

**Great Lakes Panel on Aquatic Nuisance Species  
Meeting Minutes  
July 22-23, 2003  
Ann Arbor, Michigan  
(DRAFT: November 26, 2003)**

*Note: Please note that the enclosed meeting minutes also are available online at [www.glc.org/ans/initiatives/](http://www.glc.org/ans/initiatives/). A participant list is included as Appendix A of these minutes.*

**July 22, 2003**

**Welcome, Introductions and Meeting Review**

Michael Donahue of the Great Lakes Commission welcomed members and interested parties to the summer meeting of the Great Lakes Panel on Aquatic Nuisance Species. Roger Eberhardt, Michigan DEQ, was introduced as the newly elected Panel Chair and Mark Tuchman, U.S.EPA, Great Lakes National Program Office (GLNPO), as the new Vice-Chair. Thanks were given to Ron Martin and Pat Charlebois for their service as Panel Chair and Vice Chair.

**Agenda Review**

Meeting agenda is available online at: <http://www.glc.org/ans/pdf/glpmeetingagenda.pdf>

**Regional/Federal Progress Reports**

**1) Great Lakes Panel on Aquatic Nuisance Species**

*Administrative Actions, Kathe Glassner-Shwayder, Great Lakes Commission*

Staff support for the Great Lakes Panel is currently being provided by a team of Commission staff, including Kevin Walters (program specialist), Sarah Whitney (project manager) and Kathe Glassner-Shwayder (senior project manager). Glassner-Shwayder announced the results of the recent Panel election.

• **Great Lakes Panel Election Results**

- Chair, Roger Eberhardt (Michigan DEQ)
- Vice Chair: Marc Tuchman, U.S. EPA, Great Lakes National Program Office
- Committee Chairs: Emily Finnell (Michigan DEQ) for the Information/Education Committee; Helen Brohl (U.S. Great Lakes Shipping Association) for the Policy and Legislation Committee; and Phil Moy, Wisconsin Sea Grant, re-elected as the chair of the Research Coordination Committee.

At Large Members (3 year term): Ted Batterson, North Central Regional Aquaculture Center and Hugh MacIsaac, Great Lakes Institute for Environmental Research

• **Membership**

Changes for Great Lakes Panel membership on the federal level includes Mike Hoff (primary) and Mark Dryer (alternate) for the U.S. Fish and Wildlife Service. Updates on state Panel membership representation include: Indiana DNR (primary) remains vacant as Gwen White has taken a consulting position with D.J. Case & Associates, Ohio DNR (alternate) has been filled by Joe Mion and Pennsylvania DEP (primary) has been filled by Jim Grazio.

*Products/Activities, Kathe Glassner-Shwayder and Sarah Whitney, Great Lakes Commission*

- *NAISA Flyer*: A flyer supporting the reauthorization of the National Aquatic Invasive Species Act is now online ([www.glc.org/ans/pdf/naisaflyer.pdf](http://www.glc.org/ans/pdf/naisaflyer.pdf)) through the support of the Great Lakes Commission. The flyer has been distributed to members of Congress. Glassner-Shwayder thanked members of the I/E Committee for their assistance in reviewing this product.

- *ANS Update: Volume 9, No.1:* The latest issue of the ANS Update features the article, *Watercraft Inspections: An Opportunity to Prevent the Spread of Aquatic Nuisance Species*, authored by Ron Martin, Wisconsin DNR and Jay Rendall, Minnesota DNR. The entire update is now available online ([www.glc.org/ans/ansupdate/pdf/Update-05-03.pdf](http://www.glc.org/ans/ansupdate/pdf/Update-05-03.pdf)).
- *Committee Support*
  - Research Coordination Committee: Considerable progress has been made in compiling a draft document recommending priorities for Great Lakes ANS research. This document is to serve as a resource for, and provide guidance to private foundations and local, state/provincial and federal agencies that provide funding for research on ANS prevention and control in the Great Lakes. The draft document is now available for review online at: [www.glc.org/ans/pdf/researchprioritiesjuly2003.pdf](http://www.glc.org/ans/pdf/researchprioritiesjuly2003.pdf).
  - Information/Education Committee: A review of the NAISA flyer has been provided by committee members. Also work has been initiated for the process of defining I/E priorities similar to the process undertaken by the Research Coordination Committee.
- *Staff participation at ANS meetings:* Over the past number of months, staff has participated in a number of ANS meetings on behalf of the Great Lakes Panel as well as providing presentations on ANS projects underway at the Great Lakes Commission.
  - **Michigan ANS Council Meeting** (March): Glassner-Shwayder presented an overview on the rapid response plan project.
  - **Interjurisdictional Fisheries Conference**, Toledo School of Law (April): Glassner-Shwayder presented on the multijurisdictional approach to managing ANS problems as led by the Great Lakes Panel.
  - **ANS Task Force Meeting** (May): Glassner-Shwayder presented an activity report on the Great Lakes Panel and participated in a session with other regional ANS Panel representatives project discussing regional progress on rapid response planning. Glassner-Shwayder reported that the Great Lakes Panel should be working with regional panel leadership to come up with a national management plan and invited Panel members to participate in the Task Force meetings.
  - **Northeast ANS Panel meeting and Rapid Response Workshop** (May): Whitney participated, providing perspectives from the Great Lakes Panel, particularly in the area of rapid response planning.
  - **Environmental Challenges of the 21<sup>st</sup> Century: Great Lakes Experiences and Global Applications: Joint Symposium of the Great Lakes Commission and International Lakes Environment Committee** (June). Special session organized by Whitney to highlight resource management experiences regarding aquatic invasive species and water quantity issues with global applications. Also examined was progress that has been made regarding the impact of toxics on large lake systems. Further information available online at: [www.glc.org/announce/03/06largelakes.html](http://www.glc.org/announce/03/06largelakes.html).
  - **International Aquatic Invasive Species Conference** (June): Whitney presented an overview on the early detection and rapid response projects.
  - **Invasive Species Advisory Committee** (June): Attended by Whitney
- *Future Activities:* Marc Tuchman announced the need for in-kind and financial support/guidance for the upcoming GLNPO funded project to update/revise the *Biological Invasions* brochure; the Panel was instrumental in making the first version possible. Glassner-Shwayder solicited additional financial support from agencies that may be interested in increasing circulation of the brochure to be revised over the coming year.

## 2) Federal Updates: U.S. and Canadian

### *National Aquatic Invasive Species Act (NAISA) of 2003: An Update Jonathon Champion, Northeast Midwest Institute*

NAISA was first introduced to Congress in September 2002 and was introduced in the House and Senate in the current congressional session in March 2003. Hearings have been held by the House Resources Committee and the Senate Environment and Public Works (EPW) Committee. At the EPW hearing in

June 2003, there was wide support for the bill from agencies and NGOs with positive feedback voiced in the following areas: focus on prevention and cost-effectiveness; focus on pathways other than ballast water; recognition of EPA's role in responding to invasive species; increased support for states; addresses gaps in current legislation; aggressive ballast water standards and implementation schedule; increased funding and improved outreach/education. Criticisms to the legislation primarily focused in the following areas: the large number of individual tasks and deadlines which can potentially be burdensome to federal agencies, particularly due to with conflicting timeframes ; the overly prescriptive nature of the bill; interim ballast water standard is not considered scientifically sound; NAISA threatens the states' jurisdiction and water rights. Concern was also expressed in the following areas: the U.S. FWS should hold a role in screening organisms introduced for aquaculture proposes; the proposed joint USCG/USEPA promulgation of ballast water regulations; state receipt of emergency rapid response funds should not be contingent upon a pre-existing approved state management plan. An overall issue raised over the legislation, as introduced, is that actions and deadlines of the bill are reasonable and that agencies are appropriately funded to implement assigned responsibilities. The Northeast Midwest Institute has outlined responses to these criticisms. Members and interested parties of the Great Lakes Panel were advised to help promote NAISA by contacting the following key players: members of Congress regarding co-sponsorship of the bill; committees of jurisdiction about scheduling hearings and markups on the bills; and state governor's offices about voicing their support for NAISA; and send letters of endorsement to NAISA's sponsors.

