address information needs essential to the achievement of a healthy Great Lakes ecosystem vision and milestones.
- contacts and encourages investigators and project leaders to submit proposals.
- solicits peer reviews of fishery research proposals submitted to its programs.
- performs expert reviews of operational programs, management initiatives, and other science-related inquiries as requested by the Commission.
- holds meetings to review proposals, to formulate recommendations to the Commission, to identify new research theme areas, and to address other issues as deemed necessary by the Board or the Commission.
- reports to the Commission at its annual and interim meetings and CLC's spring and fall meetings regarding its proposed research plan, progress, achievements, emerging issues, and information needs.

AREA OF CONCERN

For deliberations of this Board, the area of concern is as defined in the *Convention on Great Lakes Fisheries*:

"Lake Ontario (including the St. Lawrence River from Lake Ontario to the 45th parallel of latitude), Lake Erie, Lake Huron (including Lake St. Clair), Lake Michigan, Lake Superior and their connecting waters..." and the area of concern "shall also apply to the tributaries of each of the above waters to the extent necessary to investigate any stock of fish of common concern, the taking or habitat of which is confined predominantly to the Convention Area."

BOARD MEMBER APPOINTMENT

Core Group – The core group is composed of five or more members and includes, at a minimum, one representative of the CLC. The CLC representatives will be selected based on their ability to advance the research priorities of the lake committees, especially those priorities expressed periodically at State-of-the-Lake conferences and more often in the research priorities of the lake committees. Core group members shall not be Partnership in Ecosystem Research and Management (PERM) faculty. Other members will represent scientific disciplines needed to review the Fishery Research Program and will be scientists with demonstrated strength in peer-reviewed research. Core-group members are responsible for formulating and recommending a program of research to the Commission.

Members-at-Large – The members-at-large are term-appointed members. Members-at-large include those who lead research themes and one or more of the Commission's PERM faculty. Members-at-large report on progress within their research themes, participate in securing peer reviews of proposals, and provide advice to the core group.

Nomination – The chair and other members are nominated by the Commission's Science Director from candidates who are recognized as leading scientists by their peers. The CLC representatives for the core group will be nominated by the Science Director in consultation with the CLC. The CLC representatives will have science backgrounds, be familiar with the information needs of Great Lakes fishery management agencies, and participate regularly in lake committee and CLC meetings. Members must agree to follow the code of ethics established for the Board.

Appointment and terms – The Commission appoints all members and the chair. Members are appointed for two-year terms beginning after the Interim Meeting in odd-numbered years. Composition of the Board should approximate a balance between Canadian and U.S. scientists. Prospective members are advised that appointments will involve a major commitment of time and effort. The chair is to be available to advise commissioners during the Commission's annual meeting.

DECISIONS

Decisions shall be made by a consensus within the core group. When consensus cannot be achieved, the majority opinion shall be the recommendation and the concerns of all members shall be described in the Board's report to the Commission.

ROLE OF SECRETARIAT

The Secretariat

- provides guidance regarding research direction with respect to the convention and the Commission's Strategic Vision.
- may participate as members.
- assists or leads development of research theme areas.
- ensures that Commission contractual arrangements and policies are followed.
- liaises among the Board, the Commission, and its cooperators.
- prepares and distributes meeting agendas, reports, and briefing materials and is responsible for meeting arrangements and the Board's website.

FISHERY RESEARCH PROGRAM

Purpose – To support and conduct research and develop recommendations that will provide the information needed for achieving healthy Great Lakes ecosystems.

Theme-area definition — Most projects supported by Board's Fishery Research Program are organized under broad theme areas that describe a topic important for achievement of healthy Great Lakes ecosystems. These theme areas establish key research questions and hypotheses, organized into a logical sequential progression, that become the focus of specific projects. Theme areas are often developed in part through workshops and are broad enough to justify and support the research of several investigators. Research themes are described in documents that provide a review of the relevant literature and identify research questions or hypotheses pertinent to the Great Lakes. Research themes may be endorsed by multiple funding agencies and therefore offer the opportunity for investigators to consider multiple funding sources.

