

# Meeting of the Great Lakes Panel on Aquatic Nuisance Species

December 8-9, 2010

Ann Arbor, MI

## *Meeting Summary*

Wednesday, December 8, 2010

### **Welcoming Remarks and Call to Order**

*Phil Moy, Great Lakes Panel (GLP) Chair, Wisconsin Sea Grant*

GLP Chair Moy gave opening remarks for the meeting. He thanked all for their attendance and welcomed representatives from Illinois and Wisconsin, expressing the GLP's pleasure at having representation from these jurisdictions. There was a roll call to establish quorum and Moy reviewed the meeting agenda. A motion to approve the April 2010 meeting summary was made and seconded. There was no discussion and the meeting summary was approved by voice vote.

### **ANS Task Force Report**

*Susan Mangin, ANS Task Force (ANSTF) Executive Secretary, U.S. Fish and Wildlife Service*

Mangin thanked GLP members for their hard work and efforts in moving the GLP forward. She encouraged GLP members to seek assistance from her if ever needed. Mangin reported on the most recent ANSTF meeting and on several ANSTF initiatives, including the ANSTF hotline, a new partnership with the Boy and Girl Scouts, and the Quagga-Zebra Mussel Action Plan (QZAP). She reported that an online ANS guide that was produced by the Northeast ANS (NEANS) Panel is featured on the ANSTF website, and encouraged GLP members to send links to any other online AIS guides. Mangin covered several items from the last ANSTF meeting, including an update on the 39 approved state management plans, genetic biocontrol regulations, and a working group to look at the viability of AIS pathways. Mangin then discussed the dormancy of ANSTF committees and described how they would be restructured: the Research and Outreach Committees will continue, the Prevention Committee will be chaired by a new staff from the National Invasive Species Council, and additional committees will be ad hoc. The ANSTF will soon be looking for volunteers to serve on a reinstated Recreational Activities committee to revise and activate the national recreational activity guidelines originally developed in 1998-2000.

Mangin discussed the GLP recommendations for the Great Lakes Water Quality Agreement (GLWQA) and emphasized that the language needs to be revised to reflect the advisory nature of the ANSTF; the preliminary draft of the recommendations has been sent to a group within the ANSTF for revision which will then be sent to the larger ANSTF for review. ANSTF representatives from the U.S. Environmental Protection Agency (EPA) and the U.S. State Department are working on contacts within their agencies to forward the recommendations. Mangin committed to getting the recommendation to the parties to meet timelines for the GLWQA negotiations process.

It was also reported that the ANSTF wants to develop a database to track progress on the ANSTF Strategic Plan, a draft of which they will present at the next meeting. At the last ANSTF meeting, the Mississippi River Basin Panel (MRBP) discussed rapid response issues and the need for Incident Command System (ICS) training; representatives from federal agencies will look at their training capabilities and present at the next meeting. The spring meeting is scheduled for the first week in May 2011 in Little Rock, Ark. with the MRBP hosting.

### *Questions and Discussion*

In regards to the timeline for the GLWQA recommendation, Mangin said the ANSTF is aiming for mid-January in time for the next renegotiation meeting. She apologized for any frustration at the delay and emphasized that the recommendation is considered valuable. Mangin clarified that the ANSTF had considered the former partnership between the Western Governor's Association and the U.S. Fish and Wildlife Service (USFWS) as a mechanism for implementing the QZAP. The Council on Environmental Quality is also being considered as a location to house the QZAP director which is a similar arrangement to that of John Goss as the Asian carp director.

## Great Lakes Restoration Initiative (GLRI) Status Report and Federal Agency Updates

Moderator: *Jamie Schardt, U.S. Environmental Protection Agency (EPA)*

- U.S. Environmental Protection Agency  
*Jamie Schardt, U.S. EPA*

Schardt reported on the status of the GLRI budget for FY11. At the time of the meeting, the FY11 was still awaiting Congressional approval. It was noted that the President proposed \$300 million for the GLRI in his budget. Next, Schardt gave an update on the status of the FY11 Request for Proposals (RFP) under the GLRI. He reported that last year's funding for AIS activities will be offered as a single "pot," to include prevention, control, technology and other activities. This year multiple funding categories are being considered. He noted the need for enhanced rapid response/monitoring protocols and capacity based on monitoring and surveillance.

Schardt then reviewed the status of the Great Lakes Accounting System (GLAS), which requires grantees to report on funding, where the work is being conducted, and project success measured against the GLRI Action Plan. Schardt emphasized that GLAS will provide transparency for the spending of GLRI funds which will help build a case for ongoing funding. Schardt mentioned that under the GLRI AIS measures of progress, it needs to be shown that approaches for basin-wide AIS surveillance are being piloted by 2011. It was noted that the piloting approaches were on track, however, establishing an operational network by 2014 was considered ambitious.

### *Questions and Discussion*

Schardt clarified that the basinwide surveillance program is a U.S. commitment only at this time. The renegotiation of the GLWQA could determine whether basinwide surveillance will include Canadian waters. There was discussion on the details of the next GLRI RFP and the GLRI measures of progress (e.g., newly detected AIS, rapid response plans, information and education accomplishments, and progress towards an early detection network). Schardt clarified that the EPA hopes to see funding awarded by the end of the fiscal year. While currently there are no plans to modify the measures of progress, some consideration is being given to the idea and changes could occur depending on level of funding and progress to date. He explained that the measures were developed through initial estimates from federal partners on accomplishments of the suite of proposed programs, and extrapolating out into future years. They are consensus based vetted through the White House.

- National Oceanic and Atmospheric Administration  
*Jennifer Day, National Oceanic and Atmospheric Administration (NOAA)*

NOAA is working on two AIS projects under the GLRI. Rochelle Sturtevant, also of NOAA, reported on updates to the Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS). Enhancements to GLANSIS as funded under the GLRI include a species "watch list" of 75 potential invaders, the addition of range expansion species (e.g., those native to Lake Ontario but invading the upper lakes); and ensuring consistency in the impact assessment sections of all factsheets. Preliminary factsheets have been developed for watch list species. They have also been developing an impact assessment tool to look at social and environmental factors, which is available to share. In 2011, NOAA hopes to add management and control information to the GLANSIS factsheets.

Day then reported on NOAA's other GLRI-funded project to develop forecasting capacity for AIS with a high risk of invasion. She said NOAA is funding researchers at the University of Notre Dame to investigate potential high-risk species based on their projected impacts to habitats, ecology, and the economy. The goal of this project is to improve the planning and implementation of rapid response and prevention.

- U.S. Forest Service  
*John Rothlisberger, U.S. Forest Service (USFS)*

Rothlisberger reported that GLRI funding has allowed USFS to forge partnerships with other groups to enhance their regular AIS work of education, surveillance, and control. One such partnership is with Wildlife Forever, with whom USFS is working on a region wide education campaign, including billboards, a television series called *Silent Invaders*, aquarium exhibits, and a summer camp in Milwaukee, Wis. USFS anticipates an output of 25 million public impressions from this project.

