

Great Lakes Panel on Aquatic Nuisance Species

Meeting Summary

November 28-29, 2007

Ypsilanti, Mich.

Wednesday, November 28, 2007

Welcome and Introductions

Tim Eder, *Great Lakes Commission*

Eder welcomed meeting participants and recognized the achievements and long-standing commitment of the Great Lakes Panel members to respond to the challenges of Great Lakes aquatic invasions. In his remarks, he discussed the importance of comprehensive aquatic invasive species (AIS) prevention and control. Specifically Eder emphasized the need to apply tools such as risk assessment and screening to address non-ballast vectors and pathways by which AIS are introduced and spread.

Mike Conlin, *Panel Chair, Illinois Department of Natural Resources*

Conlin also welcomed meeting participants and gave some remarks on the importance of partnerships in this time of limited resources. He highlighted a regional and national approach to AIS management and the recent progress at the federal level on addressing the ballast water vector. Conlin also led a round of introductions. A quorum was determined to be present without the need of a roll call. Conlin next reviewed the meeting agenda, no amendments were proposed. A motion was made to approve the summary of the May 2007 meeting (Erie, Penn.) which was seconded and passed. Conlin introduced Kathe Glassner Shwayder, Panel Administrator, and acknowledged her hard work and continued Great Lakes Commission support for the Panel. He also mentioned that it might be necessary, given limited resources, to establish a small assessment for future Panel meetings.

Great Lakes Panel Update

Kathe Glassner Shwayder, *Panel Administrator, Great Lakes Commission*

Shwayder provided an update on action items from the May 2007 meeting, as well as several general Panel updates.

Featured At-large Member

Francine MacDonald, *Ontario Federation of Anglers and Hunters*

MacDonald gave a presentation describing Ontario's Invading Species Awareness Program. The program is a joint effort initiated in 1992 between the Ontario Federation of Anglers and Hunters (OFAH) and the Ontario Ministry of Natural Resources (MNR). With the help of multiple NGO and government agency partners, the program targets specific pathways such as recreational watercraft, horticulture, aquariums, use of live bait, and the live food fish industry. In an effort to evaluate program successes, public attitudes and behavior changes are also studied. MacDonald described several information and education initiatives focused on community engagement at the provincial and regional level. She also gave examples of outreach initiatives targeted towards specific pathways, including educational signage and brochures; public service announcements; raising awareness on invasive species among horticulture and landscape businesses and AIS HACCP training for bait operations. The program is also developing AIS monitoring efforts and supporting various research initiatives such as risk assessment of pathways. Looking ahead, MacDonald said the program will focus future efforts on pathway characterization and operation along with working with industry to find ways to interrupt high risk pathways. Also mentioned were hopes to increase coordination within the province; public action; and industry engagement through best management practices, among others.

Risk Assessment & the U.S. Live Organism Trade

Dr. David Lodge, *University of Notre Dame*

Lodge began with a brief overview of the invasive species issue. He described the process by which a species becomes invasive as a sequence of transitions which, if thought about in this way, will help define management and policy options available to deal with a species. Lodge emphasized that prevention is the most cost-effective area to focus management efforts and highlighted six recommendations were developed by the Ecological Society of America which apply to the different stages of invasion. There are three major U.S. federal authorities available to prevent introductions of species, motivated by protecting human health, wildlife and agricultural plants and animals. Even if the three authorities are combined, only a few species are regulated. Lodge advocated the need for response from other levels of government (e.g. city, state, and region) besides the federal level, saying the federal process was weak and in-effective for prohibiting imports into this country. He then gave an overview of a conceptual model for instituting a screening process for intentional species introduction that would utilize the increasing number of tools and resources available to estimate the potential for invasion and associated impacts. In concluding his presentation, Lodge suggested that the Great Lakes Panel and state AIS coordinators could serve as the vehicle for establishing a common protocol/approach that would be acceptable to all the Great Lakes states for risk assessment. Also mentioned was the tension in establishing a risk assessment process to balance the following issues: Industry's concern about false positives (i.e., prohibiting species that are not actually harmful); Regulators' concern over allowing import of species that may not initially seem harmful but end up causing significant impacts.

