

SEA LAMPREY RESEARCH BOARD

of the

Great Lakes Fishery Commission

TERMS OF REFERENCE

Approved September 2015

NAME

Sea Lamprey Research Board

PURPOSES

The Board:

- formulates an annual program of research entitled “Sea Lamprey Research Program” around thematic areas and recommends this program to the Commission.
- identifies areas of research to support the information needs essential to achievement of the Commission’s sea lamprey vision statement and milestones.
- identifies broad areas of thematic research that include research priorities and that address major information needs.
- solicits peer reviews of sea lamprey research proposals submitted to its research program.
- reviews proposed long-term and short-term research and technical assistance plans for the Commission’s internal research programs for relevance to Commission’s strategic vision. Work plan reviews will be provided for USGS Hammond Bay Biological Station (HBBS), USGS Upper Midwest Environmental Science Center (UMESC).
- 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 based on peer-reviewed research, to identify new research theme areas, and to address other issues as deemed necessary by the Board, SLCB, or the Commission.

- reports to the Commission at its annual and interim meetings and SLCB's spring and fall meetings regarding its proposed research plan, progress, achievements, emerging issues, and information needs.
- ensures dissemination of research results to all sea lamprey control staff and coordinates the transfer of science to the control of sea lamprey.

AREA OF CONCERN

For deliberations of the 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 eight or more members, including a Chair, the SLCB Chair, the BOTE Chair, and five or more external scientific disciplinary experts representing the breadth of expertise required to develop research program recommendations. Core group members shall not be Partnership in Ecosystem Research and Management (PERM) faculty, HBBS staff, or members of other SLCB committees or task forces. The external researchers will be selected from among those who are scientists with demonstrated strength in peer-reviewed research. Core-group members are responsible for formulating and recommending a program of sea lamprey research to be delivered by PERM faculty, HBBS staff, and other researchers.

Members-at-Large – The members-at-large are composed of term-appointed members. Membership comprises the directors of HBBS and the UMESC sea lamprey research units and five theme area experts, consisting of a subset of SLCB task force members and the Commission's tenure-track PERM professors at Michigan State University and the University of Guelph. Members-at-large discuss the scientific merits of research pre-proposals, proposals, and peer reviews, and how proposed projects relate to the research themes and priorities of SLCB's task forces. Members-at-large also may participate in securing peer reviews of proposals and providing advice to the core group.

Nomination – The chair and other members are nominated by the Commission's Science Director. If the SLCB chair is unable to serve he/she may nominate another member of SLCB with Commission approval. 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 even-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, SLCB, and 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.

SEA LAMPREY RESEARCH PROGRAM

Purpose – To support and conduct research that will provide the information needed to fully implement integrated sea lamprey control consistent with the Commission's strategic vision, including the development of novel, effective strategies for control.

Theme-area definition – Most projects supported by the Board's research program are organized under broad theme areas that describe a topic important for achievement of the Commission's sea lamprey vision statement and milestones. These theme areas establish key research questions and hypotheses 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. Descriptions of research themes are included in documents that provide a review of the relevant literature and describe research questions or hypotheses pertinent to the Great Lakes, and in a call for proposals.

Theme-area development – The development and leadership for theme areas are provided by members of the Board. Theme areas may be developed by any Board member but are most commonly developed by those who are also members of SLCB task forces, by PERM faculty, and by scientists at HBBS and UMESC. When a SLCB task force is devoted to the topic of a theme area, the research leader will work with the SLCB task force to develop the research concepts and supporting white paper. Any researcher, however, may propose new theme areas.

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

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 within the past three years 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.

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 project proposals can be submitted at any time, must be less than U.S.\$10,000, 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 Sea Lamprey Research Program – Research projects recommended by the Board for funding are to encourage integrated sea lamprey control, as directed by the Convention and affirmed in the Commission’s Strategic Vision. Of particular importance is research that is in support of the Commission’s Sea Lamprey Vision Statement and with the research priorities established by the SLCB and its task forces. Research projects supported by the Commission also must be consistent with Fish Community Objectives and with the intent of the Joint Strategic Plan.

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 sea lamprey manager, 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	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	Full proposals are due from investigators. June – August Board arranges peer review.
September - October	Board recommends proposals for funding to the Commission, as well as presents its recommendations to SLCB.
Early December December	Commission decides which proposals to fund. Mid-Board notifies principal investigators of outcome

MEETING SCHEDULE

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

September meeting – The purpose of the September meeting is to (1) discuss peer reviews of full proposals, (2) decide upon 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.