Rothlisberger next reported that USFS has funded 10 Cooperative Weed Management Areas (CWMAs), some of which were established and others strengthened. Another GLRI-supported effort is a pilot project on boat cleaning and inspection along with survey and monitoring of approximately 40 lakes in the Ottawa National Forest in the

western Upper Peninsula of Michigan. Rothlisberger said there are fewer AIS in this region than in other parts of the Great Lakes, thus the focus is on prevention. Portable boat washing units have been installed and staffed with employees hired by the CWMAs. Other USFS efforts funded by the GLRI include surveillance and control and outreach at high-visibility events such as fishing tournaments.

- U.S. Coast Guard  
*Lorne Thomas, U.S. Coast Guard (USCG)*

Thomas reported that the USCG received a small amount of GLRI funding for ballast water work, including testing ballast treatment systems for U.S. flag vessels, developing a standardized protocol for shipboard testing, improving facilities, and supplementing the Shipboard Testing Evaluation Program (STEP). Thomas said the USCG is working on increasing knowledge of how treatment systems will work on board to move towards standardization and to comply with rulemaking. He discussed the Laker Feasibility Study, which is examining ballast water challenges unique to laker vessels such as the effectiveness of treatment systems in freshwater versus brackish water. Ratification of the IMO standard by the Canadian government was noted. Thomas also commented that the uncertainty and inconsistency of regulations in the U.S. may be a barrier to other countries taking a position on the ratification of a new IMO convention. Ratification of the IMO standard is currently under consideration by the Obama Administration. Also under study is whether barges and tow boats unintentionally transport Asian carp eggs through the Chicago Area Waterway System (CAWS).

#### *Questions and Discussion*

In regards to an inquiry on the pros and cons of treating ballast water in lakers, Thomas said that lakers can accelerate the spread of AIS once introduced. However, given the high cost to mitigating that risk, there is a need to find an acceptable balance between level of risk and the costs associated with treatment. It was noted by Rick Harkins that the 18 existing IMO-approved systems are not approved for the Great Lakes.

Phyllis Green, Superintendent of Isle Royale National Park, provided a brief update on the National Park Service's (NPS) AIS work. Under GLRI, NPS is developing a ship board treatment system to test mechanics of biocide use. This includes emergency response guide for the use of low-cost treatment equipment on ships. STEP testing is underway on the Ranger III using sodium hydroxide. This work is also responding to concern over corrosion from industry partners by vetting a practicality study, which is ready to move to the concept analysis stage thanks. NPS is working with partners such as the USGS and chemical companies to scope out interest from major equipment manufacturers in pursuing commercialization if viable solutions are found for the Great Lakes.

#### **Updates on State AIS Management Plans and Other GLRI Funded Projects: Implementation under the GLRI and Opportunities for Coordination**

*Moderator: Luke Skinner, Minnesota Dept. of Natural Resources*

- Kevin Irons, Illinois Dept. of Natural Resources (IL DNR)

Irons, ANS Program Manager as of Oct. 1, 2010, reported that Illinois has been concentrating their AIS efforts on Asian carp. The state has been very active in implementation of the control strategy framework, especially on the Monitoring and Rapid Response workgroup of the Regional Coordinating Committee (RCC). The IL DNR participated in rapid response efforts last winter at the electrical barrier in the CAWS. The focus has been on short-term actions of population suppression, eDNA detection, structural operation variations, enhanced electric barrier operations, emergency engineering measures (e.g., concrete barriers and fences), and expedited biological control assessments. Irons said the state is targeting the leading edge of the invasion and defending the electric dispersal barrier by reducing propagule pressure, through monitoring and removal efforts where the Asian carp are suspected to be established. Irons reported that there is also work being done to develop a commercial harvest, including incentives and market development, and a pilot project on using Asian carp for fish meal. Funds have been invested in infrastructure to support a plant for commercial harvest. The IL DNR is also looking at the response of Asian carp populations to angling, food availability, and spawning requirements and locations. IL DNR is also conducting retail live bait monitoring.

- Doug Keller, Indiana Dept. of Natural Resources (IN DNR)

Keller reported that GLRI funds are being used to implement their state management plan (SMP). To meet goal 5 of the GLRI Action Plan, work is being conducted to eradicate newly invaded plants and control established invasive plants, e.g. phragmites (at an IN DNR nature preserve in the Great Lakes watershed), purple loosestrife

(monitoring the natural spread of biocontrol beetles, introduce root mining weevils since beetles have yet to be effective), and watermilfoil. To meet goal 3 of the GLRI, outreach and education activities are being conducted in partnership with the Sea Grant Network and Wildlife Forever. Other activities being pursued under the SMP include rapid response planning; aquatic taxa risk assessments; and early detection surveys.

It was also reported that IN DNR is also using funding for Asian carp activities. The state's focus has been on a potential connection between the Wabash and Maumee Rivers in the 100-year floodplain near the city of Ft. Wayne, Ind. To address this, 1,200 foot fence was constructed across this area, known as Eagle Marsh, in three weeks time from the start of construction and four months from when the issue was initially identified. This work addresses goals 1 and 3 in the GLRI Action Plan. Also discussed were several planned studies: 1) eDNA monitoring in the Upper Wabash and Maumee in cooperation with the University of Notre Dame (UND) to monitor carp movement (no positive identifications have occurred to date), 2) a two-year telemetry study in the Upper Wabash, in cooperation with Purdue University to determine locations where the Asian carp are concentrating and spawning, as well as indications of moving up the Little River towards the Eagle Marsh fence, and 3) A two-year spawning evaluation in the Upper Wabash and upper EF White, investigating where spawning occurs, what conditions trigger it, and where juveniles go for development. Keller stated that all three of these projects meet goal 4 of the GLRI.

### *Questions and Discussion*

In discussion, GLP members wanted to know how many connections existed between the Great Lakes and Mississippi River basins, similar to that in Eagle Marsh. Bill Bolen (USEPA) responded that, as part of the Great Lakes and Mississippi River Interbasin Study (GLMRIS), the U.S. Army Corps of Engineers (USACE) completed an assessment of connections on the U.S. side of the border. The report entitled, "Other Pathways Preliminary Risk Characterization" is currently available. He said that the Wabash-Maumee connection was identified as the highest risk, and 17 other at-risk areas were identified. The USACE is studying permanent solution to the floodplain at Ft. Wayne, since the fence is only designed to stop Asian carp and is not considered effective in preventing passage of other species such as snakeheads.

