

GREAT LAKES PANEL ON AQUATIC NUISANCE SPECIES

Ann Arbor, Michigan

Thursday, December 18, 1997

8:30 am - 4:00 pm

MEETING MINUTES

WELCOME, INTRODUCTIONS AND AGENDA REVIEW

The meeting was convened at 8:30 a.m. by the chair of the Great Lakes Panel, Mark Coscarelli, Office of the Great Lakes, Michigan Department of Environmental Quality. Coscarelli welcomed the meeting attendees and noted the diversity of agencies and organizations represented. He invited those present to introduce themselves (an attendance list is attached). Coscarelli reviewed the day's agenda and invited members to submit other items for discussion; several were added under the Other Business agenda item.

Coscarelli called for review and approval of the draft summary of the previous Panel meeting, held on June 18, 1997 in Chicago. **There were no comments on the draft summary and it was approved as submitted.**

SETTING THE AGENDA FOR 1998: WORK PLAN INTRODUCTION AND REVIEW OF CURRENT INITIATIVES

Coscarelli explained that this agenda item would include reports from the chairs of the Panel's three committees on their FY 1998 work plan and the outcome of the previous day's committee meetings.

Information/Education Committee

Jay Rendall, Minnesota Department of Natural Resources and chair of the Information/Education (I/E) Committee, invited Sandra Keppner, U.S. Fish and Wildlife Service (F&WS), and Kathe Glassner-Shwayder, Great Lakes Commission (GLC), to present on this topic. Keppner reviewed the committee's discussions on key activities and summarized action items which the members will be pursuing.

I/E Inventory: market the information in a useful manner; produce an abbreviated version with only the inventory listings; include more cross references; consider making the report available online and on a CD Rom; and update the document to keep in current. Action Item: each committee member will poll 2-5 potential users to find out if they find the information useful; how they would use it; and how the material can be presented to maximize its use. Keppner invited all Panel members to contribute input on these questions. Panel members must be liaisons to their agencies and organizations for purposes of informing support staff of new or updated I/E materials. Using this input, the online inventory should be updated every six months with a new survey form distributed on an annual basis to all previous submitters.

I/E Strategy: the strategy must be updated to reflect the results of the inventory and other new developments. Action Item: a subgroup of the committee was formed to review the document in detail and submit input. A conference call will be convened to discuss needed changes, which will then be presented to the full committee and, subsequently, the full Panel.

Biological Invasions Brochure: while not intended for general distribution, cost is preventing effective dissemination of the brochure. The brochure will be particularly effective for use with state legislators in conjunction with the model state legislation project. Action Item: examine cost structure for the brochure to determine if it can be sold at a reasonable cost, especially for use by agencies.

Recreational Guidelines: divers and waterfowl hunter guidelines are nearly finalized; comments can be submitted through Jan. 15. Rendall is the appropriate Panel representative to the Task Force's Recreational Activities Committee.

ANS Update: continue publication; seek additional marketing opportunities to enhance its distribution. Action Item: submit ideas for feature articles and opportunities for increasing readership (e.g. new newsletters to submit it to).

Great Lakes Information Network (GLIN) Website: great marketing tool and method for highlighting ANS issues in general. Use GLIN to increase the Panel's visibility. Consider the appropriate terminology for discussing the ANS issue (e.g., exotic vs. nonindigenous). Action Item: I/E committee will present the full Panel with a proposal concerning the best terminology for communicating with the public and other target audiences.

1998 Conferences: use conferences as an opportunity to highlight Panel activities and Great Lakes ANS issues. Action Item: when possible, Panel members will make presentations at conferences on ANS issues and serve as liaisons between the Panel and other groups.

Keppner noted that Rendall would continue as chair of the I/E committee. Copies of the draft prevention and control guidelines for divers and waterfowl hunters were distributed and Panel members were asked to provide input to Rendall. All Panel guidelines will be submitted to the Task Force for use by its Recreational Activities Committee, increasing their impact and usefulness. Rendall noted that several other individuals participated in drafting the guidelines, including Doug Jensen, Minnesota Sea Grant, and Beth MacKay, Ontario Federation of Angler and Hunters.

