**DRAFT 2021-2024 Great Lakes ANS Panel Work Plan**

*Updated: April 2, 2021*

**Summary**

Per Section 1203 of the Nonindigenous Aquatic Nuisance Prevention and Control Act (NANPCA) as amended by NISA, pursuant to appropriations, the Great Lakes Panel (GLP) is mandated to:

* Identify priorities for the Great Lakes with respect to aquatic nuisance species
* Make recommendations to the ANS Task Force regarding ANS programs
* Assist the Task Force in coordinating Federal ANS program activities in the Great Lakes
* Coordinate ANS program activities in the Great Lakes
* Provide advice to public and private individuals and entities on methods of controlling ANS

To facilitate the fulfillment of this mandate, the GLP will enact a two-year work plan outlining a set of priority issues, activities and deliverables for a two-year period. In development of a work plan, the GLP will consider both its legislative mandate (above) and the unique role the GLP can play in identifying and addressing AIS issues:

* **Identify AIS issues needing discussion or action:** GLP members are in a unique position to bring issues from our constituents to the GLP for further discussion or action.
* **Determine the appropriate mode for discussion or action on an issue**: Depending on the particular discussion or decision points of an issue, the GLP can determine a mode for discussion or action, such as a GLP meeting discussion or separate symposium or conference.
* **Identify relevant parties:** GLP members may not always be the appropriate individuals to discuss or take action on an issue. GLP members can identify and convene the relevant individuals (including others from their agency), organizations, etc., for a particular issue.
* **Determine urgency:** The GLP can determine a level of urgency for a particular issue that will influence the mode of discussion or action.
* **Determine magnitude:** The GLP can determine whether an issue is local, regional, national or international, and that will influence the identification of relevant parties, the urgency and the mode of discussion or action.

This work plan does not preclude the GLP from responding to or taking action on other issues that may arise during the two-year period. Emerging issues will be addressed as described above and through mechanisms deemed appropriate by the GLP Chair, Executive Committee and/or the GLP membership. Additional detail on GLP operations and functions is also provided in the [GLP Guidance for Operations document](http://www.glc.org/wp-content/uploads/2013/10/GLP-Guidance-for-Operations_final_December-2012.pdf) and the work plan will be implemented within the context of that document.

**Regional Coordination**

The network of collaborative efforts working to advance effective and coordinated approaches to AIS prevention and control in the Great Lakes region is extensive. The GLP is positioned at the intersection of many of these groups, with members that are engaged across multiple collaborative forums. Over the next two years, the GLP will proactively work to identify, support and advance AIS priorities that are common across these groups through its normal operations (e.g., meetings and committees). This will include coordination with the Great Lakes Water Quality Agreement Annex 6 Subcommittee, the Great Lakes Restoration Initiative, the Great Lakes and St. Lawrence Governors and Premiers AIS Task Force, the Great Lakes Commission, Great Lakes Fishery Commission, the International Joint Commission, and the Interstate AIS Prevention, Early Detection and Response Core Team, among others.

**Meetings**

The primary operational mechanism for the GLP to address its goals and objectives is through the conduct of in-person meetings. The GLP will meet twice annually, normally within the timeframes of November and May. The fall meeting will be held in Ann Arbor, Mich., and spring meeting locations will vary. At the close of each GLP meeting, the dates and location of the next meeting will be announced, as recommended by the GLP Chair and Executive Committee.

Meeting agendas will be developed by the GLP Executive Committee with the input of the GLP coordinator. All GLP meetings will include the following agenda items:

* Membership roll call to determine a quorum
* Introduction of meeting participants
* GLP Business (including action and decision items, recommendations to the ANSTF meeting, plans for future meetings and other administrative GLP business)
* Opportunity to provide feedback and input on regional initiatives, e.g., NOAA GLANSIS
* Emerging issues and announcements
* Public comment

A combination of plenary updates and ad hoc committee sessions will be organized for each meeting. A general breakdown (in one-hour time blocks) of a GLP meeting for this work-plan period is proposed on the next page.