Other questions clarified that UND has not considered developing an eDNA marker for zebra mussels, as their focus has been on species that are more likely to produce eDNA, such as fish. In addition, commercial harvesting of Asian carp is continuing through the winter and observations from harvesting further south have shown that fish are skinnier, which is indicative of overpopulation. Keller was also asked about the status of success for eradicating hydrilla in Indiana. In response, it was reported that 97% tuber reduction has been achieved with the expectation that the last 3% may take a while. It was noted that if GLRI funding was not currently available, there would significant problems given the freeze in state funding.

- Roger Eberhardt, Michigan Dept. of Natural Resources and Environment (DNRE)

Eberhardt first mentioned forthcoming changes in the state which will see the DNRE split into the Dept. of Environmental Quality and the Dept. of Natural Resources. There was some uncertainty on how the new arrangements will affect the AIS program. He talked about Michigan's Great Lakes Plan and its priority area goals, one of which is to create an AIS program in Michigan. The AIS program goals are primarily focused on prevention. The program has a newly appointed core coordinator in the DNRE Water Resources Division, Sarah LeSage, with participation from other DNRE divisions (Fisheries, Wildlife, Law Enforcement, Office of the Great Lakes, Recreation) and the Dept. of Agriculture. The state is also maintaining work on ballast water regulations, including reporting legislation and permit legislation. As part of this effort, work is being conducted on a Clean Water Act 401 certification program as part of the EPA Vessel General Permit and providing input on federal legislation. It was noted that ballast water is an important part of Michigan's AIS program that is not part of the GLRI Action Plan. An Asian carp prevention workshop was held in November that was tied to a new Michigan Asian Carp Plan released in Oct. 2010. Eberhardt reported on a GLRI-funded project of the DNRE Wildlife Division, *Mounting a Response to New Aquatic Invaders*. Funding has also been used for eDNA testing for Asian carp in Michigan waters; the first samples from southwest Lake Michigan were negative. Eberhardt briefly reported on other important AIS activities in Michigan including the Clean Boats/Clean Waters Program, the Michigan Inland Lakes Partnership, and the AIS Complete Prevention Plan for Lake Superior. The Lake Superior plan focuses on pathways/vector analysis which is considered to be more proactive approach compared to a species-specific approach. The pathways/vectors approach will be expanded to the entire state under the state AIS plan with all measures tied to the GLRI Action Plan. Eberhardt clarified that DNRE is working with Michigan Sea Grant on these efforts, but the core team of the AIS Program is comprised only of state agencies.

- Luke Skinner, Minnesota Dept. of Natural Resources (MN DNR)

Skinner reported that Minnesota's SMP was approved in fall 2009. The state's efforts in 2010-11 include early detection research focused on eDNA as a monitoring tool, watercraft inspections, public awareness, campaigns, and strengthened enforcement of state laws – including the addition of conservation officers to enforce state AIS regulations. Other activities include research on the management of invasive plants and Asian carp, and prevention technologies to limit the spread of carp and other fish. Skinner discussed the state's leadership and coordination initiatives, including grants to tribes to implement AIS prevention efforts, and statewide organizations to develop and implement training for lake service professionals and citizen monitoring. Minnesota's prevention activities include the implementation of the *Stop Aquatic Hitchhikers!* program with lake associations and local governments. Skinner said that the state is tracking GLRI performance measures, including rates of detection in Lake Superior, acres managed, and contacts made through public awareness efforts. Plans are being discussed for rapid response plans, but no mock exercises have occurred to date. Skinner said that the state's next steps include working with other states and federal agencies on a regional approach, and incorporating performance measures into future plans, which was not actively pursued this time around.

- Dave Adams, New York State Dept. of Environmental Conservation (DEC)

Adams began with an overview of the DEC invasive species program, including staffing and focus areas for the program, Partnerships for Regional Invasive Species Management (PRISM). Currently, two of eight PRISM coordinators are being funded. A comprehensive plan and rapid response framework has also been established under PRISM with some competitive grant funding provided. Adams reported that New York has worked on an invasive species listing bill (which is in progress, but has yet to be passed), as well as a transport bill. The "do not transport" bill is currently in draft form and needs to go through the legislative process. Adams expected the bill to go forward during the 2011 assembly session. Firewood transport regulations are in place to prevent movement of Emerald Ash Borer. Adams said that past AIS projects were carried out under an older plan; a revision of the older plan was initiated but not adopted, and the state has since started working on a comprehensive plan. Adams presented briefly on New York's new AIS projects including watercraft inspections and monitoring, control and response efforts. Adams described the state's "clearinghouse" website organized by New York Sea Grant and the state cooperative extension, where users can find tools such as assessments for plant taxa, resources for difference species, and a compilation of outreach initiatives coordinated through the website. GLP members provided positive feedback on the PRISM program.

- John Navarro, Ohio Dept. of Natural Resources (ODNR)

Navarro reported on ODNR's work in monitoring and early detection. ODNR is leading survey efforts, including evaluating current efforts, developing a notification process, identifying gaps, recommending monitoring improvements, and creating/disseminating a regional watch list. He commented that using an experienced crew is a good way to save money and be efficient. The ODNR is also carrying out Asian carp eDNA monitoring in the Ohio River and its tributaries; assistance is being provided to the state in getting the analysis up and running in the laboratory. Next, Navarro talked about Ohio's efforts in information and education, including partnering with Wildlife Forever on a billboard campaign. Ohio's largest portion of GLRI funding for AIS is being used in control efforts (e.g., invasive phragmites). While these control efforts were more akin to spot treatment in the past, the state anticipates a more strategic effort over the next several years. A Lake Erie CWMA is also being established.

- David Day, Pennsylvania Fish and Boat Commission (PFBC)

Day reported that Pennsylvania is focused on seven major tasks in their GLRI proposals. These address all five goals and "principle actions to achieve progress" within the AIS focus area of the GLRI, with the exception of ballast water treatment. Briefly, the tasks are:

1. Enhanced statewide and interstate coordination
2. Biosecurity protocol implementation by state agencies
3. Early detection and monitoring program development
4. Development of a coordinated reporting and inventory system
5. Rapid response, control, and management activities
6. Research and risk assessment
7. Education and outreach, with Sea Grant overseeing.

Day presented a color coded chart of how these activities address GLRI goals and measures of progress.