Discussion after Lodge's presentation addressed questions regarding available data to answer questions involved in his model screen process, the amount of error involved in those estimates, applicability to terrestrial species, and clarifying the difference between risk assessment and screening. Lodge said that models available for determining suitable habitat for a species were accurate to the extent that they could be based on the information upon which they were built. There is an inherent problem with any kind of forecasting that is trying to make decisions based on what has happened in the past and what we think is most likely to occur in the future. He said also that determining how much uncertainty was acceptable in determining whether a species should be imported is a question left up to policy makers. The important thing is that a risk assessment be transparent, quantitative and repeatable upon peer review. Further, the process is equally applicable and useful for terrestrial species. Lodge indicated he used the terms risk assessment and screening synonymously, but that others may see screening as a coarse tool that is used to determine when a finer risk assessment tool is needed. Also mentioned was the importance of evaluation of risk assessment in economic terms.

Canadian Centre of Expertise for Aquatic Risk Assessment

Nick Mandrak, *Fisheries and Oceans Canada*

Mandrak provided an overview of the Canadian Center of Expertise for Aquatic Risk Assessment which is part of Fisheries and Oceans Canada. The Center is focused specifically on biological risk assessment (i.e. not social or economic consequences). He explained that risk assessment is only one component of a risk analysis which includes risk management and risk communication. When risks are determined on a scientific basis, the results are then turned over to policy experts. The Center has five objectives including developing a national standard for biological risk assessment for AIS and prioritizing risk assessment needs for the country. They have completed several risk assessments thusfar including Asian carp (5 species), the northern snakehead and tunicates. On-going and new risk assessment include the green and Chinese mitten crabs, bloody red shrimp, spiny rayed fishes, Ponto-Caspian fishes to the Great lakes and freshwater pathways of AIS introduction and spread. Peer reviews of several ongoing risk assessments will occur in 2008. The Center is also working with NOAA and USGS to coordinate future risk assessments and is developing tri-national risk assessment guidelines with the U.S. and Mexico. Mandrak explained the current Canadian biological risk assessment process which has two parts. In the first part, a rapid assessment protocol is used to determine if the species is in a pathway, if it is able to survive in Canada and identifying

the known impacts. The second part is used to develop a biological synopsis of the species and a detailed assessment of the risk using statistical methods and models. The Center is working to develop a global environmental match tool to inform the rapid assessment process. The tool is expected to be available at the end of March 2008.

Canadian Live Freshwater Fish Trade

Becky Cudmore, *Fisheries and Oceans Canada*

Cudmore described a risk assessment approach recently used to assess a number of pathways of AIS introduction and spread that included live food, aquarium, water garden and baitfish trades. For each pathway, four areas of potential risk were examined: probability of introduction; probability of survival, reproduction and spread; probability of impacts; and probability of fellow travelers (i.e., hitchhikers). The food, aquarium and water garden trades were examined together as they are closely linked regarding importing species. The primary issue is that species are imported live and bought live. Other potential concerns include accidents during shipping; human mediated release (e.g., ceremonial and activism); and fellow travelers (e.g. parasites, diseases and other species). Cudmore explained challenges that were experienced during the assessment regarding a lack of sufficient documentation of species imports and errors in classification and identification of species. As a result, they are working with the Canadian Border Services Agency to improve the accuracy and timeliness of data collection. They are also conducting online surveys of aquarium and water garden owners and consumers. They have used a similar approach with the bait industry, focused primarily on bait dealers as well as a survey to determine how, when and what Canadians are using regarding bait fish. They will be compiling this data over the next year. They have already found an average 100 kilometer difference between where bait is bought and where it is used. Research at MSU is also starting to show that although outreach to the bait industry has increased, attitudes are not changing significantly. Cudmore explained that there are currently no Canadian statutes related to AIS and that management is currently all program based. The data being collected is being used in building risk assessment to support decision making on species to be prohibited to provide the basis for regulation. She added that the Fisheries Act is currently being revised and may include some regulation, such as a black list.

Risk Assessments for Aquatic Invasive Species

Reuben Keller, *University of Notre Dame*

Keller provided an overview of a joint project pre-proposal between University of Notre Dame, The Nature Conservancy and Illinois-Indiana Sea Grant: *Predicting and Preventing Great Lakes Invasions from the Trade in Live Aquatic Organisms*. The three primary goals of the project are to create risk assessment tools for freshwater organisms in trade in the Great Lakes region; assess the risk of all species currently in trade, or predicted to enter trade; and determine the economic benefits and costs to each state from listing species. Keller described the structure of the project and shared some recent research regarding organisms in trade that would help lay the foundation for project work.