Research Coordination Committee

CDR. Eric Reeves, U.S. Coast Guard, reviewed the discussions of the Research Coordination Committee. Since he is retiring, the committee has nominated Jeff Reutter, Ohio Sea Grant, or Reeve's successor, if Reutter is unavailable, as the new committee chair. The committee feels that inter-regional communication and coordination of ANS research efforts must be priority and suggested that opportunities to address this priority be an action item for the committee and for the Panel as a whole.

Reeves directed the Panel's attention to the draft policy statement on ballast water research, a revised and shortened version of which was distributed to the members to take the place of the version distributed prior to the meeting. He noted that he would invite the Panel to adopt the statement later in the meeting. He reviewed that ballast water is a major vector for the introduction of aquatic nuisance species into the Great Lakes. A mandatory ballast management regime has been in place since 1993 requiring vessels to conduct open-ocean ballast exchange beyond 200 nautical miles. There are major defects in this regime, however, including the safety of conducting exchange (due to hull stress), vessels with no ballast on board (NOBOBs), and limitations on exchange and treatment options due to the design of current ballast tanks. The binational U.S.-Canadian report on ballast water management lays out a detailed strategy for addressing the issue and emphasizes its importance in ANS introductions. Some critical outstanding questions include the potential threat of pathogens in ballast water; comparison of ballast water with other vectors of introductions; safety problems associated with the current exchange regime; additional tests to supplement salinity; short-term approaches to NOBOBs; short-term, low-cost tank retrofitting options; interim measures for the application of heat and chemicals to NOBOBs; and a methodical comparison of options recommended in the Marine Board report.

Policy and Legislation Committee

Mike Donahue, GLC, and chair of the Policy and Legislation Committee, noted that the special committee session held the previous day discussed a number of topics, with special emphasis on the new ANS Action Plan and model legislation projects. Since the model legislation project would be the subject of a subsequent agenda item, Donahue limited his comments to the Action Plan project.

U.S. EPA, Great Lakes National Program Office (GLNPO), has provided the Panel with funding to develop an Action Plan for ANS prevention and control. This will be a policy document intended for signature by high-level officials in the Great Lakes states. The document is proposed to identify major points of consensus related to ANS prevention and control; enhance the existing regional framework and control efforts; strengthen decision making at senior levels; ensure a timely response to new infestations and other issues; encourage intergovernmental partnerships; leverage financial support for individual programs; and maintain a high profile for ANS issues and associated activities. The Action Plan is a two-year project, with GLNPO funding covering the first year and base Panel funding supporting the second year.

An analogy for the Action Plan is the 1985 Great Lakes Charter on water quantity issues and the GLC's Ecosystem Charter. The committee meeting focused on scoping and infrastructure for the Action Plan project, the document's structure and content, and potential signatories. Based on the input received, it appears that the Action Plan will include a vision statement followed by a series of very broad principles articulating areas of consensus related to ANS prevention and control. Each principle will include a series of associated goals, objectives and tasks that signatories will commit to pursue, both individually and collectively.

The committee meeting also addressed six key questions related to the Action Plan project. These questions, and the major points of agreement, include:

- 1) *What should be the composition of the drafting committee?* The drafting committee should be broad based to ensure representation from all relevant interests; all Panel members should be invited to serve; and other

parties to be invited to participate are tribal authorities, Great Lakes Fishery Commission, Council of Great Lakes Governors, aquaculture groups, recreational boaters, American Fisheries Society and the federal executive administration (in reference to the proposed national Action Plan).