Theme-area development – The development and leadership for theme areas are provided by members of the Board. Any researcher or Board member may propose new theme areas. Research priorities from lake committees should either be integrated into existing research theme areas or stimulate the development of new theme areas. When not represented in existing research theme areas, project support for these priorities will be earmarked for funding under lake committee research (see below).

Lake Committee Research – The Board also develops and executes a program of research in support of the immediate information needs identified by the lake committees, the Council of Lake Committees, and the Fish Health Committee.

Non-Theme Area Research – Projects that do not fall under any current theme area are also eligible for support. This category provides an opportunity for researchers with highly meritorious concepts, not connected to existing theme areas, to receive commission funding. It also provides a process for initiating projects that may develop into new research theme areas.

New Great Lakes Researchers – New-investigator research funding is provided to encourage new researchers to focus their programs on the Great Lakes. New researchers are those who were hired by a university or governmental agency in the Great Lakes basin within the past three years and those outside the basin. New investigators are characterized by never previously being awarded a Commission project costing more than \$15,000 USD.

Networking – In addition to the conduct of research, at its March meeting the Board will invite principal investigators for presentations of recent completion reports and new investigators for presentation of pre-proposals. A networking reception will be held to allow interaction between researchers and the Board.

Pilot projects – The Board administers a program to provide rapid support for pilot research projects designed to explore new hypotheses and concepts and to acquire preliminary data to guide the development of full research proposals. Pilot projects proposals can be submitted at any time, must be less than \$10,000 USD, will be acted upon at both the March and September Board meetings, and Board recommendations will be forwarded immediately to the executive secretary of the Commission for funding decision.

Recommendation of Fishery Research Program —Recommendation for funding of a project by the Board to the Commission will depend upon positive, favorable reviews of the proposal. Research projects supported by the Board will encourage the restoration and rehabilitation of Great Lakes fisheries as directed by the Convention and reaffirmed in the Commission's Strategic Vision. Of particular importance are research projects that support the Commission's Healthy Great Lakes Ecosystems Vision Statement. Research projects also must be consistent with Fish Community Objectives and with the intent of the Joint Strategic Plan. High-priority research topics and questions also are identified within the research priorities developed by the lake committees and the Council of Lake Committees.

Schedule for Research Proposals – The Board evaluates research projects via a seven-step process: 1) request for pre-proposals, 2) pre-proposal submission, 3) oral presentation of research, 4) full proposal submission, 5) peer review, 6)

Board review and recommendation, and 7) Commission approval. The time frame for these steps is as follows:

Any time Principal investigators discuss potential project

submissions with the Commission Science Director, the

Board chair, or theme-area leaders.

Early November Board issues request for pre-proposals.

January 15 Principal investigators submit pre-proposals.

Early March New principal investigators present their proposed

research to the Board (by invitation only).

Early April Principal investigators who are successful in the pre-

proposal process are invited to submit a full proposal.

June 1 Principal investigators submit full proposal.

June – August Board arranges peer review.

September - October Board recommends proposals for funding to

Commission, as well as presents its recommendations

to CLC.

Early December Commission decides which proposals to fund.

Mid December Board notifies principal investigators of outcome.

MEETING SCHEDULE OF THE BOARD

March meeting – The purpose of the March meeting is to allow (1) for oral presentations of FRP pre-proposals, (2) completion reports from recently completed FRP funded projects, and (3) decisions around which FRP research pre-proposals should be advanced as full proposals.

September meeting – The purpose of the September meeting is to (1) discuss peer reviews of full research proposals, (2) develop a program of research to recommend for funding to the Commission, and (3) discuss potential new research directions. This meeting also will discuss new research priorities, review progress within existing theme areas, and identify critical research areas to emphasize in the next request for pre-proposals.

TRAVEL EXPENSES

The Commission may, upon request, reimburse the member or the member's agency as appropriate.