Deliverables:

* Meeting summaries, including action items, and meeting presentations posted on the GLP website
* Recommendations to the ANSTF

**Basic Meeting Agenda Outline**

To be modified each meeting in accordance with need.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | Potential Topics (TBD) |
| **Hour** | **Agenda Item** | **Description** | **Outputs/Outcomes** | Spring 2021 (virtual) | Fall 2021 | Spring 2022 | Fall 2022 |
| 1 | **Organisms in Trade Committee** | Implement committee work plan | Defined in committee work plans | -OIT virtual sessions |  |  |  |
| 2 |
| 3 | **GLP Business** | Operational items, action items, recommendations to the ANSTF;  | GLP decision-making, GLP recommendations, reports on GLP operational and action items, etc. | -finalize work plan |  | -Install officers-Next work plan |  |
| 4 | **Committee reports** | Progress reports and updates from Ad-hoc / standing committees  | Information-sharing |  |  |  |  |
| 5 | **TBD Updates** | Updates on ongoing or new initiatives, programs, research of interest to the GLP (will vary from meeting) | Information-sharing; coordination and collaboration; identification of needs | -genetic biocontrol updates |  |  |  |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 | **Breaks** | Three 20 minutes breaks | Networking |  |  |  |  |

**Committees**

The GLP will conduct much of its work through its committee structure. This includes the Executive Committee, three standing committees, and ad hoc committees (as needed). Additional detail on committee roles, function and structure is provide in the [GLP Guidance for Operations](http://www.glc.org/wp-content/uploads/2013/10/GLP-Guidance-for-Operations_final_December-2012.pdf) document.

Executive Committee

The GLP Executive Committee will convene monthly via conference call to plan GLP meetings, develop meeting agendas, identify important items to be discussed during GLP meetings or in other forums, and handle other administrative items as necessary. The Executive Committee will also provide final approval for GLP recommendations to be communicated to the ANS Task Force.

Deliverables:

* Monthly Executive Committee calls
* Meeting agendas
* Recommendations to the ANS Task Force

Standing Committees (Information/Education, Policy Coordination and Research Coordination)

Standing committees will be responsible for updating, maintaining and tracking progress on AIS priorities and identifying priority issues for GLP discussion and action. Each of the GLP standing committees will hold an annual webinar to review and update their priorities. Staff will work with Committee Chairs to develop a priority tracking matrix to document progress. Updated priorities documents and tracking matrices will be posted on the GLP website and distributed to the GLP membership. The committees will also identify and propose priorities for GLP discussion and action that might be incorporated into meeting agendas.

Deliverables:

* Annual committee webinars
* Updated priorities for AIS prevention and control with tracking matrices
* Identification of priorities for GLP discussion and action should be addressed at meetings
* Summaries of relevant regional data, research, policy, and/or outreach to facilitate information sharing, and inform priority setting and development of recommendations to the ANSTF

**Priority Issues**

The GLP will focus its efforts, including time and resources, both at meetings and in-between meetings, to address the following issues that were identified as priorities by the GLP over the previous year: genetic biocontrol, recreational activities pathway, and organisms in trade pathway. At the end of the two year period, the GLP will evaluate whether these are still priority issues and what additional discussion or action may be needed; whether ad hoc committees should be continued (more work is needed) or disbanded; and what issues the GLP will take on over the next two year period.