- Bob Wakeman, Wisconsin Dept. of Natural Resources (WDNR)

Wakeman reported that Wisconsin's AIS activities under the GLRI have been mostly an extension of current activities, but that GLRI funding will add capacity and value to these efforts. Wisconsin has formed a partnership with the EPA to conduct a student watercraft inspection program, involving the University of Wisconsin and Wisconsin Sea Grant. In the state, AIS monitoring has mostly been volunteer-based, which has made it difficult to standardize and to get statewide coverage. Consequently, staff has been increased for this effort, including a Great Lakes outreach specialist. Wakeman reported on Wisconsin's SMP implementation with efforts focused on reaching out to bait dealers, increasing AIS monitoring and tracking, enhancing watercraft inspection and compliance, installing boat launch signs to help boaters comply with state no-transport laws, and strengthening local, county and state partnerships with \$600,000 in grants and contracts. The WDNR has been working on getting a statistically valid answer in determining the presence of AIS and the rate of their spread in the state. Wakeman noted that the state has an objective to control 3,000 acres of invasive plants, with success demonstrated on the control of purple loosestrife. Phragmites control is becoming more of an issue, especially around Green Bay. Also mentioned was the WDNR's objective to modify the SMP to include a rapid response plan with 22 mock exercises. There has been significant success in contacting recreational and resource users on AIS issues, with 158,000 people contacted (mostly through volunteers) and a goal of contacting 10,000 more.

#### *Questions and Discussion*

Federal agency representatives were asked to explain the term "technologies" as used in the AIS section of the GLRI Action Plan objectives. New bio-control methods were used as an example. It was suggested that funding agencies consider including social science methods in this definition; e.g., new technologies for outreach. It was also clarified that the GLRI includes terrestrial invasive species, in addition to aquatic, in situations that directly impact the Great Lakes (i.e. coastal terrestrial species are a better fit than inland terrestrial species). Additional explanation was provided on two of the AIS measures of progress. The goal of a 40% reduction in the yearly average rate of newly detected invasive species includes both new species entering the basin and new species being detected. The term "acres managed" refers specifically to the acres of invasive species controlled and is not inclusive of the entire area where the treatment occurred. For example, if 1 acre of phragmites is treated in a 25 acre wetland, the 1 acre number is used. A comment was offered that Minnesota has developed a method to estimate changes in propagule pressure based on recreational boater survey data. It was thought that this method might be useful in reporting on how many lakes are being protected from invasive species.

#### **Regional GLRI Funded AIS Projects: Updates and Discussion on Opportunities for Coordination**

*Moderator: Doug Jensen, University of Minnesota Sea Grant*

- Environmental DNA Surveillance and Preventing Invasions from Trade in Live Aquatic Organisms  
*Lindsay Chadderton, The Nature Conservancy (on behalf of the University of Notre Dame)*

Chadderton reported on the environmental DNA (eDNA) surveillance project, funded by an agreement between UND and USFWS. The project seeks to establish an eDNA surveillance program for priority AIS in addition to Asian carp which is the current focus/initial impetus for eDNA monitoring. Chadderton said that the eventual objective is to transfer the technology to facilitate use of eDNA as a standard monitoring tool for use across the basin, including in Canada; to this end they will hold training workshops. Protocols will be available in the next 2-3 weeks, and the genetic marker for Asian carps will be available soon. Chadderton said the project team hopes to hold a formal meeting soon to lay out their plan for upcoming work.

Next, Chadderton reported on the project on preventing invasions from organisms in trade (OIT), also funded by a cooperative agreement between UND and USFWS. This project is developing a suite of risk assessment tools, assessing the range of OIT in the Great Lakes basin and impacts on a regional basis, and communicating risk assessment tools and a list of high risk species to policy makers, trade leaders and other stakeholders. Risk assessment tools for plants are close to completion with accuracy greater than 90%. Finally, Chadderton reported on the NOAA-Center for Sponsored Coastal Ocean Research (CSCOR) project. The interdisciplinary team on the project is forecasting the spread and bioeconomic impacts of AIS in the Great Lakes from multiple pathways to improve management and policy. The project will evaluate alternative management strategies using a Management Advisory Board to guide research and management priorities, develop realistic management scenarios and costs, and peer review project results. Chadderton stressed that the research team does not want this to be strictly an academic exercise but something truly useful that engages management from the start.

## *Questions and Discussion*

Chadderton clarified that the timeline for the CSCOR project is three years, with the outputs to be rolled out throughout the project. He also confirmed that USACE has been performing eDNA sampling in the CAWS since July 2010. There was discussion on the relationship between various risk assessments and information sharing between projects. Chadderton said that he was unaware of formal coordination, but it is a goal of the CSCOR project. He emphasized that the CSCOR risk assessment is trait-based which a narrower focus than others.

- Comprehensive Regional Outreach Campaign  
*Doug Jensen, University of Minnesota Sea Grant*

Jensen described the two -year Great Lakes Sea Grant Network outreach program being implemented in the Great Lakes region. Led by Minnesota Sea Grant, the program targets 15 outreach pathways aimed at AIS prevention. Jensen said this project features successful elements already in place such as *Stop Aquatic Hitchhikers!* and *Habitattitude™*. The project is driven by survey results and social marketing, and consists of 30 new or improved outreach projects reaching 40 communities. He said the project matches the objectives of the GLRI in creating over 4.85 million exposures that will potentially reach millions of boaters, anglers and others region-wide. The overall purpose of the program is to improve behavior to prevent AIS introduction and spread; the project team will evaluate the outcomes and impacts of the initiative goals and objectives at multiple levels. Jensen invited GLP members who are partners with Sea Grant programs to get involved in large production runs of printed outreach materials, which are maximized by pooling resources. He stressed that it is important to maximize funding, provide cost-effective products and extend the campaign's reach by using existing effective programs.

There was some discussion on the technical details of obtaining specimens and locating suppliers to make acrylic blocks to preserve them. Jensen told GLP members that the campaign is in need of specimens, and that they should contact him with questions. Another question was posed on why states are expected to pitch in money for print runs given the existing GLRI funding available for products. In response, it was stated that over half of budget for this project goes to products, providing \$10,000 per state for products which states need to match.

- AIS Threat Campaign  
*Doug Grann, Wildlife Forever*

Grann reported on Wildlife Forever's threat campaign program, which provides targeted outreach to anglers, boaters, and hunters with the help of numerous partners. The campaign uses a sportsman targeted message, "Most Wanted Dead" using public service announcements, television, print ads, billboards, and Public Service Announcements. An important aspect of the campaign is the "Silent Invaders" television program on the Versus Network (also available on Wildlife Forever's website), which focuses on priority species and their impacts. Viewers are also introduced to explanations of the problem, followed by best management practices. Grann reported that overall, the campaign has reached 74 million impressions this year. The goal of the campaign is to mobilize a conservation army of millions of people who have a vested interest in combating invasive species.

- Verification of Ballast Water Treatment Technologies  
*Jeff Ram, Wayne State University*

Ram began with the project's overall goal, which is to garner ideas and facts for future action on the development of new technologies to meet the IMO standard. The project is a pilot study on early detection and monitoring in the port of Toledo (Ohio) focused differentiating between living and dead organisms through eDNA analysis. It was noted that Toledo Harbor has the second highest number of ballasts discharged in the region, and is the port of greatest concern for propagule pressure with the most suitable habitats for many AIS to become established. In addition, Toledo is also a major ballast water donor to other ports in the region. It was mentioned that the EPA GLRI goal for ballast water treatment is virtual elimination with the two stages of ballast water treatment being mechanical filtration and disinfection. This project is developing molecular and microscopic methods to differentiate live from dead organisms, which will be applicable to a range of treatment systems. One of the project milestones is to design Standard Operating Procedures for shipboard sample collection and preservation for land-based analysis for verification. They will be conducting shipboard verification tests in partnership with a multinational biotech company, and testing verification systems with ballast water treatment technologies in shipboard tests with shipowners in Canada.