- **Action Item: The Great Lakes Commission is requested to continue outreach efforts to encourage members of the Great Lakes Congressional Delegation and other members of Congress to support passage of NAISA.**

*U.S. Coast Guard's Regulatory Activities, Michael Gardiner, U.S. Coast Guard*

Commander Scott Newsham has retired and is replaced by Commander Kathy Moore. The U.S. Delegation is currently in London for the IMO's MEPC meeting. An expected outcome of this meeting will be a draft ballast water treaty. Ballast water treatment standards include provisions for concentration-based standards(sized-based removal ranging from 50-80 micros/unit volume) instead of a percentage of organisms removed. Concentration-based standards requires that organisms above a certain size will be removed rather than a 95 percent removal. Options are still being explored for smaller-sized particles such as viruses and bacteria that are threats to human health. Vessels of different sizes will have different compliance dates. Extremely small vessels and vessels with ballast capacity of 20,000 metric tons or more will be given an extended compliance date. Areas of no-discharge have been discussed. The Coast Guard testified to the Science subcommittee on NAISA. The Coast Guard has concerns over the enforcement of interim standards and the ability to gather and incorporate public input. The Office of Management and Budget has cleared the mandatory ballast water notice of proposed rule making that will expand ballast water exchange requirements currently in place in the Great Lakes on a national scale.

*Canadian Status Report, Dennis G. Wright, Fisheries and Oceans Canada*

Dennis Wright reported on the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) Task Group on Aquatic Invasive Species. The need for action and leadership on a national scale on the AIS issue led to the creation of the Aquatic Invasive Species Task Group in September 2002. It is represented by all provinces and territories that support the development of a national invasive species plan under the Canadian Biodiversity Strategy. The AIS Task Group is working to develop a National Invasive Species Plan with four working groups: terrestrial animals, terrestrial plants, aquatic invasive species, and leadership and coordination. Environment Canada is the lead agency for plan development. The framework for the AIS plan will focus on major pathways of invasion including: shipping and ballast water; live food industry; live bait; recreational boating; aquarium and horticulture trade; unauthorized fish transfers; canals and diversions. Elements of the plan incorporate: broad leadership and coordination; international, federal, provincial, and territorial cooperation; monitoring and reporting; research and assessment; prevention and control (i.e., awareness and education to foster stewardship, legislation, regulation and policy, enforcement, rapid response); information/education; planning and management and restoration (i.e., activities to manage impacts, control population levels and impacts, eradication of AIS and restoration). Lessons learned thus far include:

- the need to adjust for regional variations
- importance of national coordination and leadership
- AIS problem is shared among jurisdictions and is not driven solely at a federal level
- practical solutions are necessary along with early action
- shared concern over limited human and financial resources

The implementation strategy identifies priorities for action, responsibility allocation, and stakeholder involvement. The National AIS Plan will be finalized by September 2004.

***National ANS Task Force, Sharon Gross, U.S. Fish and Wildlife Service***

Gross noted that press reports stating that federal agencies viewed NAISA as “burdensome” was somewhat of a mischaracterization. She contended that federal agencies are generally supportive of NAISA. Concern was expressed that better coordination was needed in implementation of the legislation due to overlapping deadlines since much of the work is to be carried out by the same people. She advised that to meet the deadlines, issues will need to be prioritized. It was also noted that adequate funding was needed to address provisions in the bill. In summary, NAISA is supported content-wise with the identified need of an implementation schedule.

The Task Force has reorganized itself into large committees to cut down on the problems of reporting out of tasks. The committees are: prevention, research, monitoring; community education and outreach; and control. The prevention committee includes screening, pathways, and risk analysis working groups. New working groups on control/management include those on the Asian carp, New Zealand mudsnail and the nutria.

The Stop Aquatic Hitchhikers Campaign can be accessed at [www.protectyourwaters.net](http://www.protectyourwaters.net)

The regional panels of the ANS Task Force are made up of the Western (1997); Great Lakes (1991); Northeast (2001); Gulf of Mexico (1999); Mississippi River Basin (2002). Once State ANS Management Plans are approved, states are then eligible for grants from the U.S. FWS. At the federal level, ANS issues will face challenges and appropriations will be very difficult for the next few years because other issues are taking priority over ANS issues in this administration.

The ANS Task Force is working with the National Invasive Species Council (NISC) on implementing the national management plan actions based on a crosscut budget. The aquatic and terrestrial species problems are being defined together since the NISC holds responsibility for both aspects of the nonindigenous species problem.

The next meeting of the ANS Task Force will be held in November in Washington D.C. One focus of the meeting will be to convene regional Panel leadership to discuss common goals and priorities.

***National Invasive Species Council, Chris Dionigi, National Invasive Species Council (reported by Sharon Gross)***

Executive Order 13112 on Invasive Species established the National Invasive Species Council (NISC), which is co-chaired by the secretaries of Interior, Agriculture and Commerce, and established the Invasive Species Advisory Committee (ISAC). NISC Executive Order was signed by President Clinton and carries a mandate to federal agencies. The responsibilities are delegated to political appointees. There are 30 non-federal members/stakeholders as part of the Invasive Species Advisory Council (ISAC). They help to generate interest in ANS issues because these members also interact with politicians in Washington D.C. President Bush plans to make some minor changes to the Executive Order by adding a state representative to the council. A bill has been passed in efforts to codify the NISC, allowing it to exist as a law and not just as an Executive Order. The executive secretary of the NISC is Lori Williams with Dean Wilkenson of the National Oceanic and Atmospheric Administration (NOAA) serving as policy liason.

**Regional ANS Initiatives**

***Predicting Nonindigenous Fish Invasions, Cindy Kolar, U.S. Geological Survey***

Research performed by Cindy Kolar and David Lodge has focused on predicting the identity, spread and

impact of aquatic invaders. By examining past invasions into the Great Lakes, predictions can be made about which fishes will become established, spread quickly and possibly become a nuisance. Predictive models developed for use in the risk analysis were based on the following variables: environmental and habitat tolerances; life history characteristics; and history of invasion. Ponto-Caspian fishes were examined for their level of risk for establishment. Of the 66 fish examined, 22 were targeted as high risk and were common to both the level of spread and level of impact models. The highest risk fish were the Tyulka (*Clupeonella cultriventris*), monkey goby (*Neogobius fluviatilis*), Eurasian minnow (*Phoxinus phoxinus*), Black Sea silverside (*Atherina boyeri*), and European perch (*Perca fluviatilis*). This research may impact ANS policy by providing an argument for targeting introduction pathways such as bait, aquaculture, pet industry, and water gardens for species-specific restriction and regulation. Early detection and rapid response can help assess the risk of newly discovered fish, help allocate personnel and dollars for controlling/managing newly discovered fish, and help identify species requiring aggressive control. David Lodge is looking at ways to distribute easy-to-use risk assessment tools through a Windows based menu driven CD possibly via CD-rom.