Kristin TePas, *Illinois-Indiana Sea Grant & Illinois Natural History Survey*

TePas described the communication strategy the project would use to make sure the models developed through the project would be “user-friendly” for resource managers to objectively assess species risk. It was also communicated that benefits from the risk assessment process will be greatest when coordinated across the region. The desired end result of the project would be to have an invasive species screening kit based on the applicable data and statistical techniques described by Keller and Lodge. She then asked for feedback from the meeting participants on how to make the project and the resulting tools most useful to the Great Lakes AIS management community. Themes from the discussion focused on avoiding duplicity with other risk assessment initiatives through communication and collaboration; challenges to and promoting consistent lists among the states; and industry involvement through voluntary guidelines, best management practices and how to change behavior of industry and their practices to reduce AIS risks. Also mentioned was the importance of science based results for each species in trade and that coordination of species prohibition

lists was needed since protection is only as good as neighboring states. Rapid assessment is considered an important tool to prioritize species most likely to enter jurisdictions. The need for the Panel to develop a position on risk assessment and listing regulations, without endorsing specific projects, was also identified.

Great Lakes Regional Collaboration: Great Lakes Clean Boat Initiative

Lisa Wojnarowski, *Council of Great Lakes Governors*

Wojnarowski provided a brief overview of the new *Great Lakes Clean Boats Initiative* which came about as an outcome of the Great Lakes Regional Collaboration (GLRC). She said that although funding has been limited for many GLRC recommendations, the region is working to implement several of them. The Initiative consists of developing an inventory of existing outreach/education efforts for recreational boaters and a Clean Boats Day in June of 2008. The Council is currently interested in identifying partners and coordinating outreach efforts to contribute to Clean Boats Day. It was suggested by meeting participants that they reach out to industry groups such as boating manufacturers and tap into existing partnerships such as the *Stop Aquatic Hitchhikers!* campaign and a USFWS partnership with Cabela's.

Outstanding Service Award

An Outstanding Service Award was presented to Ron Martin. Comments were provided by Phil Moy, Kathe Glassner Shwayder and on behalf of Jay Rendall who was not in attendance.

Committee Break-Outs: Risk Assessment & Screening

For the final meeting session of the day, participants convened by Panel committee (Information/Education, Research Coordination and Policy Coordination) for discussion on risk assessment and screening, guided by discussion questions (Appendix A) developed by staff. Discussion outcomes are available in the committee reports presented in the final section of this meeting summary.

Thursday, November 29, 2007

Mike Conlin, *Panel Chair, Illinois Department of Natural Resources*

Conlin reviewed the agenda and introduced the first speaker of the day, Scott Newsham.

Federal / Regional Program Updates

Scott Newsham, *Aquatic Nuisance Species Task Force*

Newsham gave an overview of the recent Aquatic Nuisance Species Task Force (ANSTF) meeting held in Arlington, Virg. (Nov. 6-8, 2007) focusing on the decision and action items which were provided as part of the Panel meeting materials. The ANSTF meeting theme was climate change and AIS, including prediction and mapping, management strategies and research. An agenda and documents for this and all other ANSTF meetings are available on the ANSTF website at <http://anstaskforce.gov>. A discussion on VHS also occurred at the meeting which resulted in an ANSTF statement that VHS and other pathogens are AIS and should be considered for inclusion in state management plans. The ANSTF does not currently have plans to develop a species-specific management plan for VHS. The ANSTF has finalized management plans for four species of Asian carp and is forming an implementation team to keep this initiative moving forward.

The ANSTF approved three more state management plans (SMPs), bringing the total of approved SMPs up to 25. Newsham said the ANSTF is currently looking level funding for the coming year (i.e. \$1.75 million). At this funding level, each of the 25 states with approved SMPs will receive approximately \$42,000, assuming equitable share-based allocation per state.. It was noted that until the USFWS has budget for Fiscal Year 2008, allocations will not be made to states. Newsham explained that the decision on how to distribute funds is a formal decision made each year at the fall meeting of the ANSTF. He said that he would be working on revising the guidelines and process for developing and approving SMPs based on recommendations from this and the May 2007 meeting. Other topics covered by Newsham included reactivating the five standing committees of the ANSTF which have been dormant for the past couple years; investigating how to best

improve management / control plan of the common carp; and decontaminating equipment moved by federal agencies with and between states. Newsham concluded by announcing his retirement from the USFWS and letting meeting participants know that USFWS is still committed to having the Executive Secretary of ANSTF as one specific job.