- 2) *What level of detail should the Action Plan include?* Broad statements of principle should be backed up with more detailed implementation protocols.
- 3) *How should the Action Plan be organized and what key elements should it include?* Profile state management plans; promote consistency in laws, policies, and administrative rules across the region; establish a consultative process for addressing new infestations; acknowledge interrelationships between aquatic and terrestrial introductions; acknowledge that the Great Lakes region is part of a larger global ecosystem; address federal-state relations and explain the role of states in implementing and complimenting the National Invasive Species Act (NISA); identify the roles of public and private sector partnerships in prevention and control efforts; present the Panel's I/E strategy; and document the important role of basic and applied research.
- 4) *What process should be used for external review and outreach for the Action Plan?* Cast a broad net that reflects the diversity of interests involved in the ANS issue; the Panel, and the Policy and Legislation Committee in particular, will be helpful in identifying a review and comment strategy during the iterative process through which the document will be developed.
- 5) *What types of existing plans and agreements can serve as models for the Action Plan?* Great Lakes Charter, Joint Strategic Plan for Management of Great Lakes Fisheries, GLC Strategic Plan, and the Ecosystem Charter. The Action Plan should concisely summarize, showcase and advance existing initiatives rather than creating new documents or procedures.
- 6) *At what level should the Action Plan be endorsed and how might support from potential signatories be accessed?* Ideally, the Action Plan should be endorsed at the gubernatorial/premier level with additional endorsement from the Panel and other appropriate state/provincial and federal officials. This might be achieved through a two-part structure: a concise series of fundamental principles that document the importance of the issue and establish fundamental points of agreement that all the jurisdictions can buy into; and an associated implementation protocol detailing procedures for implementing and/or addressing each principle. The former would be signed at the gubernatorial/premier level and the latter at the agency level.

Additional recommendations were that the document should be regional in scope, covering all involved jurisdictions; and that the support and ownership of governors and premiers should be solicited from the outset, possibly by inviting one governor to take ownership for the project and sell it to his colleagues. Letters from the Panel, or from Governor Engler, if he should agree to assume a leadership role for the project, shall be sent to the governors publicizing the Action Plan and inviting their support. The drafting committee will be established in the near term with all Panel members invited to participate or recommend other interested parties. Letters to additional, special representatives will then be distributed. Also in the short term, one fundamental principle and associated implementation protocol will be drafted as a sample to facilitate agreement on this proposed format for the Action Plan.

Donahue explained that mailings will go out to the Panel in the near future detailing additional aspects of the Action Plan and outlining the opportunities for the members to participate and provide input. He concluded by noting that an increasingly large number of multi-jurisdictional, regional, non-binding agreements are making a tremendous difference in elevating the profile of issues before Congress and other key groups.

NATIONAL TASK FORCE REPORT

Bob Peoples, U.S. F&WS, and secretary to the national ANS Task Force, provided an update on the Task Force's activities. Peoples recognized the Panel for its work on the ANS issue and noted that it was addressing the issue long before it assumed a national profile. The Task Force appreciates the Panel's work.

Peoples reviewed the agenda from the Task Force's recent meeting. Two new members have been added to the Task Force, Ed Theriot of the U.S. Army Corps of Engineer's Waterways Experiment Station in Vicksburg, MS, and Leo Dunn of the Pennsylvania Department of Agriculture, who will serve as an ex-officio member representing the National Association of State Aquaculture Coordinators. In response to the increasing importance of the ANS issue at the national level and to a letter to the vice president from a number of scientists and environmental managers encouraging federal action, the vice president asked the departments of Interior, Commerce and Agriculture to propose an ANS strategy for the administration. A draft plan, with seven major recommendations, is under consideration. It is not clear at this point how the group will move forward with this plan. The recommendations include to establish and national council to deal with all nonindigenous species,

both terrestrial and aquatic, as well as regional groups. The regional groups would provide recommendations to the national council. There will also be an effort to change the way the federal government deals with intentional introductions under the Noxious Weed Act, administered by the Animal and Plant Health Inspection Service, and the Injurious Wildlife Provisions, administered by the U.S. F&WS. The existing approach uses a relatively short "dirty list" of species whose importation is prohibited. The new, proposed approach would involve adoption of a "clean list" of species that could be imported without questions. All other species would require a permit to be imported. One result would be to shift the burden of proving that a species could be a problem from the government to the proponents of its introduction. This is controversial and has been tried before.