***Developing an Early Detection-Rapid Response Approach to Invasive Species in the Midwest: An Opportunity for Partnership with the Great Lakes Panel, Mike Hoff, U.S. Fish and Wildlife Service***  
The Great Lakes Commission (GLC), the Great Lakes Panel (GLP), and the Midwest Natural Resources Group (MNRG) are complementary organizations working on ANS projects sharing at least one similar goal: To prevent, control, and manage infestations of invasive species in the Great Lakes Basin and Midwest. Although the GLC and GLP have longer histories, the MNRG recently became interested in developing a federal initiative to develop plans to detect new colonies of invasive species on Midwest federal lands and, if appropriate, rapidly respond to and eradicate new colonies. The focus of the MNRG will include both terrestrial and aquatic invaders, habitats within and outside the Great Lakes basin, and federal lands, unless invited to participate in state and tribal initiatives. The MNRG is made up of 13 federal agencies working in focus areas and developing partnerships on issues such as watershed planning, urban sprawl, and most notably invasive species. If NAISA is passed with its current language, it will establish federal rapid response teams to implement strategies on federal lands. A Memorandum of Agreement has been approved by the U.S. Forest Service, NRCS, U.S. Army Corps of Engineers, Bureau of Land Management, U.S. Fish & Wildlife, U.S. Geological Service, and U.S. Environmental Protection Agency. A Rapid Response Task Force Group has formed, co-chaired by FWS and EPA, and each agency is in the process of identifying priorities and available resources and expertise. The GLP and the MNRG share priorities regarding early detection/rapid response species in the following areas: Sleeping Bear Dunes National Lakeshore, zebra mussel infestation of inland lakes, and waters within the Hiawatha and Manistee National Forests. Collaboration between the GLC, GLP and the MNRG would promote increased communication, cooperation (including sharing of expenses and joint permit applications) and coordination. The co-chairs of MNRG are Mike Hoff, U.S. FWS and John Perrecone, U.S. EPA.

***Ruffe Expansion into Lake Michigan, Mike Hoff, U.S. Fish and Wildlife Service***

In the summer of 2002 ruffe were discovered in northern Lake Michigan. This summer (2003), monitoring efforts have not turned up any ruffe from the following locations in Lake Michigan: Portage, Indiana, the port of Indiana, the port of Milwaukee, Fox River estuary in Green Bay, and the port of Sturgeon Bay. These areas were targeted as favorable habitat for the ruffe and monitoring will continue as part of the ruffe management plan. If ruffe are found, it may trigger a rapid response. Preliminary studies indicate that the ruffe are susceptible to TFM, a lampricide used in the control of sea lamprey in the Great Lakes.

***Dispersal Barrier: Project Update and Summary of Great Lakes Research Priorities as identified by Great Lakes Panel's Research Committee, Phil Moy, Wisconsin Sea Grant***

***a) Dispersal Barrier: Project Update***

The electric dispersal barrier was installed in April 11, 2002. In March 2003, one of the benthic electrodes shorted out. Apparently, there is no learning curve for the carp in response to voltage stimulant. This scenario served as the impetus in the purchase of a backup generator that was permanently hooked up in April, 2003. Emergency access ladders and a boat hoist were also installed along the sides of the canal. Because the first barrier has a life span of three years, a second barrier will be necessary when the first one needs to be replaced. Illinois DNR provided \$2.5 million matching

federal funds to begin construction of Barrier II. It will be three times the size of Barrier I. Barrier II should be in place by next summer, about the time that the electrodes from Barrier I start to wear out.

Research on Asian carp is underway at the fish hatchery in Havana, Ill. to test the barrier's effectiveness at repelling the fish. Asian carp are known to be 22 miles below the barrier, but they might be closer than sightings indicate. An Asian carp monitoring crew led by Pam Thiel (U.S. FWS), witnessed a carp jump out of the water about 12 miles below the barrier. A response plan is currently being developed in the event that Asian carp migrate past the dispersal barrier. The plan that involves a team of 17 people, most of whom have some kind of jurisdictional authority over the canal. The plan focuses on management and extermination actions with monitoring serving as a significant component. The dispersal barrier is a backstop to the efforts downstream. Monitoring efforts are targeting the advance of the carp at four sample sites. If carp are detected at those sites, monitoring will continue and a chemical response may be recommended depending on the location of the detection. If large numbers of carp come upstream and threaten the integrity of the barrier, the team would recommend an eight hour Rotenone treatment to exterminate the fish. One-time treatment is \$500,000 and it would probably have to be repeated. As part of the management response plan, a price subsidy is needed as an incentive for fishers to target and harvest the carp.

*b) Aquatic Invasive Species Summit*

Mayor Daley brought experts to Chicago to discuss halting the transfer of invasive species through the sanitary and ship canal and requested solutions to guarantee a 100 percent prevention of transfer of such species. The existing barrier will need to keep adding new technology to increase its effectiveness. The barriers will only buy time to prevent further introductions until a permanent solution is devised. Commercial and recreational navigation must be addressed as well as the economic transfer of cargo.

*c) Summary of Great Lakes Research Priorities*

Moy explained the process that the Panel's Research Committee has gone through to create a document that lists research priorities for the Great Lakes region. The committee has collected and organized research priorities as developed by Great Lakes entities. The priorities are organized into seven different categories, based on the National Invasive Species Council Management Plan. The research document also includes a list of 66 priority species. The purpose of this exercise is to develop a reference document for granting agencies and researchers when applying for funds and replying to requests for proposals. Gross added that these documents will be very useful for the national ANS Task Force and NISC/ISAC as guidance for these agencies in selection of research priorities for funding. Discussion followed on how to market these documents through Sea Grant agencies, NGOs, and independent foundations. It was stated that the marketing responsibility should be taken on by the Panel's Research Committee with assistance other Great Lakes Panel members. David Reid mentioned that the list does not include a price-tag and the differentiation of costs for the priorities. The next step will be to deliver the document into the hands of the research agencies and granting agencies. Moy reiterated that they need everyone's comments and would like to have a final version of the research priorities within the next few months. The other committees are about to start this same process of prioritizing issues. The ANS research priorities document is available for review online at: [www.glc.org/ans/pdf/researchprioritiesjuly2003.pdf](http://www.glc.org/ans/pdf/researchprioritiesjuly2003.pdf).

## **Panel Training Session: Working with the Media on ANS Issues**

Sarah Whitney, session facilitator, introduced the topic of working with the media on ANS issues and session speakers. Given that media relations are becoming increasingly more important to advance support for ANS issues, this training session is being held for Panel members as an opportunity for regional journalists, Dave Poulson and Lester Graham, to share their expertise about strengthening communication with the press. A similar session was held at the International Associations of Great Lakes Research (IAGLR) workshop this past June. Recommendations from IAGLR workshop focused on the following ways that scientists could better promote their research findings: keep message simple, take the time to communicate in a more outgoing manner, show instead of tell, the reporter provides information to their readers, controversy is good, avoid using acronyms, keep reporters informed about emerging issues, develop a press kit, make a story relevant to local communities, use internet for

information dissemination, inform reporter about errors, take information to schools.