CAPT Lorne Thomas and CDR Timothy Cummins, U.S. Coast Guard – District 9

CAPT Thomas discussed progress on the ballast water discharge standard rule-making and related Environmental Impact Statement (EIS) which are close to being complete. He mentioned keeping a regional perspective to ballast water program and that currently, very little un-managed ballast water is going into the Great Lakes. He said no ballast on board (NOBOB) ships continue to be a high priority for the Coast Guard (USCG), as well as hull fouling. He asked for patience from the states on development of the regulations and said that one federal standard would be better than multiple state standards. Currently, inspections occur on board vessels checking for completion of ballast water reporting forms, knowledge of ballast water management and salinity tests of ballast. If results indicate ballast not exchanged, the ballast must be kept on board.

CDR Cummins discussed the USCG ballast water discharge standard rule-making in more detail. The National Invasive Species Act of 1996 (NISA) gave USCG the authority to set a standard and approve technologies for managing ballast water discharge that is consistent with the IMO (International Maritime Organization). The draft EIS has been under development since 2003 and has recently been submitted to USCG headquarters and is awaiting approval. Once the EIS is complete, USCG will hold three public hearings, including one in the Great Lakes region. USCG will accept comments on the EIS, address the comments and then publish a proposed rule-making. Once new standards are adopted, USCG will begin approving processes that will achieve the standards. Enforcement will likely include an equipment check and sampling of effluent for organisms; implementation maybe a joint federal-state effort. There will be a phase in of the standards over a five year period which is needed given that necessary technology / equipment can only be installed at dry dock that many ships only do once every five years.

Other current ballast water initiatives include the joint ballast water management exam program with Transport Canada, the St. Lawrence Seaway Management Corporation and St. Lawrence Seaway Development Corporation; and consideration of a NOBOB rulemaking based on a NOBOB risk assessment and workshop. Noted was the difficulty in testing sludge on the bottom of tanks coupled with the situation that some crews are not well informed on this. Given the assessed risk of NOBOBs for AIS transport, Cummins said that NOBOB regulations were on the horizon. USCG is also working to get caught up on entering information for the National Ballast Information Clearinghouse (NBIC), which tracks vessel's port of origin and last five ports of call. The quality and rate of dissemination of this information is expected to improve as knowledge of the form improves. While NBIC does not include information on vessels only stopping at Canadian ports, the information will be included in a Canadian database which is expected to be real-time by the end of 2008. Cummins obligated to providing more information on the NBIC at the next GLP meeting.

Tim Eder, Great Lakes Commission

Eder provided an update on several relevant Great Lakes Commission (GLC) activities. With regards to federal legislation, the GLC has been working with Congress to develop ballast water regulations that satisfy the spectrum of regional interests involved in the issue. He highlighted major issues with the legislation which include its affect on EPA authority provided in the Clean Water Act and the role of states and their ability to implement a ballast water program. There is both a House and Senate version of the legislation. Eder said it is likely the House will be able to move the legislation to the floor; however there is strong opposition to the bill in the Senate. He emphasized the need for the region to continue to put pressure on both the House and the Senate to move on the legislation. In addition, Eder mentioned that there is still a desire to see a comprehensive approach to AIS management through federal legislation such as the National Aquatic Invasive Species Act (NAISA); however this legislation has only been introduced in the Senate and is

currently unlikely to move. The GLC is in the process of assembling recommendations for legislative action for the coming year which will be released in conjunction with Great Lakes Day in Washington, DC (scheduled for Feb. 28, 2008). The GLC will again be making funding for state management plans and the regional panels a priority.

Eder also gave a brief overview of two new GLC projects related to AIS management, both funded by the Great Lakes Protection Fund. The first mentioned involves the GLC working with a team led by the Northeast-Midwest Institute and Cornell University on testing protocols for microbes and pathogens (e.g. VHS) in harbors, ambient water and ballast tanks. The other project, led by the GLC, is a planning grant to investigate live organisms in trade (OIT) by assessing the AIS risks associated with this vector and also examining the feasibility of risk assessment and screening tools to address OIT on a regional basis. Also to be examined under this grant is the availability and provision of information (e.g. information technology), management aspects, authority, regulation, and policies related to the trade in live organisms. Eder also mentioned fundraising efforts to provide institutional support in forming and operationalizing an ad hoc Panel committee on rapid response. He emphasized the need for state involvement and representation in all of these projects through advisory committees and other vehicles in a systematic way that would take into account busy schedules. Eder also mentioned his role on the Executive Committee of the Great Ships Initiative and the potential to work with the Panel, or a subset, to discuss regulatory and environmental standards.