Peoples presented a comparison of FY 1997 and FY 1998 appropriations for ANS activities for the five federal agency members of the Task Force. There was an approximate \$4.1 million increase in appropriations between the two years. Some of the funding is specifically directed to the Great Lakes. He also presented a comparison of authorizations under the 1990 ANS act versus actual appropriations. The Task Force feels that authorizations under the act represent the minimum amount needed. Peoples noted that some ANS funding comes from non-federal sources, such as support from the Great Lakes Protection Fund for the Ballast Technology Demonstration Project. In FY 1997 approximately 35 percent of the funding needed to implement the act was available; this number rises to about 45 percent in FY 1998. Concern was expressed that the non-federal contributions not be viewed as taking the place of federal funding and it was suggested that these sources be listed separately so they are clearly viewed as being supplemental to federal contributions.

A meeting recently was held of high-level representatives from the principal federal agencies on the Task Force. The purpose was to bring these people together to raise the profile of the ANS issue, highlight the Task Force's activities and present new proposals. The ANS issue is growing rapidly and additional staff are needed to meet the rising expectations for the Task Force. It was proposed that a small Task Force staff be established and shared among the federal agencies. There was also discussion of developing a unified ANS budget request for all federal agencies to enhance the likelihood of obtaining the necessary resources. Finally, it was noted that there are a number of relatively painless actions which the agencies can take to promote solutions to ANS problems. This includes following the Task Force's research protocol in all agency-funded research and using native species in all restoration activities. It was a very successful meeting and the agencies expect to move forward on a number of issues.

State management plans have been approved for New York, Michigan and Ohio. Sixteen other plans are under development, including in Minnesota, Wisconsin and Illinois. A Task Force web site is being developed. An outline for the site has been presented to the Task Force and plans are to unveil the site at the Task Force's meeting in March, following the zebra mussel conference.

A proposal has been made to undertake control of the green crab, which has been introduced to the west coast and is expanding northward rapidly. A formal proposal for a control program is expected soon and the Task Force has agreed to establish an ad-hoc committee to review it and make recommendations.

Updates were provided on the Great Lakes Panel and the Western Regional Panel, and on a variety of other ANS initiatives. Mike Donahue is an ex-officio Task Force member and presented on behalf of the Panel. There was also discussion of a proposal to produce a TV documentary on aquatic nuisance species to be broadcast on the Discovery Channel. Lt. Larry Greene, U.S. Coast Guard, will be developing some ideas for such a program.

The second day of the meeting included a field trip to the Chesapeake Bay. The Task Force met at the Smithsonian Environmental Research Center in Edgewater, MD, with presentations on the center's research on ANS introductions via ballast water. The group then boarded a vessel in Baltimore to view ballast water structures.

Peoples was asked about the status of forming a regional ANS panel for the Mississippi River. He reported that, in preparation for the Panel's March meeting, he would be reviewing the whole issue of regional panels. A proposal has been submitted by the Mississippi Interstate Cooperative Resource Association (MICRA) to become a member of the Task Force. The issue of regional panels needs to be viewed strategically and he will be preparing an issue paper on the subject.

Peoples reported that the Task Force is preparing guidance for developing comprehensive state management plans. This will build upon the model plan developed by the GLC for the Panel. The guidance will address some of the issues being confronted by states outside of the Great Lakes. There is also some tension between the ANS act's call for comprehensive plans and the Task Force's desire to have the plans submitted and approved as quickly as possible. Staff hopes to distribute draft guidelines prior to the Task Force's March meeting, after which they will be disseminated for broader review and comment.