*1) Dave Poulson, Environmental Journalism Program, Michigan State University*

Poulson has been a journalist for over 20 years, working as an environmental writer and teaching journalism at Michigan State University. Poulson believes that scientists tend to think that the media trivializes what they do, yet, in his eyes, scientists have an obligation to communicate with the public. He discussed the following list of suggestions for scientists to better take advantage of working with the media to promote their research findings with the public:

- make contact with the media and be proactive
- read bylines and find out who is writing about your issue
- call up a reporter, ask if they are on deadline and then set up a meeting to build a long-term relationship
- work the depth of the newspaper, aside from the environmental reporter, approach reporters from other sections such as business and education
- think of it as not one issue but a whole campaign
- political ramifications should be taken into consideration other than just the story of what happened
- a reporter can help drive an issue using a local perspective
- give the journalists a focus, a sentence that summarizes why anyone should read your story
- emphasize the “uniqueness” of the species you are researching
- show how issues are connected, i.e. political decisions, such as the new trade agreement, that are tied to invasive spread
- scare people (responsibly), using catchy phrases (e.g., “invasional meltdown”) or use humor
- show and use numbers to establish trends but also as a point of entry
- use photos and images
- practice quotes (short soundbites) to use in an interview but don’t practice passion
- help the journalist tell the story
- scientists should hold the journalist accountable for the information delivered – if mistakes are made, the journalist should be informed
- keep message simple (as if you are communicating with grade school student)
- to effectively make a difference in getting a story out, such as the black carp, you need to make sure your audience is listening.

*2) Lester Graham, Great Lakes Radio Consortium*

Most reporters are not environmental reporters; they cover a wide range of news, so researchers will need to guide the reporter through the story patiently. Researchers are concerned that the stories in the news simplify the issues. However, focus groups show repeatedly that even though the audience is well educated, scientific stories tend to be too complicated. It is critical to get to the bottom-line. To ensure that stories are conveying the message, read the story aloud.

Media reporters are not science advocates, they just tell the story and disseminate information. It is up to the researcher to make it clear to the reporter why your story is important and how to instigate change.

If newspapers tend to have a pro-land owner and anti-environmental slant, editorials should be written in response or calls made to demand/ complain about the unbalanced stories. To effectively communicate environmental issues, such as invasive species, to the public, we must learn from mistakes, but also learn from what works. There is a need for more local news to strengthen coverage of environmental issues (such as ANS invasions).

**July 23, 2003**

**Panel Committee Reports**

***1) Information/Education Committee***

Attendees: Emily Finnell (chair), Kirstin Wakefield, Gwen White, Eric Obert, Rochelle Sturtevant, Paul Marangelo, Michael Goehle, Doug Jensen, Kathe Glassner-Shwayder (staff), Erin Higbee (staff)

*a) ANS Update feature articles ideas*

The committee will consider using the article, “Mail-Order Sales of Aquatic Plants: A Pathway for ANS Introduction” by Kristine Maki and Sue Galatowitsch of the University of Minnesota in the next *ANS Update*. Some committee members expressed concern that the article may not focus enough on creative solutions or recommendations to alleviate the problem. Doug Jensen offered to talk with the authors about adding a paragraph to the article discussing the educational components of this issue.

*b) Information/Education Priorities*

The I/E Committee has initiated work in identifying ANS information/education priorities of the Great Lakes region, similar to the exercise of the Research Coordination Committee. The process of creating a priorities document began via a conference call in July. The product of that call was a draft listing of I/E priorities pulled from several different documents.

During the I/E committee meeting, the need was recognized for a national campaign on aquatic invasive species (AIS). Posed was the question: How can the committee provide the impetus for outreach? For example, how can outreach promote partnerships to interrupt AIS pathways of introduction and spread. Members discussed the next steps for action in terms of categories that should be used to highlight priorities, including pathways and audience groups. Doug Jensen suggested using the following categories: communication, extension (as in technology transfer), education (K-12), coordination/dissemination, which are similar to Sea Grant’s categories. Some members felt that it would be useful to have categories similar to other committee’s priorities documents to maintain consistency. Gwen White suggested using the same categories as the Research Committee but using Jensen’s suggestions as sub-headings. The title of the document was also discussed and whether it should be called *a list of priorities* or *a needs assessment*. Concern was expressed that the term “priorities” implies a ranking system, which is not the intent of this document. The group agreed that the “list” of priorities should be framed as needs that could help outreach be more effective. Emily Finnell asserted that the final document should be a long-term tool compatible with states needs to help prioritize the items in the implementation plan. Other topics to emphasize in the final document included: using language that promotes partnership and collaboration; making semantics a priority; consistency with acronyms, (e.g., use ANS for aquatic nuisance species (which is from the original legislation of 1990) or AIS for aquatic invasive species (which is a term pending in the legislation currently proposed), not NIS or exotic; and emphasizing evaluation techniques.

Next Steps for I/E document:

- Merge the “strawdog” with the existing document *Information/Education Strategy for ANS Prevention and Control* and use the new categories
- Make the list before determining whether the items are priorities or needs
- Gather input and ownership from committee members during in this process

*c) GLC Workplan*

Committee members were requested to read over the workplan and make comments for the next meeting. Glassner-Shwayder pointed out that funding from the U.S. FWS supporting operation of the Great Lakes Panel will be cut by \$25,000 for the coming year. As a result, some adjustments should be necessary in terms of the workplan. Gwen White suggested that committee members should consider taking more responsibility for certain tasks to assist GLC staff.

*d) I/E Committee Mission Statement*

Emily Finnell read the I/E Mission statement to the committee members from the 1996 ANS Annual report to use as a starting point. The outcome of the needs assessment will help in developing the new mission statement. In addition, the needs assessment/priorities document will contain a statement of purpose developed in the mission statement. Other concepts to be included in the mission statement as guiding principals include: evaluation, synthesis, coordination, partnership and consistency in terms of messages.

*e) Future ANS Update feature article ideas*

- Live food fish industry: Status of state regulation in the region
- Special feature on ANS outreach programs in the Great Lakes (borrowing from the priority/needs assessment list): Perspectives on how to most effectively communicate

- with people
- Why are monitoring efforts so important? Examining several studies such as the U.S. FWS research on ruffe, round goby round-up, Asian carp (Michael Goehle offered to look into researching this article)
- Economic assessment of impacts to build justification for prevention and control (e.g., diaporina population decline correlated with whitefish decline to generate dollar impact figures). Use research of David Lodge on economic costs of economic invasions.
- Predictions of the next invasive fish (Cindy Kolar's top five threats from the Ponto-Caspian region)
- Is eradication/extermination of aquatic invasive species possible?
- National Invasive Species Council (what they do, how they collaborate with the ANS Task Force, etc.)

Other Panel members suggested using foundations to support some of the I/E efforts through ad campaigns or public service announcements. There is also a need to focus on ANS economic impacts and get more recent figures on zebra mussel costs, etc. to position I/E priorities around economics. Glassner-Shwayder added the need to push for funding to help update and distribute the *Biological Invasions* brochures and expects a year long process before completion.