## *Questions and Discussion*

Ram clarified that his grant is small and his team is not running basic water quality analyses on water samples from the harbor. This project serves as a pilot for methodologies that he plans to expand on. He also clarified that while they are concerned with ballast being both released and deposited in Toledo, with releases as the main focus of the project.

## **Committee Breakout Sessions conducted with reporting to follow on Thursday, December 9.**

### Thursday, December 9

Phil Moy (GLP Chair) called the meeting to order and reviewed the agenda.

### **Committee Reports and Discussion**

- Information/Education (I/E) Committee  
*Doug Jensen, Minnesota Sea Grant; Information/Education Committee Chair*

Jensen reported that the I/E Committee spent a portion of their time discussing the recreational activities guidelines. The committee identified a need to reinvigorate and elevate the use of the guidelines to prevent inconsistent or incorrect use. Jensen reported that the committee will post the revised guidelines for GLP approval which will include the new component on the water garden trade. Upon approval, the Executive Committee will forward them to Susan Mangin of the ANSTF. Jensen next discussed the Great Lakes Aquatic Invasions (GLAI) booklet, which the I/E Committee is interested in revising as a 2<sup>nd</sup> edition. The committee is seeking funding to produce the booklet. Suggestions included member agencies/organizations of the GLP and the GLRI. The committee plans to share with the GLP a two-page mini-proposal with a budget and work plan that was developed by Commission staff. Next, Jensen expressed the I/E Committee's concern regarding recent low participation in and use of the Great Lakes Panel Wiki. He said the Wiki serves as an important communication tool for the GLP, but that usage for updates is down from 44% participating for the last meeting to 10% for this meeting. The I/E Committee is looking for ways to enhance use of the Wiki by members and asked for feedback from the GLP on how to make it usable with possible incentives. Finally, Jensen reported on discussion whether GLP meetings could provide a venue for workshops and training. He reported that the committee felt it would be valuable to add an extra half-day or day to GLP meetings to accommodate this.

## *Questions and Discussion*

A comment was offered that the Wiki has value in several areas, particularly for editing documents (e.g., GLP's Research Priorities Document) and that we should use it strategically when there are documents to be edited and decisions to be made. Regular use of the Wiki saves staff time spent on traditional e-mail communication, and we should continue to encourage its use. It was noted that we may be able to use the Wiki as a checklist to identify GLP priorities and to document these priorities, in order to improve accountability between meetings. The Wiki could also be a way to showcase how the GLP is involved in the GLRI and helping to reach its objectives. It was noted that more reminders are needed to help members use the Wiki correctly and regularly. GLP members were encouraged to contact staff with idea on other mechanisms on how to provide updates.

There was discussion on the role of the I/E Committee in coordinating GLRI activities. Ideas included sponsoring a webinar sharing ideas about AIS outreach, taking a lead role in social networking related to GLRI, and helping develop/refine performance measures. It was suggested that since the GLRI has no strategic outreach plan except for GLAS, the GLP could advance communication to constituents on the good work GLRI funds are supporting. A potential outreach tool that could be developed to accomplish is the GLAI booklet.

- Research Coordination Committee  
*Phil Moy, GLP Chair (on behalf of Lindsay Chadderton, Research Coordination Committee Chair)*

Moy reported that the Research Coordination Committee (RCC) discussed development of species "hot list," which they hope to further develop by drawing on lists by GLANSIS and the USACE Great Lakes and Mississippi River Interbasin Study (GLMRIS). He said the RCC is looking at opportunities to provide input to upcoming RFPs for the GLRI, via phone calls to coordinate efforts and promote priorities such as monitoring and early detection, education and outreach, rapid response, risk assessment, and database development. The RCC committee also



discussed developing/enhancing the taxonomic experts database, and developing a list of eDNA-certified labs at the point when UND passes on the responsibility for eDNA testing. The committee discussed rapid response training and exercises; they had little interest in species-specific plans and recognized the need to have Memoranda of Understanding (MOUs) in place that describe the roles of each player and to train biologists in the Incident Command System (ICS). Some discussion took place on reviving the old legislative committee of the GLP, since AIS laws are becoming more prevalent. The RCC did not express much interest in extending the GLP meetings by a half-day or day, and thought it would only add value if associated with ICS training or something similar. He announced that the RCC is in need of a candidate to serve as committee vice chair.

#### *Questions and Discussion*

It was mentioned that the Policy Coordination Committee recognized that ICS training worked into a mock rapid response exercise would be very helpful, especially for state agencies. An MOU or ICS structure could be part of a rapid response plan.

- Policy Coordination Committee

*Mike Murray, National Wildlife Federation (NWF), Policy Coordination Committee (PCC) Chair*

Murray reported that at the April 2010 meeting, the PCC voted to revise the committee mission and guidelines and broaden their scope of activities. The next step will be clearing the revised documents with the Executive Committee and then implementing changes. Murray said the committee came up with five work plan tasks: 1) the regional priorities document; 2) coordination on an organisms in trade position statement; 3) coordination on a ballast water position statement; 4) considering the GLP role in increasing coordination on rapid response; and 4) an Asian carp position statement. The PCC hopes to finalize the work plan, with prioritization, by the end of January 2011 and then begin to implement priority tasks. Next, Murray reported that the PCC discussed the potential for the Great Lakes region to take a lead on risk assessment, given the current level of interest and investment in AIS issues, particularly risk assessment. He said the GLP could have a role in facilitating coordination of existing efforts in agencies and academia and could help increase coordination with Canada. Finally, Murray discussed several actions that the PCC wished to coordinate with other committees on, including the organization of a GLP meeting with a rapid response or risk assessment focus, an update of the GLAI booklet to help promote/market GLRI-funded projects, and the Asian carp position statement.

#### *Questions and Discussion*

It was noted that USFWS has conducted virtual and face-to-face risk assessment training, which could be conducted in conjunction with a GLP meeting. There was then some discussion on concern over use of GLRI funds for Asian carp control. It was commented that the work is obviously needed, but future funding needs to come from separate appropriations and baseline funding. There was also discussion on the framework for GLP activities, and it was emphasized that the GLP can make recommendations to the ANSTF and assist in coordination within the region; for specific issues, we must assess how GLP actions can be most effective (e.g., with position statements). It was mentioned that the GLP would like to get better feedback from the ANSTF after submitting recommendations, suggesting that ANSTF members attend GLP meetings would help in accomplishing more direct communication on the status of recommendations.