Rapid Response: Regional Initiatives

Mark Burrows, *International Joint Commission*

Burrows explained that the International Joint Commission (IJC) usually identifies themes for project work on a two year cycle and AIS was determined to be a major theme for the next two years. Staff are then asked to develop preliminary proposals for projects on the themes. Burrows submitted preliminary proposal framing a project to look at binational response for AIS similar to binational oil spill response systems. The IJC subsequently approved the proposal and provided funding for two years to develop recommendations on binational system. The work group for this project had its first meeting in October and decided to approach the project from a high level policy perspective (e.g. obtaining pre-approvals for chemical use). The work group, which consists of representatives from the Water Quality Board, the Science Advisory Board and the Council of Research Managers, will act as the steering committee for the project. An RFP is due out in January. Further information is available on the IJC website.

James Schardt, *Environmental Protection Agency*

Schardt provided an overview of progress under the Great Lakes Regional Collaboration (GLRC) AIS Strategy recommendation to “establish an interagency, Great Lakes Federal Rapid Response Team, that will conduct activities on federal lands, and in other locations with State, Tribal, and local cooperation.” Such a rapid response team was subsequently formed under the already established Federal Interagency Task Force and Regional Working Group as the Federal AIS Rapid Response (FAISRR) Subcommittee. Thusfar, FAISRR has developed Points of Contacts within each federal agency to coordinate rapid response efforts. Through this process, FAISRR recognized that some species-specific and location-specific exist and are the preferred contingency plans and outlined a Communication Protocol to address situations without such plans. On March 2, 2007, the GLRC Executive Committee endorsed the formation of an Aquatic Invasive Species Rapid Response Initiative to include multiple sectors of government (i.e., federal, state, tribal, mayor/cities, Congress). The Initiative will work to refine the Points of Contact and Communication Protocol, and develop plans for a mock exercise to test the Protocol. The mock exercise is being planned for spring of 2008 and Schardt noted suggestions and sponsors were being solicited.

Phyllis Green, *National Park Service*

Green gave a presentation on preventing VHS from spreading into Lake Superior and Isle Royale National Park. The National Park Service (NPS) is primarily concerned with preparing a response strategy that can be

executed in a timely fashion if VHS is introduced into Lake Superior. It was noted that once VHS was introduced, controlling the spread would virtually be impossible. Given the mission of the NPS to preserve and protect habitat within park boundaries, a high level of concern has been mounting over the potential of VHS to infest NPS waters and threaten the fishery. This concern led to a NPS held a workshop at the Lake Superior Conference in Duluth (October 30-31, 2008) to determine current and potential future activities to contain VHS. The workshop looked at multiple vectors of VHS spread including recreation, aquaculture and ballast water, and identified areas where management practices could reduce this risk through these vectors. Dialogue at this forum provided NPS with a clearer idea of lead agencies and issues that need to be further explored. NPS will be moving forward with a planning team starting in January to develop a rapid response plan based on the Incident Command System (ICS) for Isle Royale National Park if VHS is introduced. It will be an interagency effort coordinated with FAISRR. NPS will also be participating with the Great Ships Initiative to develop and test ballast water treatment technology, as well as the *Stop Aquatic Hitchhikers!* and other campaigns to address recreational pathways of VHS spread. Green clarified that the planning team will be considering the effectiveness and feasibility of chemicals to control VHS and vetting a solution that is environmentally sound. Noted was the need for a threat analysis of VHS in efforts to protect NPS waters. This would be accomplished by pulling together a panel of experts to discuss what can be done with what is currently known, recognizing that there is a need for more information. Green mentioned that an ICS team would be convened with proper authority to implement actions in NPS waters, considered short term solutions to long term problems.