## 2) *Research Coordination Committee*

Attendees: Phil Moy (Chair), Mark Burrows, Margaret Dochoda, Mike Hoff, Joe Mion, Jim Grazio, David Reid, Marc Tuchman, Tom Johengen, Michael Goehle, Matt Colmer, Michael Gardiner, Kevin Walters (staff)

### a) *Research Priorities List*

A discussion of the Research Priorities document included rearranging priorities within each category into high and moderate priorities. The committee also agreed to find a means to market and distribute the document. It was suggested that the committee compare the current priority listing with the Great Lakes Panel's *Ballast Water Management Policy Statement* to ensure consistency. In so doing, it was suggested that the policy statement should be updated. Once the Panel members have had a chance to review the document and provide feedback, the committee will convene via conference call to discuss the feedback. This meeting will likely occur in late September or early October.

Margaret Dochoda expressed the need to coordinate cross basin research efforts with other regional ANS panels. A history of the Research Coordination Committee that outlines operational aspects and the committee's role to serve as a valuable tool for other newly formed regional panels such as the Mississippi River Basin Regional Panel. The group also felt that it would be useful to raise awareness of Great Lakes issues, such as the ruffe and Asian carp, with other regional panels.

### b) *International Joint Commission Research Inventory*

New help features have been added to the IJC inventory. Mark Burrows seeks input on which data entry fields to keep and which to eliminate. Many of the new entries are only title and abstract searchable by keywords. Paper collection is now an online electronic form. It was noted that knowing the clientele of the inventory will help focus available fields. Burrows will work to distribute a listing of inventory users as soon as possible. It was suggested that a summary of the inventory be included in the *Advisor/ANS Update*. Many of the committee members felt that the inventory title should be expanded to "Research, Management, and Monitoring Inventory" to more conclusively capture what is contained in the inventory.

The committee felt that creating a mission statement was not necessary. Interest was expressed in developing a statement of purpose that includes identification of research priorities for the Great Lakes. The following language was offered by Phil Moy, Committee Chair.

The Great Lakes Panel on Aquatic Nuisance Species Research Coordination Committee Shall:

- provide a means to minimize unnecessary duplication of research efforts in the Great Lakes basin.
- identify Great Lakes research priorities for use by researchers and funding agencies
- provide support to the Policy and Legislation and Information and Education Committees and the Great Lakes Panel as requested

- provide a vehicle to coordinate research and management projects in the Great Lakes basin

c) *Committee Work Plan*

- The members added several elements to the committee work plan. Suggested activities include:
- Raise the awareness of ruffe among other jurisdictions
- Coordinate with the new Canadian ANS center
- Revisit and update the ballast water management policy statement

**3) Policy and Legislation Committee**

Attendees: Helen Brohl (Chair), Dennis Wright, Jen Nalbome, Jonathan Champion, Roger Eberhardt, Mike Ripley, Sarah Whitney (staff)

a) *Mission Statement*

The committee will borrow from the 1996 statement and the 2000 action plan to develop a mission statement. The discussion focused on the target audience for committee work and how to prioritize support for the legislation currently before Congress. Helen Brohl emphasized that the committee is not a lobbying organization, but must still work to promote policy. The audience will include, among other groups, the ANS National Task Force, Great Lakes governors, National Invasive Species Council, lawmakers, states/provinces, federal agencies and Great Lakes Commission.

b) *National Aquatic Invasive Species Act*

The Great Lakes Commission continues advocacy efforts to members of Congress in support of NAISA by using targeted mailings which reference to the Panel's NAISA flyer ([www.glc.org/ans/pdf/naisaflyer.pdf](http://www.glc.org/ans/pdf/naisaflyer.pdf)). There is concern, however, that the states are not weighing in on an individual basis or collectively to push for passage of the legislation. It was suggested that the governor's Great Lakes Action Plan be updated and signed by every Great Lakes governor, especially those newly elected governors who have yet to see the action plan. Glassner-Shwayder commented that the Panel can use the Action Plan as a tool to educate constituency groups, but it cannot act as an advocacy group. The Committee will review the plan, mark it up with suggestions and then pass it on to the full Panel for approval before the GLC works to get the governors' signatures. Glassner-Shwayder also encouraged the use of the NAISA flyer developed by the I/E Committee in conjunction with the Great Lakes Governor's Action Plan.

c) *Policy and Legislation Priorities*

The committee had not previously met to discuss creating a priorities document and this meeting was the first attempt to work on it. They determined that getting the Asian carp listed under the Lacey Act should be a priority. Sharon Gross, U.S. FWS, explained that it would not be appropriate for a regional ANS panel to submit a letter to a federal agency recommending injurious listing of Asian carp (silver, black and bighead) under the Lacey Act since federal agencies serve as representatives on the Panel. Such letters should be submitted by individual agencies. Currently there is a draft proposed rule for listing the bighead carp under the Lacey Act. There is a need for economic data (such as the cost of native mussel recovery) to support the listing of Asian carp as an injurious species. Congress has already petitioned listing of the black and silver carp; the comment period regarding these two species has now closed. The comment period for the proposed rule regarding the bighead carp will close in mid November. Gross will send updated information on this process to the GLC to forward to the entire Panel.

The policy and legislation committee also discussed monitoring the Great Lakes Navigation Study with consideration for developing a draft for comments. There was also discussion on the need to review the Great Lakes Panel's *Ballast Water Policy Statement*. Glassner-Shwayder requested that any Panel members with interest in updating this policy contact her to facilitate this process.

**Future Directions of the Great Lakes Panel**

Gwen White, D.F. Case & Associates, facilitator, opened the session by discussing the interest expressed among Panel officers and staff to hold an open forum on how the future direction of the Great Lakes

Panel will be determined. The objective of the session is to provide ideas on establishing a process that will actively engage members in identifying ANS priorities to help determine activities/projects pursued by the Panel on a regional basis. In response, staff placed the issue of priority setting as an agenda item for an open forum discussion for Great Lakes Panel. Comments generated during the discussion that follows will be considered for further development/refinement and ultimately incorporated in a revised version of the Panel's operational strategy.

*a) Identifying Panel Priorities*

White explained that a primary focus of the discussion stems from the recognized need by Panel officers to identify priorities for future Panel activities. Helen Brohl, U.S. Great Lakes Shipping Assoc., initiated discussion about the role of the Great Lakes Panel, emphasizing the fine line that the Panel plays in activities regarding lobbying and promotion of ANS issues. Sharon Gross (Executive Secretary, national ANS Task Force), clarified that the federal legislation stipulates that the role of regional ANS panels is to provide advice to the national ANS Task Force on Great Lakes ANS issues, *but not to function in an advocacy role*. Gross also mentioned that the Great Lakes Panel and the ANS Task Force are coordinating entities that convene to discuss ANS issues and information, integrated into Panel documents. The Task Force has endorsed almost every document that the Great Lakes Panel has produced. The role of the Panel is to synthesize information and work towards consensus among Panel members. However, Panel members should recognize that they also speak on behalf of the agencies they represent and should not feel compelled to endorse something that their agency would not support. Jon Gannon, (International Joint Commission) among others, felt that Panel members should be speaking strictly on behalf of the Great Lakes resource. Policy that is developed by the Great Lakes Panel needs to be run through respective agencies to facilitate communication and coordination on priorities.