#### **Ballast Water Collaborative (BWC) Update**

*Marvourneen Dolor, St. Lawrence Seaway Development Corporation, U.S. Dept. of Transportation*  
*Azin Moradhassel, Canadian Shipowners Association (CSA)*

Dolor reported that ballast regulatory activity exists widely throughout the region, with a range of standards and implementation dates. To respond to this challenge, the BWC emerged to build new partnerships and create an informal forum for candid discussion and information exchange; this is particularly important because of sensitivities due to litigation. Dolor said the BWC is comprised of government regulators, commercial maritime stakeholders, scientists, and non-governmental organizations. Its main objective is to bring U.S. Great Lakes state representatives together with the marine industry and respected Canadian and U.S. scientists and researchers. She said the International Joint Commission has been vital in funding these meetings and ensuring attendance of state representatives. Dolor reported that recent activities of the BWC include forming three workgroups to address specific questions such as identifying "commercially available" treatment systems. Several GLP members commented that the BWC has been an excellent effort thus far and commended the strong cooperation from shipping companies.

Moradhassel reported that the CSA is exploring measures to further reduce the risk of spread of AIS and that they see opportunities for linkages with GLP efforts, such as the species hot list. She said there is a proposal for a workgroup to focus on understanding risk of spread (including secondary spread) and exploring measures to further reduce the risk of spread via interlake transfer posed by existing vessels in the Great Lakes system. Moradhassel talked about the unique conditions facing shippers in the Great Lakes, including fresh, cold waters, short voyages, and the process of rapid de-ballasting. There is also a proliferation of regulations in the region, which results in a patchwork system in regards to compliance. Moradhassel next reported that the CSA, in partnership with U.S. carriers, is looking at their role in a near-term solution. She said the CSA and other carriers will present preliminary results and a proposed work plan for their risk assessment project at the next BWC meeting. The next steps in the project include expanding risk assessment elements to incorporate additional data, using an expanded model and aggregated fleet-wide ballast water inventories, and developing preliminary conclusions documenting the highest level of risk. Moradhassel said the project team is hoping to rank species based on risk and/or rank routes based on risk.

### *Questions and Discussion*

Moradhassel clarified that there was not a limit to the geographic scope of the analysis of trade routes; rather, the team asked for participants' inventories by trade. The project team has documented port-to-port ballast movements from port monitoring funded by the BWC, but currently has more confidence looking at movements between bodies of water rather than from port-to-port. Moradhassel commented that one of the principle actions of the GLRI is to develop surveillance techniques for early detection, which will be species-specific via the ballast vector. She said that with the ballast water project team's analysis, when a species is detected, the known risky trade routes can be targeted. A comment was offered from a state regulatory perspective, that the uncertainties of risk assessment cause concern. Scientists and researchers may find detailed work interesting, but the timeframe is often too long to be useful to state agencies.

### **Wrap-up Discussion on Opportunities for Coordination and Collaboration on GLRI Projects**

*Moderator: Phil Moy, GLP Chair*

There was discussion on the possibility of the GLP developing a framework for an MOU or ICS to meet the GLRI performance measure requirement of an early detection/rapid response plan. Based on the committee reports, there was general interest in adding a half day to the next GLP meeting for GLRI coordination, ICS training, or a tabletop rapid response mock exercise. A suggested format entailed an entire day of breakouts and discussion with plenary sessions on the second day. Another workshop idea proposed involved development of an early detection/monitoring (EDM) program for the Great Lakes system. It was noted that an EDM program is GLRI performance measure but thus far, no related projects have been funded. Some discussion followed on how much citizen involvement should be integrated into a proposal for such an EDM project; it was noted that citizen involvement is acceptable as long as the effort is led by entities with management authority (e.g., states and tribes, provinces). The point was raised that we need to be prepared for the next AIS poised to invade, however, state agencies are under considerable pressure with reduced staffing to broaden existing monitoring programs. It was suggested that the states need to collaborate more closely with the academic community and federal agencies to assist in implementing more extensive monitoring initiatives or additional efforts. It was also proposed that federal agencies could complement the state/provincial role by holding a workshop aimed at developing a Great Lakes early detection program; recommendations resulting from such a workshop could serve in garnering support and funding. Tasking GLP committees with EDM needs was also suggested, for example, citizen based monitoring for larger organisms could be implemented through the I/E committee and smaller and microscopic organisms through professional monitoring with the RCC overseeing coordination between the two.

The Lakewide Management Program (LaMP) was suggested as a forum that could also serve in facilitating cooperative management between scientists and state/federal agencies. There was agreement on the need for a network to be established involving state and federal agencies. It was recommended that the GLP should go on record requesting more resources for monitoring, enabling the states to increase monitoring efforts. The need was identified to inventory all projects that inform rapid response and early detection/monitoring. The inventory would then be discussed at a GLP meeting in terms of components that have been addressed as well as identifying the gaps and unmet needs. In combining the inventory discussion with elements of an educational piece on risk assessment was suggested as a theme for an upcoming GLP meeting.

The discussion then turned to the GLP's role in improving outreach as related to the GLRI to help taxpayers see the benefits and payoff of their investment. It was noted that a well educated public is the backbone of policy. EPA expects there will be some formal communication on work under the GLRI, but most communication will probably

happen through the partners promoting their own work. It was suggested that the GLP could hold a session on what has been accomplished under the GLRI, documented by a publication developed for information sharing. It was suggested that in the next version of the GLAI booklet, an overview could be provided on how the different AIS vectors are being addressed through GLRI projects. A proposed beneficial exercise would be to identify linkages between GLP and GLRI priorities, connections between their accomplishments, and how each entity has supported the other. Such an assessment could also be used as a report on GLP accomplishments. There was some discussion on whether the structure of the GLP was appropriate for receiving GLRI funding through the competitive process. It was advised that the GLP should pursue funding outside of the RFP process. Another option proposed was to have an entity serving on the GLP lead efforts with the GLP serving as a project team to implement project activities. The GLP has an oversight structure that makes it well-positioned to receive non-competitive funding. It was noted that to qualify for GLRI non-competitive funding, the GLP would need a strategic plan similar to SMPs.

There was brief discussion on OIT. GLP members generally agreed that a day spent discussing the issue of OIT laws and regulations along with legislative implications would be a good investment of the GLP's time. It was noted that the legislative issue is timely, and there would be value in having a session examining invasive species laws and how they are working (or not) as well as hurdles to their implementation. GLP members should e-mail Kathe Glassner-Shwayder ([shwayder@glc.org](mailto:shwayder@glc.org)) or GLP Chair Phil Moy ([pmoy@uwc.edu](mailto:pmoy@uwc.edu)) with further comments on this discussion.