Genetic Biocontrol

A number of research efforts are ongoing to develop genetic biocontrol tools for established Great Lakes AIS (e.g., dreissenid mussels, sea lamprey, *Phragmites*), highlighting the need to ensure that the appropriate regulatory framework and level of social acceptance for gene editing are in place prior to deployment of any genetic biocontrol tools in the Great Lakes. As part of the GLP’s mandate under NANPCA, particularly the authority to “[p]rovide advice to public and private individuals and entities on methods of controlling ANS,” it is a priority of the GLP to provide a forum for regular updates on the progress of research efforts into genetic biocontrol and to lay the framework for management and social acceptance of developed tools. Fully understanding the extent of genetic biocontrol tools and associated impacts is key to their successful application in the Great Lakes; without appropriate effort and time in consulting with experts, AIS managers, and the public, there is a very real possibility that concerns about gene drive technology will prevent the use of any genetic biocontrol tools in the Great Lakes. It is the role of the GLP to ensure its members understand the technologies in development, and facilitate the actions of its members to address needs related to the acceptance of genetic biocontrol tools in advance of any deployment of those tools. There is already a high level of interest in this topic, and GLP member agencies have already participated in efforts to understand the required regulatory framework for the use of genetic biocontrol; thus, the work of the GLP will continue to build on areas of high interest to its members.

Deliverables:

* Plenary sessions on the development of genetic biocontrol tools relevant to the Great Lakes
* Identification of needs and/or recommendations related to advancing management and social acceptance of genetic biocontrol tools

Recreational Activities

As part of the effort to update the regional AIS priorities for the Great Lakes under the previous work plan, a number of priorities for the recreational activities pathway were developed. At the November 2020 GLP meeting, a plenary session was held on this topic, focusing on pathway prevention and management efforts in the region. In discussion following the plenary session, GLP members indicated a high level of interest in continuing to provide support for prevention activities in this pathway. Of particular interest to the membership was the relationship between the recreational activities pathway and surveillance/outreach efforts, noting that further analysis of this pathway may be used to inform increased efficiency in efforts to detect AIS at new sites and provide outreach to members of the public who constitute the pathway (e.g., boaters, anglers, waterfowl hunters, etc.). Building on this, the GLP will continue to dedicate a portion of meeting time over the next three years to share information on pathway prevention and management efforts across the basin.

Deliverables:

* Regular updates on the Great Lakes AIS Landing Blitz during fall GLP meeting business sessions
* Scoping of a workshop to better define the relationship between pathway characteristics, AIS early detection efforts, and targeted outreach and identify how that relationship can be used to improve the efficiency of AIS management, surveillance, and outreach

Organisms in Trade [Ad Hoc Committee]

A 2018 review of Great Lakes regional AIS priorities highlighted OIT as a priority pathway for which the Great Lakes Panel on Aquatic Nuisance Species (GLP) could contribute to greater coordination of regional efforts. During the November 2018 GLP meeting, break-out sessions were held to identify specific actions and recommendations to increase coordination across several areas of AIS management, including OIT. Priority actions identified through this exercise align with common regional priorities. The GLP provides a venue to bring key agencies, groups, and experts together to advance work to prevent AIS introduction and release via the OIT pathway in the Great Lakes region. The purpose of the committee is to coordinate regional OIT initiatives with partners and advance near-term actions to address the OIT pathway. The Ad Hoc Committee will meet periodically via conference call and in-person under the auspices of the GLP. Key activities of the committee will include:

* identifying opportunities for OIT industry participation with the GLP
* identifying needs, objectives and next steps for an OIT-focused symposium or webinar series, hosted by the GLP and building on past Great Lake BIOTIC Symposia
* prioritizing trade pathways and identifying gaps in knowledge about species in trade
* recommending additional species for regulating in trade based on risk assessment and risk tolerance
* coordinating with the Great Lakes Fishery Commission Law Enforcement Committee to identify opportunities to increase awareness of AIS among enforcement personnel and support action on AIS violations
* identifying resource needs and gaps to inform development of a toolkit for conducting surrender and rehome pet events as part of existing outreach campaigns (i.e., Habitattitude, RIPPLE and Be a Hero)
* providing input on OIT related initiatives led by the ANSTF under implementation of the ANSTF Strategic Plan
* identifying needs and opportunities for GLP engagement to minimize AIS risks from OIT used in K-12 education

Deliverables:

* Progress reports on the status of GLP OIT priorities
* Symposium to improve coordination in OIT management
* Report on knowledge gaps within the OIT pathway and species in the pathway
* List of recommended species to be regulated by Great Lakes jurisdictions