Also discussed was how the Great Lakes Panel should determine priorities as identified in the committees, and forward this information on to the ANS Task Force. Jennifer Nalbene, Great Lakes United, articulated that the Panel needs to improve communication and distribution of information on the rule-making such as ballast-water regulations and carp listings.

To facilitate consensus building that substantively support project development and associated products, Panel members are asked to play an active role in projects to ensure that agency perspectives are appropriately represented. It was noted, however, that consensus on various Panel initiatives is not always achievable given the diversity of interests represented on the Panel. In the cases where consensus is not achievable, the option exists for the entity that does not consent to the document to issue a minority report. Ultimately, the objective is to establish on a strong basis of consensus, a regional position based on priority ANS prevention and control issues for the Great Lakes. John Schwartz, Michigan Sea Grant, suggested that a future action item for the Panel should be to clarify the process of building consensus and associated implications.

- **Action Item: As part of revising/updating the Great Lakes Panel operational strategy, the process of building consensus should be defined in terms of how policy and other related products are developed and approved by the Panel.**

*b) The Role of the Great Lakes Commission (GLC) and the Great Lakes Panel (GLP) in Advancing ANS Prevention and Control on a Regional Basis*

Glassner-Shwayder explained the need to formalize the process of creating a priorities list for purposes of determining Panel activities/projects, including proposal writing. The GLC has historically taken a lead in developing project ideas as funding opportunities either autonomously or in consultation with the GLP. Tom Crane (Program Manager, Great Lakes Commission) stated that the GLC receives funding each year from the U.S. Fish and Wildlife Service for general support of the GLP and limited staff support for committees. The GLC also solicits funding for special projects that are consistent with Great Lakes Panel goals and objectives but are managed by GLC staff. Historically, the GLC has determined which projects they can accomplish with existing general operating support for ANS-related issues, and which initiatives will require procurement of special project funding. The priorities assessment, as recommended by the Panel, will provide guidance to GLC staff on proposals to be pursued in support of GLP initiatives. Concern was expressed that priorities may be defined too narrowly defined. Once the GLP develops priorities, it was recommended that action plans are developed as way to facilitate implementation. The GLC was asked to communicate clearly whether products produced with special project funding are those of the GLC or the GLP. The need for clarification was noted during discussion

to identify whether project activities will result in a GLC product with GLP endorsements or solely a product of the GLP.

It was noted during discussion that projects considered formal products of the GLP, require Panel participation early on during the phase of project ideation/development. Crane emphasized that in cases where the project is considered a product of the GLP, it is important for members to be involved both in the process of project scoping and in the review of the product towards the end of the initiative. The GLC agreed to discuss this issue and report back to the Panel to clarify the GLC's role on various projects underway, including the *Rapid Response Plan*, and develop a protocol in determining project leadership for future projects. Also expressed was the need to improve communication regarding the entity that assumes a lead in project development (e.g., Great Lakes Panel or Great Lakes Commission).

- **Action Item: Great Lakes Commission staff will report back to the Panel with a list of regional priorities to serve as a guide to help determine Great Lakes Panel activities/projects.**

*c) Logistical Adjustments to Funding Constraints*

A discussion regarding the number and location of Panel meetings resulted in affirmation among GLP members that it would continue the goal of meeting twice a year. Members stressed the importance of in-person meetings where informal interactions can occur outside of formal meeting time. It was also suggested that the feasibility of a teleconference, including video and web access, would be explored for those who could not attend the meeting in person due to financial or logistical constraints. It was suggested that moving the location of meetings might make it easier for some member jurisdictions to attend. Staff cautioned that with limited financial resources, meetings outside the Ann Arbor area may be cost prohibitive. Glassner-Shwayder suggested moving the next meeting westward to accommodate and encourage participation of the western Great Lakes states and also suggested Chicago as a more accessible location for many people. Tuchman mentioned that the U.S. EPA's conference facilities in Chicago could potentially be used as a meeting location.

*c) Eligibility of Panel Members for Leadership Positions*

Glassner-Shwayder outlined guidelines for GLP elections stemming from the Great Lakes Panel's operational strategy. The position of Panel chair can only be held by a state representative of the Panel. Positions of Panel vice-chair and committee chairs can be held by any formal member serving on the Panel. At-large members can be held by any appropriate party/stakeholder previously identified by the Panel membership as having important expertise and perspectives on the ANS issue. At-large members serve on a rotating basis with full term positions running for three-years. Those members elected as at-large members are eligible to run for committee chair, holding voting capacity during the decision making process of the Panel. Elections are to be conducted every two years. It was suggested that eligibility of Panel members to run for committee chair should depend on serving at least one year on the Panel to get a sense of how the Panel operates. Additions to the election guidance will be incorporated into a revised version of the operational strategy for the Great Lakes Panel that will undergo Panel review before finalized. Other additions needed to strengthen the strategy, as noted by staff, include mission statements from each committee and definition of roles/responsibilities of the Panel chair, vice chair, committee chairs and respective members.

**Panel Member Updates** (based on written submissions of the following Great Lakes Panel members and interested parties)

**Mike Conlin, IL DNR:** Illinois is focusing on efforts to eradicate the Asian carp. The state contributed \$2 million towards the installation of a second electrical barrier that will be up and running next summer. The DNR is also looking into ways to market Asian carp to would-be harvesters of the fish, such as a subsidy for the fish. The DNR is also working on eradication of Eurasian watermilfoil in inland lakes, bighead carp diet research studies, continuing other carp studies, and training conservation police officers on ANS issues.

**Mark Burrows, IJC:** The IJC has continued efforts to draw attention to the problem of invasive species, providing testimony to members of Parliament and to Congress to spur action on the Canadian side and

to support NAISA and Great Lakes restoration legislation. Chairman Schornack's remarks from his July 16, 2003 Senate testimony provide a clear picture of current IJC activities. His remarks are available online at: [www.ijc.org/php/publications/html/030618.html](http://www.ijc.org/php/publications/html/030618.html). The IJC continues to closely monitor the International Marine Organization (IMO) and the U.S. and Canadian governments progress on developing and implementing ballast water standards, The IJC will participate in the ETV Ballast Water Stakeholder Meeting in Arlington, Va. on September 23, 2003. Information about this meeting is available from NSF by contacting Pat Wilkie at [Wilkie@nsf.org](mailto:Wilkie@nsf.org). The IJC's Council of Great Lakes Research Managers is sponsoring an Aquatic Invasive Species (AIS) Workshop at the 2003 IJC Great Lakes Conference and Biennial Meeting in Ann Arbor on September 19, 2003. The workshop will focus on prevention efforts by pathway, with an ecosystem perspective. Improvements continue to be made to the Great Lakes-St. Lawrence Research Inventory database. Help files have been added and programming errors have been corrected to improve data entry. Mike Hoff recently held a teleconference with members of the research subcommittee to discuss ways to improve use of the research inventory database to capture AIS project information and the IJC will continue to work with the subcommittee to make this happen.

**Margaret Dochoda, Great Lakes Fisheries Commission (GLFC):** The Great Lakes Fish Health Committee of the GLFC has noted new parasites and pathogens in the Great Lakes basin, including: *Heterosporis*, a microsporidean parasite of yellow perch, first reported in North America in some inland lakes of Wisconsin and Minnesota and is now in Lake Ontario's Bay of Quinte. The parasite affects palatability of yellow perch and many other species. The GLFC has supported research on transmission mechanisms by Dan Sutherland (U of WI). Fish management agencies are considering containment measures. *Heterosporis* is previously known in Europe and Asia in farmed Japanese eels and in tropical fish raised for aquaria.