It was pointed out by Panel members that the USCG is looking at chemical treatment as an option in their ballast water EIS. The USCG would not be able to require a treatment standard that has not gone through an approval process, such as with the EIS. Further, USCG does not have the authority to implement rapid response or interim requirements as the situation does not fit the criteria for an emergency rule-making. Such authority is included in proposed federal ballast water legislation. The EPA would be responsible for developing effluent standards in the case that chemical treatment is recommended. It was also noted that although Michigan's ballast water permit allows for chemical treatment, no ship that has applied for the permit has utilized this option. One of the potential treatment options is chlorine, which is considered a corrosive material and may void a ship owner's insurance if used. During discussion, it was mentioned that scientists understanding ballast tank environments needed to be involved in determining treatment dosage of chlorine to kill VHS, avoiding non-target organisms. Also raised was how recreational boaters, anglers and bait transport would be affected by VHS response activities.

Committee Reports

(Note: Discussion for committee break out sessions was guided with question found in Appendix A)
Rochelle Sturtevant, Information / Education Committee Chair

Sturtevant provided a brief overview of the Committee's risk assessment discussion. Concerns from the discussion included the feasibility of having the exact same regulated species list across the states and the ability to enforce current and any potential future lists. As an alternative to regulations requiring enforcement, the Committee suggested increasing outreach and best management practice approaches. The Committee also discussed the importance of VHS as an opportunity to look more closely at the bait vector and related communication and cultural issues. The Committee identified social and economic aspects as important components of risk assessments. Sturtevant's report on Committee activities provided a progress update on the following items:

- Committee priorities documents distribution;
- *Great Lakes Aquatic Invasions* booklet distribution and feedback;
- ANS Task Force Experts Database development; and
- Panel member updates compilation and distribution.

The Committee asked Great Lakes Commission staff to develop email list-serves for each of the standing committees that members may sign up for to keep informed of Committee activities to streamline

communications to Committee members. The Committee also requested a new timetable for compiling and distributing Panel member updates so that they are sent out sooner as well as requesting that they be posted online prior to the meeting. The Committee asked that Commission staff also look into setting up a online “wiki” for members to post information on program/project activities related to Committee priorities and provide contact information for those programs/projects. The Committee thought this type of tool would lead to increased project evaluation. Finally, the Committee recommended that the Panel investigate and consider translation of materials into other languages in an effort to reach a broader community of culturally diverse stakeholder groups.

Phil Moy, *Research Coordination Committee*

Moy gave a report on the outcomes of the Committee discussion on risk assessment as well as a progress update on Committee work plan items. As result of their discussion, the Committee recommended adding an item to their Research Priorities document on developing and refining tools for screening and risk assessment, as well as researching species attributes to contribute to the tools. Moy said the Committee would be working on a letter to the U.S. Coast Guard expressing desire for more timely release of ballast water information documentation through the National Ballast Information Clearinghouse. Moy also highlighted changes to the Committee Prohibited Species List and Priority Species List. Finally, Moy reviewed the Committee’s proposed mission statement, goals and products, which were subsequently approved by the Panel.

Jen Nalbone, *Policy Coordination Committee*

Nalbone reviewed three Committee work plan items to the Panel: a recommendation on ballast water legislation, development of priorities for the Committee and development of a Panel risk assessment ad hoc committee.

The session began with discussion on risk assessment. Noted were the economic benefits associated with imports of live organisms and the need to help commercial business replace prohibited species with native alternatives. The importance of changing behavior was also discussed, noting that children are valuable messengers to inform and influence behavior of adults (parents). Concern was voiced for the need to identify a listing of diseases/pathogens to facilitate detection, raising the bar in terms of response timeframe. It was recommended that terrestrial pest model should be used for aquaculture. The discussion indicated the need for a working group to be established on screening to pull in research expertise. The goal is to develop user oriented tools in efforts to limit the number of invasive species imported. The group was informed by committee staff of the OIT vector assessment project recently selected for funding by the Great Lakes Protection Fund.

The group was also informed on a Commission proposal, *Building Capacity for Rapid Response in the Great Lakes Region* submitted in mid-November to the National Fish and Wildlife Foundation, under the Great Lakes Watershed Restoration Program. If funded, the proposed project would help address some of rapid response priorities identified by the Great Lakes Panel through the conduct of an ad hoc committee for rapid response.

Considerable discussion was focused on a recommendation being developed for consideration by the ANS Task Force regarding ballast water legislation drafted prior to the meeting. Jen noted the need to maintain pressure for passage of ballast water legislation questioning whether there was motivation on the part of the Administration to push through ballast water legislation. Discussion focused on how to craft a recommendation for the ANS Task Force that would add value in terms of getting ballast water legislation passed. Scott Newsham advised that the regional ANS panels should focus on recommendations to advance coordination among the states. Jen recommended that the ballast water letter go forward to the Great Lakes Panel for review and comment as well as consulting with their agencies/organizations.