### **Great Lakes Panel Business**

- GLP Chair's Report

GLP Chair Moy reported that he has developed a draft Asian carp position statement that he will send out to the rest of the GLP for review. Kathe Glassner-Shwayder reported out on the ANSTF meeting held in Arlington, Virginia during the first week of November. Featured at the meeting was an overview of the GLP's recommendation for an AIS annex in the GLWQA. Shwayder noted the discussion on the GLWQA was robust and caught the ANSTF's attention. She recognized that although there will be challenges, not knowing the ins and outs of the GLWQA negotiations, the investment in developing the recommendation on AIS for the Agreement promises to be worthwhile.

- Spring GLP Meeting

GLP chair Moy said that numerous suggestions for the location of the spring 2011 GLP meeting have been received, and the most likely location is somewhere on the western shore of Lake Michigan, such as Sheboygan, Milwaukee or Green Bay. A comment was offered that a good field trip from Green Bay would be to shipyards in Menominee and Sturgeon Bay. Next, Moy said that the timeframe for the meeting will likely be late April in order to avoid the beginning of the field season.

### **Asian Carp Initiatives: Updates and Discussion**

*Moderator: Phil Moy*

- Regional Coordinating Committee  
*John Goss, Asian Carp Director, White House Council on Environmental Quality*

Director Goss said that he will be depending on the GLP members and their networks and expertise in the coming year. He reported that the Asian Carp Regional Coordinating Committee (ACRCC) has the 2011 *Asian Carp Control Strategy Framework* well established and a number of research and development projects are underway. Goss said that all of the states are now members of the ACRCC and would like feedback from the GLP on whether connections are actually being made at the state level. He described his charge, and that of his Deputy Director Jim Bredin, as ensuring that all Asian carp control actions continue to move forward simultaneously and that milestones in the new framework are met. He said that Bredin should serve as the first point of contact. Goss emphasized that the ACRCC wants to take proactive communications actions; for example, [www.asiancarp.org](http://www.asiancarp.org) will be the focus for up-to-date information and they hope to make it more dynamic and informative. If GLP members have recommendations for content, they should send them to Jim Bredin or other members of the ACRCC's Communication and Outreach Workgroup. The ACRCC is seeking Communication and Outreach Workgroup representatives from each Great Lakes state. Goss emphasized that this discussion is bigger than just Asian carp; it is also an opportunistic time to find permanent solutions to between-basin transfer of AIS. He said that most Asian carp control projects are funded by the GLRI, and we may need to provide information to NGOs,

elected officials, and others who can push for continued GLRI funding. Goss said that for 2012, an effort will be made to incorporate Asian carp control into base budgets of federal agencies. Finally, Goss said that efforts are being made in marketing Asian carp as a food source and for other end uses, and recognized the concerns over reviving commercial fishing in Indiana waters. He requested feedback from the GLP members on this issue.

#### *Questions and Discussion*

There was discussion on commercial fishing, and some members felt that the idea of marketing Asian carp as a commodity may be dangerous. Concern was raised that once fishery is established, there is the risk that it may never be disbanded; it follows that a sustainable Asian carp fishery created by a market could serve as a permanent source for this highly invasive species. However, there was general agreement that these decisions should be left to state authorities. There was also discussion on the role of the GLP in encouraging a coordinated approach to this issue. It was emphasized that it is important to keep in mind that commercial fishing is currently a part of integrated pest control, and that issues can be avoided as long as commercial fishermen know the goals of the program. It was noted that the best parallel to this situation is alewife fishing, which was licensed commercially for a limited period of time driven by the states' decision to end the commercial fishing.

- Asian Carp Control Strategy Framework  
*Bill Bolen, U.S. EPA*

Bolen reported that the 2011 Framework is currently going through review by the Executive Office of the White House. The Framework was initially focused on the CAWS, but the addition of the states to the ACRCC has expanded the framework to a more basin wide effort. Bolen asked GLP members for their help in identifying people who should participate, in response to a request from the Great Lakes governors to appoint two people to represent each state. It was stressed that, if possible, a person with policy background and experience is needed on the team. Also noted was the need for a "Federal Executive Committee" to serve as a decision-making body that can quickly direct resources. Bolen discussed the formation of an Interconnected Waterways Workgroup, of which the current CAWS and Wabash-Maumee workgroups will be a part. Bolen encouraged Canadian partners to join the workgroups. Bolen also discussed the ACRCC's non-federal technical and policy workgroup, formerly the Dispersal Barrier Advisory Panel. The workgroup currently consists of a core of official members but is open to those interested in participating. The workgroup's current ad hoc operating model has worked well and will be maintained. It was noted that the Framework's main objective is to transition from a single point of defense (the electrical barrier system) to multiple points by bringing all the players together. The 2010 framework was based on short and long term items, whereas the 2011 framework focuses on efforts to be performed related to specific action categories. Bolen also discussed eDNA efforts, reporting that significant funding has been provided for a calibration study which needs to move rapidly this year. He recognized the important pioneering work done by UND in these efforts, but emphasized that responsibility needs to be transitioned to other federal agencies, such as USFWS [which hold the capacity to conduct eDNA monitoring on a large scale level]. Bolen commented on the importance of coordination and communication across the number of GLRI-funded eDNA sampling projects.

#### *Questions and Discussion*

Bolen clarified that the role of the states on the ACRCC is expected to bring in new ideas, information on new invasion fronts, and improvements in communication so that in the future, resources can be directed where there is need. For Asian carp control efforts to be built into budgets in the long term, broad-based support will be needed. To accomplish this, the states' help with professional staff will be needed along with the political will to stay on this issue. The states may also be able to meet the need for increased ICS capacity in the future. A comment was offered that more state management plans specific to Asian carp are needed. These plans can be funded under SMPs and would provide good support to federal efforts.

- Binational Asian Carp Risk Assessment  
*Becky Cudmore, Centre of Expertise for Aquatic Risk Assessment (CEARA), Fisheries and Oceans Canada (DFO)*

Cudmore reported on the Asian carp risk assessment project, investigating the likelihood of introduction of Asian carp, the magnitude of the consequences, and the uncertainty in estimates. The current project will fill gaps left by previous risk assessments and will benefit from a greater understanding of Asian carp biology. It was noted that the high level of uncertainty and conflicting information on Asian carp makes decisions difficult. There is a need for more targeted questions to address specific management priorities. The 12 month ecological risk assessment, which includes eight months of complementary research, is being led by CEARA with Great Lakes Fishery

Commission coordination. The primary research/writing is being conducted by DFO, with contributions from the USGS lead Duane Chapman and USFWS team members. State, provincial, and federal governments, academic groups, and NGOs will be able to study the results, time permitting. The risk assessment will be scientifically peer reviewed by a transparent process prescribed by DFO. Cudmore said there will be a four month socio-economic impact assessment as well, and they are in discussions to make this a binational endeavor.