Largemouth Bass Virus has shown a range extension from southern states. The virus is now found in inland Indiana, Illinois and Michigan waters as well as Lake Michigan. So far, the virus does not seem to affect large mouth bass populations in those areas.

Spring Viremia of Carp has been confirmed for the first time in North America in a North Carolina koi farm and in carp from Cedar Lake, Wisconsin. Spring Viremia, first tested by pathologists this spring, may well be the cause of recent spawning carp mortalities. The virus may affect other species such as northern pike. *Piscirickettsiae* has now been reported for the first time in North America. This bacteria causes skin lesions in Lake St. Clair muskies. It may also be a threat to coho salmon. Mohammed Faisal from Michigan State University is currently investigating.

**Nick Schmal, U.S. Forest Service:** Schmal has been assigned to coordinate the aquatic biota portion of invasive species for the Eastern Regional Office and to represent the USFS regional Forester at Panel meetings. Schmal also hopes to get involved with the Northeast and Mississippi River Basin Panels. The Chief of the Forest Service, Mr. Dale Bosworth, has included non-native invasive species as one of four major threats to National Forest System Lands in the United States. In addition, the Eastern Region has recently completed and approved a framework for dealing with non-native invasive species on national forests of the Eastern Region.

**Tom Johengen, Cooperative Institute for Limnology & Ecosystem Research (CILER):** CILER and the Great Lakes Environmental Research Lab (GLERL) co-hosted an ANS symposium as part of the state of Michigan's *ANS Awareness Week*. The NOBOB project is in the third year of its study. The first phase of the project (assessment) has been completed. The second phase involved time-series sampling of NOBOB ships as they enter the Great Lakes and looked at the dynamics of organisms dying out or hatching out eggs into the tanks after they are filled. The third component involves cross-ocean ballast water exchange experiments, which has been challenging to conduct due to the logistical difficulties of finding ships that fit the necessary criteria.

**David Reid, National Oceanic and Atmospheric Association (NOAA):** GLERL and CILER have taken the existing ANS list, published by Mills et al. and posted it on the web. Reid requests that any new validated sightings be brought to his attention so that the database can be kept up to date. The Great Lakes office has joined the SERC NEMESIS database, which is tied to the Gainesville and Australia databases. Users can sort the data by specific species. Researchers can send validated new sighting information to be added to the lists. Currently there are 162 species on the list with twelve more to be

added in the future. A secondary table will be created for species that exist in the entire Great Lakes basin as well as those only existing in certain lakes. NOAA has created a National Center for Research and Aquatic Invasive Species Center with Reid as the Director.

**Donna Turgeon, NOAA:** Maryland NOAA offices have also joined NEMESIS and agreed to combine USGS, SERC, and NOAA ANS databases.

**Michael Gardiner & Matt Colmer, U.S. Coast Guard:** Ballast water standards were clarified from the minutes of the last meeting. Based on the 2002 ballast water exchange requirements, of the 121 vessels that reported ballast water, 110 were compliant (91 percent compliance rate). These vessels represent one-quarter of the ships entering the seaway.

**Joe Mion, Ohio DNR:** The Ohio DNR is working with Ohio State University on treatment operations of hatcheries, and a project to quantitatively survey and control noxious plants on state lands. In collaboration with U.S. Fish & Wildlife, the Mussel Litigation Trust, and the Columbus Zoo a mussel research and propagation center has opened to investigate concerns such decreasing populations of native clams caused by zebra mussels. An Asian carp pilot monitoring plan has been developed to assess the movement of the carp into Ohio River tributaries. Threats to smallmouth bass by round gobies are also being investigated. The DNR proposed a no-possession regulation for smallmouth bass in Lake Erie during May and June. This action is intended to offset the impacts gobies render on bass reproduction. The DNR has also developed boat ramp signage based on the "Stop Aquatic Hitchhikers" campaign. Cooperative efforts continue for assessing and controlling invasive aquatic plants on lands owned by the state of Ohio. Ohio has also begun assessing their current ANS management plan as an initial step in revising and updating the document.

**Kirstin Wakefield, Pennsylvania DEP:** At the 3<sup>rd</sup> Binational Conference on Botulism in Lake Erie, scientists presented strong evidence that quagga mussels are acting as a vector for botulism transmission to round gobies and waterfowl. Biologists with the Erie County Department of Health and the Pennsylvania Department of Environmental Protection recently documented an apparent range expansion of the rudd (*Scardinius erythrophthalmus*) into the Pennsylvania waters of Lake Erie. Pennsylvania DEP and Sea Grant held the workshop *Lake Erie Aquatic Exotics Squad* in May 2003. This workshop was a pilot program to train volunteers to monitor local lakes and streams for aquatic invasive species. Through a combination of presentations and hands-on training, volunteers learned to identify zebra mussels and several aquatic plant species. Twenty-two people attended the training workshop and selected sites to monitor throughout Erie County. They were supplied with zebra mussel samplers, kick nets, lake rakes, field guides to ANS in the region, and a training manual with sampling and reporting protocols. Results of the monitoring program will be compiled and integrated into a GIS database. Pennsylvania DEP, Sea Grant, and Pennsylvania Fish and Boat Commission (PFBC) recently conducted a statewide recreational boater ANS survey. The response rate was 47 percent overall. Following analysis, survey results will be used to direct future outreach and education programming on ANS. The PFBC has proposed a rulemaking to prohibit possession, introduction, importation, and transport of live snakeheads, black, bighead, and silver carps, zebra and quagga mussels, and round and tubenose gobies. In June 2003, Pennsylvania's Coastal Zone Management Program instituted a new policy, in concert with networked agencies, to prevent the introduction and spread of ANS and facilitate environmentally appropriate means of eradication where possible. The policy also enables PA CZMP to direct funding and technical guidance to ANS issues in the state's coastal regions.

**Gwen White, D.J. Case and Associates, Indiana:** The Indiana DNR and stakeholders are mid-way through the process of developing a state ANS Management Plan with the assistance of contract facilitators, D.J. Case & Associates. The draft plan and meeting minutes are posted to the new state website [www.invasivespecies.in.gov](http://www.invasivespecies.in.gov). The addition of several species to the illegal fish possession list (white perch, black carp, silver carp, bighead carp, and 28 species of snakeheads) was approved as a permanent rules in May. As a point of information, D.J. Case & Associates and Southwick Associates are working with the International Association of Fish and Wildlife Agencies (IAFWA) to develop communication strategies for regions and pilot states regarding exotic species.

**Ron Martin, Wisconsin DNR:** The 2003-05 budget recently passed by Governor Doyle provides more state dollars for aquatic invasive species efforts. An additional \$250,000 annually was allocated for programmatic activities such as watercraft inspection efforts, ANS monitoring and information/education

and outreach efforts. These monies augment a base program funding level of \$300,000. An additional \$500,000 annually in new monies was allocated for aid to local governments for prevention and control efforts. The funding source for the aquatic invasive species program is from the motor boat gas tax revenues. Bait posters were mailed out to Wisconsin bait dealers to alert them about invasive fish species and procedures they should follow to avoid spreading these invaders. Follow-up surveys to the bait dealers are being mailed to check on their efforts. Wisconsin's comprehensive management plan will be submitted to the national ANS Task Force for final approval this fall. The DNR has produced additional wild cards for white perch, the fish hook and spiny water flea, rainbow smelt and curly lead pondweed. They are now available for distribution to anyone who wants copies. Radio public service announcements are airing this summer across the state as in past years with an emphasis in the coastal areas. In addition, DNR continues efforts on watercraft inspection at the boat landings, monitoring for Eurasian watermilfoil and zebra mussel, and a comprehensive outreach program.