In developing the committee workplan, Jen requested that the committee consider the near term priorities of the Great Lakes Regional Collaboration AIS Strategy Team. Mentioned was development of a regional list of priority species based on the lists of prohibited species commonly regulated by all the states. The formation of a rapid response ad hoc committee was also raised as a priority for the workplan. Also discussed was the need for work by a regional screening group, guided by research scientists, on a regional approach to risk assessment. It was noted that progress has been made in this area through an initiative under the Mississippi River Basin Panel on model state screening.

Discussion shifted to development of VHS rapid response plan for NPS waters. NPS is looking for feasible options to prevent the spread of VHS within park waters with plans to enlist other agencies and states in process. It was asserted that the planning process will push the Great Lakes forward on rapid response planning with particular focus on contingencies for AIS pathogens. The action plan is geared to figure out where to send people to make a difference. It was pointed out that the emergency order for management practices of chlorine was illegal. Noted was the incident command system (ICS) which works to turn crisis management into project management.

Panel Business

Mike Conlin, Panel Chair, Illinois Department of Natural Resources

Action Items: Erika Jensen reported out on the action items raised during the meeting (see Appendix B).

Spring Panel Meeting: Glassner-Shwayder discussed plans for the spring meeting to be held in conjunction with the Mississippi River Basin Panel. The location will be Milwaukee, Wisconsin during the week of June 17-19. The following agenda items were suggested by GLP members:

- o US Coast Guard Update
- o Products held in common interest by the 2 regional ANS panels
- o Milwaukee plans for shore based treatment of ballast
- o Milwaukee River in its function as a canal for the spread of AIS
- o Climate change and projected effects on AIS
- o Update on what is working and not
- o Perspectives of industry: Listening session to advice GLP membership

Election for Panel Officers: Glassner-Shwayder mentioned that elections are on the horizon for this spring. ExCom will be asked for input on members to serve on a nominating committee.

Committee Break-out Questions

Risk Assessment and Screening as Tools for AIS Prevention and Control

1. How can risk assessment be applied to improve management of AIS in the Great Lakes region?
 - a) On what jurisdictional basis should risk assessment be implemented (state, regional, federal or combination thereof)?
 - b) What challenges/obstacles exist to implementing risk assessment?
 - c) How can we overcome these challenges/obstacles?

2. What are the important components of a screening process and how can it be applied to improve management of AIS in the Great Lakes region, particularly as applied to organisms in trade and other non-ballast vectors of AIS introduction and spread?
 - a) What is needed to integrate risk assessment into a broader screening process?
 - b) On what jurisdictional basis should a screening process be applied (state, regional, federal or combination thereof)?
 - c) What challenges/obstacles exist to implementing a screening process?
 - d) How can we overcome these challenges/obstacles?

3. How can the Great Lakes Panel, as a multidisciplinary entity or through individual members, facilitate the development and implementation of a risk assessment and/or screening process to improve AIS prevention and control on a regional basis?
 - a) What types of information or tools are needed by governments, private sector and NGOs to develop and implement a risk assessment and/or screening process?
 - b) How can the tools/information be packaged for regional application?

** Questions are intended to be used only as guidance during the first Committee break-out session.*

Meeting of the Great Lakes Panel on Aquatic Nuisance Species

November 28-29, 2007

Action & Decision Items

Great Lakes Panel

- **Risk Assessment and Screening:** Staff is requested to investigate how the Panel can maintain involvement in risk assessment/screening (potentially via ad hoc Committee, or other initiatives) to keep momentum going from discussions at the fall meeting.
- **Spring ANS Panel Meeting:** Plans are underway for a joint meeting of the Great Lakes Panel and the Mississippi River Basin Panel
 - Dates: June 17-19, 2008
 - Location: Milwaukee, Wisconsin
 - Agenda: To be determined through discussion by ExComs of both ANS panels
- **At Large Membership:** It was suggested that staff look for opportunities for representation from industry and the Coastal Management Program to serve on the Great Lakes Panel as at large members.
- **Great Lakes Panel Elections:** With Panel officer terms ending this spring, the ExCom is requested to provide recommendations for a nominating committee for the spring (2008) Panel election. Positions up for election include vice chair, committee chairs of information/education, research coordination and policy coordination. The chair position will be assumed by the current vice chair. Refer to the Panel's Operational Guidance Document (<http://glc.org/ans/documents/07-04-27OpsGuidanceFinal-FINAL.pdf>) for further information on elections.