The first meeting under the project, held in November 2010, was a scoping session to identify management needs. Cudmore said that they are using a reiterative process between the management and science components to ensure that the study is producing useful advice. Management goals include focusing prevention efforts on all high risk entry points, identifying vulnerable areas (e.g., high propagule pressure, sufficient food source, and suitable spawning habitat) for early detection and surveillance, informing rapid response efforts, impacts and identifying key control points. Management needs will be addressed based on the risk assessment. Other project deliverables include a biological synopsis, an annotated bibliography of the Russian literature, the peer reviewed risk assessment, proceedings from the peer review, a science advisory report for managers, a science-to-policy transfer meeting and associated documents, and primary publications.

- The Potential for AIS Spread via Interbasin Hydrologic Connections in the Great Lakes  
*Dave Wethington, U.S. Army Corps of Engineers (USACE)*

Wethington began by discussing the GLMRIS language related to preventing or reducing risk of AIS transfer between basins. It was noted that as an engineering organization, USACE recognizes because there may not be a solution that will ensure 100% prevention, this effort should essentially be considered risk reduction. It was reported that the GLMRIS study is fully federally funded and consists of numerous project elements, including analysis of hydrologic separation. The area addressed by the GLMRIS study is large, with the Great Lakes and Upper Mississippi basins as priority areas. The project has two areas of focus: CAWS and "other pathways." It was noted that generally speaking, GLMRIS will identify pathways as well as potential AIS, and analyze the possible controls available. Outlined were the steps being taken to analyze CAWS; currently USACE is collecting baseline environmental, economic, and social data. Discussed was the recent report, mostly focused on Asian carp, which looked at 18 other pathways representing some risk. Wethington noted that while most of these potential connections do not pose severe risks; the Eagle Marsh connection is considered a high risk pathway.

The project's overall timeline was discussed, recognizing public concern that the project is taking too long. Wethington emphasized that USACE is not predetermining a solution; in being supported by taxpayer dollars, GLMRIS must consider all user groups. It was noted that in FY15 the project team will deliver draft recommendations for CAWS. Interim products to be released include inventories of AIS and their transport mechanisms, control technologies, navigation surveys, and fisheries surveys. Wethington said that stakeholders can help by providing information that directly applies to the GLMRIS scope and conforms to the USACE QA/QC requirements. Other ways of providing input include participation in the NEPA scoping process by attending meetings being held throughout the region. Wethington emphasized the importance of GLRI funding to the project, pointing out that appropriations are not sufficient to cover the cost of GLMRIS.

#### *Questions and Discussion*

Wethington clarified that most of the identified at-risk pathways are similar to Eagle Marsh – episodic connections with the potential for flooding. The CAWS is the only continuous connection between the two basins. He emphasized that it is not as simple as closing off the connections, and that the Corps has to look at the economic, social, and environmental impacts of disconnecting connections at all locations. He confirmed that the study hopes to publicize interim results on regular media as well as on the internet and through social media, and encouraged suggestions on ways to better communicate. It was also mentioned that series of public meetings would be held for presentations and discussion on GLMRIS.

- Envisioning a Chicago Area Waterway System for the 21st Century  
*Tim Eder, Executive Director, Great Lakes Commission*

Eder recognized the Commission's partner in the project, the Great Lakes and St. Lawrence Cities Initiative (GLSLCI.) Also noted was the appointment of an Asian carp director which shows how important this issue has become, and recognized the role of eDNA monitoring in elevating the issue. Eder emphasized that one goal of the Commission is to get states to speak with one voice; in February 2010 the Commission adopted a resolution taking a position seeking the long-term solution of permanent ecological separation between the Great Lakes and Mississippi River basins. In discussing the project, Eder stated the four goals: 1) preventing Asian carp and other

AIS from moving in both directions between the two basins, 2) improving transportation, 3) improving water quality, and 4) improving storm water and flood management. It was noted that the project team's solution(s) for ecological separation will have as a foundation the other three goals besides preventing AIS transfer. As compared to the GLMIRS study, this project has been set on a faster timetable with an expected completion date of December 2011. The final report is expected to be published at the end of January 2012. Another difference is that this study focuses specifically on the CAWS, and on ecological separation as the preferred solution. The project partners made a policy decision that ecological separation is the best solution, and are working with consultants on how to most effectively accomplish this. Eder reported that the project received funding from six foundations and has reached its budget goal of \$2 million. It was also explained by Eder that the outcome of the project will explore at least 3 options for ecological separation. He emphasized that the project team is not going to advocate for a solution, but rather is trying to advance the discussion in the public dialogue. In addition to an executive committee, feedback will be obtained from an advisory committee and resource group consisting of outside experts. It was significantly noted that the project is not trying to get consensus from stakeholders on the three separation options, or to make recommendations on preferred options.

### *Questions and Discussion*

GLP members thanked the Commission for its stance on ecological separation. There was discussion on whether the work of the Commission/GLSLCI would be useful to the GLMRIS study. While USACE will not be able to use most of the outcomes directly, there is potential for the outcomes of the Commission/GLSLCI study to reduce the amount of cost estimations that will need to be conducted by the GLMRIS team on ecological separation. There was discussion on whether the continued northward migration of Asian carp in the Mississippi River was getting attention. The issue was noted as a concern at the federal level but the current focus is to keep carp out of the Great Lakes. There was also discussion on whether eDNA monitoring was being coordinated at the federal level; Director Goss responded there are a lot of groups working on this and the activities are not all connected, one goal is get these efforts coordinated soon. Finally, there was discussion on the need to fund Asian carp control and management through base agency funding rather than the GLRI. Eder noted that the GLP has an opportunity to advise the ANSTF, via a recommendation, to encourage the administration and federal agencies currently developing budgets for FY12 along these lines. It was also noted that any recommendation to the ANSTF should include full funding for implementation of the national Asian carp management plan.

### **Public Comment**

Sarah Whitney, Chair of the Mid-Atlantic Regional Panel, reported that Mid-Atlantic Sea Grant is looking for researchers to address a current RFP to investigate social marketing and the bait vector management issue. Sarah Whitney should be contacted with any information or questions. Kathe Glassner-Shwayder announced a Great Lakes Commission-organized regional *Phragmites australis* symposium in March 2011 and the National Invasive Species Awareness Week 2011, encouraging GLP members to attend both of these important events. Doug Jensen reported that he is coordinating orders to get a volume discount on Asian carp mounts; contact him if you are interested.

### **Great Lakes Panel Business**

- Report on GLP Action Items  
*Kathe Glassner-Shwayder, GLP Coordinator, Great Lakes Commission*

Glassner-Shwayder thanked everyone for attending and staying engaged, and reviewed the major action items from the meeting (provided as a separate attachment).