**Mark Tuchman, USEPA, GLNPO:** Funding decisions for 2003 have been finalized from the \$300,000 available for invasive species projects. Seven projects have been awarded funding including: \$25,000 awarded to the Great Lakes Commission for revisions of the *Biological Invasions* brochure; Phil Moy's project on an invasive species kiosk on the Badger ferry; and a project through the Minnesota pollution control agency to eradicate Buckthorn using bio-control agents.

**Sarah Whitney, Great Lakes Commission:** Progress continues on the following ANS projects of the Great Lakes Commission: guidelines and recommendations for early detection and monitoring in the Lake Michigan basin, Rapid Response Plan for Great Lakes Invasions; and an online spatial database for invasive species in the Lake Michigan basin.

**Kathe Glassner-Shwayder, Great Lakes Commission:** Funding is pending on several projects: 1) A Sea Grant ANS outreach program grant titled: *A Collaborative Approach to Advance Implementation of State Management Plans for Prevention and Control of Aquatic Nuisance Species in the Great Lakes Region*. The goal of the proposed project is to generate collaboration to advance the development and/or implementation of state management plans. For those states operating with approved management plans, Sea Grant funding will support further development and revision of the plans, identification of strategies to advance plan implementation, and development of criteria for plan assessment/evaluation. For other states that have yet to develop ANS management plans, this project is designed to help get plans off the ground and initiate the process to develop a plan. Partners for this project involve the Sea Grant network and state ANS representatives; 2) a two part U.S. EPA, GLNPO grant has been proposed to update and revise the Great Lakes Panel's *Biological Invasions* brochure; and develop a model species-specific regional management plan for ANS prevention and control.

**Michael Goehle, U.S. Fish and Wildlife Service:** A Northern Snakehead factsheet has been submitted to the U.S. Fish and Wildlife Service (FWS) regional office. It is designed to be "angler friendly" by showing the differences (with pictures) between northern snakehead, bowfin, and burbot. A FWS version of the snakehead ID card, coordinated by the regional office, has been modeled after Pat Charlebois' Asian carp ID card for silver and bighead carp. There are seven FWS contact numbers and cities listed. Preliminary Asian carp habitat suitability studies have begun in Buffalo Harbor, Buffalo River, and Presque-Isle Bay. Factors including temperature, pH, dissolved oxygen, plankton density, spawning habitat, and flow rates were collected three times this year. The first of two ruffe surveys on the lower lakes have been completed and no ruffe were collected. The first of two invasive fish surveys on the Erie Canal were completed and while no new species were collected, some existing ANS populations (goby, rudd, and carp) were found. The field work for invasive vegetation surveys on the canal has been completed. Water chestnut was found in a different area near the Finger Lakes which may be a new location. There are very large numbers of water chestnut on the Oswego River and so the FWS is putting together voucher specimens of native as well as non-native aquatic plants collected. A round goby creek survey on Lake Ontario tributaries was initiated this year with three trips to the streams (spring, summer, fall). Last year they surveyed several Lake Erie tributaries and found a large numbers of gobies. This year they found gobies in one Lake Ontario tributary on a separate (non-ANS targeted) wetland survey. The FWS is organizing a "round goby round-up" on September 6 and they are hoping to gather volunteer fishermen and women to fish for gobies in the western end of the Erie Canal to determine range expansion eastward. They will also perform some trawling of the canal. They are working on an invasive species website for Region 5 ANS activities.

**Emily Finnell, Michigan DEQ:** Governor Granholm proclaimed May 31 through June 7, 2003 as Aquatic Nuisance Species Awareness Week in an effort to protect against potential invasion and spread of ANS throughout the state and its waters. Tip of the Mitt Watershed Council's Great Lakes Aquatic Habitat Network and Fund awarded nine grants totaling \$13,000 to various grassroots groups throughout the state to raise awareness on the ANS issue. Office of the Great Lakes staff participated in the Inland Seas Education Association's 2<sup>nd</sup> annual Invasive Species Field Course and presented at the 12th International Conference on Aquatic Invasive Species in Windsor, Ontario concerning the Aquatic Nuisance Species Prevention Day held in Michigan during 2002.

**Doug Jensen, MN Sea Grant:** Led by Minnesota Sea Grant, two multi-state aquatic nuisance outreach projects totaling \$286,200 were awarded from the National Sea Grant College Program. *Preventing New Introductions of Invasive Aquatic Plants from Water Gardening and Shoreline Restoration* will develop an educational campaign model to prevent the spread of invasive aquatic plants. *A National Aquatic Nuisance Species (ANS) Outreach Campaign for the Aquarium Industry and Hobbyist Consumers* will develop a strategic national campaign designed to change attitudes and behaviors within the aquarium industry and among hobbyists aimed to prevent the accidental spread of aquarium plants and animals.

DNR's watercraft inspection program expanded to 38 inspectors this year. Eurasian watermilfoil spread continues to be slow in Minnesota. Seven lakes were found to be newly infested, bringing the total of infested waterbodies to 149. No new zebra mussel infested inland lakes have been found; there remains only one inland lake infestation in Minnesota. DNR and Sea Grant have joined the *Stop Aquatic Hitchhikers!* national campaign and are integrating the campaign's brand and tagline into signs, brochures, fliers, and WATCH ID cards. Zebra mussel monitoring efforts have grown to over 225 citizen volunteers across the state. Minnesota Sea Grant has been working with David Reid, GLERL, to compile a list of new or previously unreported nonindigenous species found in Lake Superior to be included in a central database for Great Lakes invasive species. The Minnesota Invasive Species Advisory Council has been actively meeting. Its committees have been working on developing criteria for invasiveness, survey and monitoring, and a communication and outreach strategy plan.

**Pat Charlebois, IL-IN Sea Grant/IL Natural History Survey:** Illinois is embarking on a new medium to inform boaters about ANS invasions. The "Stop Aquatic Hitchhiker" message will be on all permit renewal notices sent to boaters as well as the envelopes mailed containing the permits. A new ANS WATCH card has been created for two species of Asian carp – silver and bighead. The card contains information on their history, potential impacts, identification characteristics, and how to prevent spreading these and other ANS. Multiple copies available through University of Illinois, Distribution Center, 1-800-345-6087, singles through Pat Charlebois. IL-IN Sea Grant and the DNR conducted regional workshops for their conservation officers. The workshops included a general overview of ANS, information about the new "Administrative Code 805: Injurious Species", and a hands-on identification segment with specimens.

KGS/KW: GLP Administration\GLP Meetings\Ann Arbor-GLP-RR\min-GLP-meet-AA-July-03-fin2-11-26-03 (completed November 26, 2003)

**Great Lakes Panel on Aquatic Nuisance Species  
Meeting Minutes Participant List  
July 22-23, 2003  
Ann Arbor, Michigan**

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