Panel Committees

I/E Committee

- **Dissemination of Committee Priority Documents:** To facilitate use of the priorities documents developed by each of the Panel Committees, the I/E Committee will develop a list of entities, including funding agencies, for targeted distribution of the documents.
- **List Serves for GLP and Committees:** Staff will develop list-servs for each of the GLP Committees so Panel members can sign up to receive information on committee activities.
- **Great Lakes Aquatic Invasions (GLAI) Booklet**
 - **Survey on Utility of Booklet:** Staff will continue work with the I/E Committee in developing a feedback survey for those who have received copies of the *Great Lakes Aquatic Invasions* (GLAI) booklet to see how this publication is being used.
 - **Website Posting of GLAI Booklet:** Staff will look into the request from the Shedd Aquarium to post the electronic version of the *Great Lakes Aquatic Invasions* (GLAI) booklet on their website, and investigate opportunities to do this with other organizations.
 - **Website Linkages:** Panel members are encouraged to link their agency AIS webpages to the Panel webpage posting the electronic version of the GLAI booklet (<http://glc.org/ans/aquatic-invasions/>).
- **ANS Task Force Expert Database:** The I/E Committee will send out a request to Tier 1 experts included the ANSTF database to gather input on recommended experts to be included in Tier 2. This query should include input on types of experts, other than taxonomic, that should be included in the ANSTF Experts Database Tier 2, with particular attention to establish contacts needed for rapid response planning and implementation.

- **Process Change for Great Lakes Panel Updates:** To add value to the GLP member updates, staff will make the request for the updates at least 30 days before the meeting and post on the Panel webpage for access by members and interested parties prior to the meeting.
- **Tracking Progress on GLP Committee Priorities:** GLC staff will investigate potentially setting up a password-protected “wiki” on which to post GLP Committee priorities and allow Panel members to post activities that are underway in their organizations which relate to those priorities as a way to track progress.
- **Multi-lingual Outreach:** Staff will work with interested committee members on the efforts of other Panels (e.g., the Northeast Regional Panel) translating materials into other languages to reach a broader audience of stakeholders.

Research Coordination Committee

- **Research Priority List:** Staff will work with the committee in adding a bullet to the research priority list to cover the following:
 - Development of new tools for risk assessment and screening for organisms in trade to identify species of concern. Refine the accuracy of existing tools; develop probabilistic results and include species already here from the native range.
 - Determine research species attributes to complement development of the tool.
 - Development of future models to consider global climate change.
- **Ballast Water Information Clearinghouse (NBIC):** A letter from the Great Lakes Panel will be sent, via the proper communication procedures, expressing our concern/desire for more timely release of ballast water information documentation from the NBIC by the U.S. Coast Guard. (The NBIC is a joint program of the [Smithsonian Environmental Research Center \(SERC\)](#) and the [United States Coast Guard](#) that collects, analyzes, and interprets data on the ballast water management practices of commercial ships that operate in the waters of the United States.)
- **Regulated Species List:**
 - Research Committee will continue work with Lindsay Chadderton (TNC) as the lead with support from staff to revise, finalize and update periodically, the Prohibited Species List, now to be called the “Regulated” Species List.
 - Research Committee will make revisions to the Priority Species List (add tier designation to Phragmites (1), Northern Snakehead (2) and VHS (1); and delete ranking column.
- **Mission Statement:** Staff will post the newly approved Committee Mission/Goals/Products document to the website.

Policy Coordination Committee

- **ANS Task Force Recommendation on Ballast Water Legislation:** The committee will present a draft letter on the need for ballast water legislation to the full Panel for consideration on Friday, November 30, 2007 with a request for comments (recusal if needed) by Friday, December 14, 2007.
- **Priorities Document and Workplan:** Conference calls will be held by the committee to continue work in developing a Committee Priorities document and 5 year work plan that is based on review of the GLRC near-term priorities.
- **Ad Hoc Committee on Risk Assessment:** Staff will work with TNC in developing a statement on the purpose and work of a Panel ad hoc committee on Risk Assessment for the Panel ExCom to consider and take next steps.