**Projects**

Invasive Aquatic Plant Control Prioritization and Needs Assessment

The GLP has received funding for an interjurisdictional project on invasive aquatic plants (IAP) for the Great Lakes region. The GLP has repeatedly expressed its interest in and support for advancing IAP management and control as a priority issue and specifically the identification of research needs and/or recommendations. The GLP identified IAP as one of three priority focus areas in the GLP’s 2016 – 2018 work plan. Recent GLP meetings featuring sessions on aquatic plant response, eradication, and control efforts were held in 2015 and 2018. In 2017, a Great Lakes Binational AIS Forum was convened and featured a robust session on case studies in aquatic plant response and control. Overall, the GLP members found these to be valuable information-sharing and coordination opportunities. There continues to be a high level of interest in this topic, as well as investment by GLP member agencies and others in developing and implementing aquatic plant prevention and control efforts. The GLP will continue its efforts to coordinate AIS prevention and control activities in the Great Lakes region, with support from the GLC. In particular, the GLP will coordinate a project to identify priority needs for response/control technique development for invasive aquatic plants. This effort will be led by the Research Coordination Committee and updates on progress will be shared as part of regular committee report-outs to the GLP. This project will address the following objectives:

* Provide operational support to regional AIS coordination activities through the GLP and engagement with other regional entities
* Establish a comprehensive, baseline understanding of IAP research and management activities and associated gaps in knowledge
* Conduct a workshop focused on priority IAP to refine and prioritize targeted research and management needs
* Develop an applied research agenda to inform future investments in IAP control

Deliverables:

* Regional management priority list of invasive aquatic plants
* Draft list of research questions and management needs for invasive aquatic plants
* Directory of principal investigators and experts and areas of expertise
* Inventory of aquatic plant control methods being developed and tested, and associated state, provincial, Tribal and federal authorities to implement specific methods
* Workshop and associated documentation (e.g., summary of attendees, presentations and key outcomes)
* Inventory of knowledge on effective and non-effective control methods for priority plants, including gaps in method availability and barriers to implementation
* Draft prioritized list of research needs for each priority plant
* Prioritized research agenda to advance aquatic plant management and control

Redesigned Great Lakes Panel website

The Great Lakes Panel has historically developed and published the *Great Lakes Aquatic Invasions* booklet, a regional resource that provides a broad, yet thorough, overview of the aquatic invasive species situation, along with the challenges it poses and the approaches being taken to address it. The booklet was first published in 2007, and efforts were undertaken in 2015 to produce an updated version. However, those updates were stalled due to a series of unforeseen issues.

Parallel to this effort, the Great Lakes Panel also maintains a website, housed by the Great Lakes Commission, that provides information about the GLP and serves as a repository for GLP meeting materials, plans, recommendations, and other products. In order to improve the GLP’s web presence and continue to provide useful information to facilitate regional coordination, a new website will be built separate from the Great Lakes Commission and incorporating information that would typically be included in the *Great Lakes Aquatic Invasions* booklet. This redesigned website will allow users to interact with the information in the booklet in a dynamic manner and serve as a portal to other related resources in the Great Lakes, including NOAA GLANSIS, GLRI, interstate AIS surveillance efforts, and Blue Accounting. Website development will be led by the Information/Education Committee and updates on progress will be shared as part of regular committee report-outs to the GLP.

Deliverables:

* Updated, standalone website serving the Great Lakes Panel
* Improved regional coordination of online AIS resources
* Outreach materials related to the *Great Lakes Aquatic Invasions* booklet

**Member Updates**

Programmatic updates on AIS activities from GLP members (regular, alternates, at-large) will be requested from GLP members prior to each semiannual meeting. The updates will be shared in writing as part of meeting materials and also included in meeting summary. If possible, these updates are to be submitted in writing in advance of the meeting; if not, within two weeks following the meeting.

Deliverables:

* Semiannual (twice per year) GLP member update summaries posted on the GLP website