Peoples provided a brief review of the *Pfiesteria* issue, which has become a major concern in the Chesapeake Bay area. He noted that it is generally considered to be a native species, even though it has characteristics often associated with nonindigenous species. While he was not well informed on the issue, Peoples understood that *Pfiesteria* is a very complex species with up to 24 life stages or forms. It is now referred to not as a species, but as a *Pfiesteria*-like complex involving at least three kinds of organisms. It is hard to detect in the ecosystem and its distribution is not well understood, although it is thought to be distributed throughout the Atlantic coast area. It is a very nasty organism that produces a neuro toxin in one of its life stages, making it difficult to study. It is also unclear what triggers its harmful life stages. From an ANS perspective, a major question is the potential for its transfer via ballast water and whether it can survive in fresh water. These remain open questions which the Task Force will follow up on.

SPECIAL SESSION: PROMOTING ANS PREVENTION AND CONTROL THROUGH MODEL STATE ANS LEGISLATION

Donahue moderated the session, which focused on the model state ANS legislation project being pursued by the GLC on the Panel's behalf. Glassner-Shwayder provided an overview of the project. She noted that the most recent issue of the *ANS Update* reviewed the project, as well as the new ANS Action Plan project. She explained that significant progress had been made on the ANS issue in areas such as research coordination and I/E outreach. The absence of a consistent legislative approach to ANS prevention and control will stand in the way of continued progress, however. To address this outstanding need, the GLC has received funding from the Michigan Coastal Management Program to pursue the model state legislation project. Glassner-Shwayder reviewed the goals and objectives for the project, which are to

- 1) identify inconsistencies, gaps and unmet needs in state ANS legislation for the Great Lakes region;
- 2) develop model state legislation for the Great Lakes region that incorporates components for a comprehensive prevention and control regime, including legislative consistencies among the states;
- 3) provide a means to broadly disseminate project findings and promote their incorporation into state law in Michigan, the Great Lakes region and beyond;
- 4) provide recommendations for integrating ANS efforts with coastal management laws and programs; and
- 5) protect sensitive natural resources from the ecological threats posed by ANS invasions.

The model legislation will be developed with a close eye to previous and ongoing ANS initiatives, including existing federal ANS legislation, the national Task Force, the Panel and the state management plans. Model state legislation is the logical next step to complement these activities. It is a logical time to pursue the project, as an increasing number of states are becoming involved in the ANS issue. It is also important to recognize that aquatic nuisance species do not respect political boundaries, so the model legislation will help ensure that an effective statutory regime in one jurisdiction is not undermined by weak laws and regulations among its neighbors.

The major components of the project include project oversight, to be provided by the Panel's Policy and Legislation Committee; legislative research and analysis, currently underway and summarized in the draft matrix of existing state legislation previously distributed to the Panel members; workshop design and conduct, to be held next spring to review and comment on a draft model legislation; the model legislation and associated recommendations; and dissemination and technical assistance, including adding the model legislation to the annual volume of model statutes published by the Council of State Governments. Glassner-Shwayder emphasized that the matrix of existing state legislation was preliminary and incomplete and encouraged the Panel's state representatives to review the document and provide additional information. She also invited suggestions regarding the manner in which the matrix classified ANS issues.

Glassner-Shwayder posed three fundamental questions for the Panel members to consider during the session. Input and guidance on these and other issues will be critical to the project. What are key components of model state legislation? What other issues and opportunities need to be integrated into the model, such as the relationship to existing federal legislation and coastal management laws and programs? How can we best structure model legislation to most effectively serve the primary goal of ANS prevention and control?

Pam Thiel, U.S. F&WS, provided an overview of ANS laws and regulations in the Great Lakes states. She began by noting that increasing attention is being directed to the ANS issue at the national and international levels. A variety of federal, state and provincial laws and agencies enforce ANS regulations. A 1993 report by the Congressional Office of Technology Assessment (OTA), entitled *Harmful Nonindigenous Species in the United States*, was critical of both federal and state ANS programs. The report stated that the current federal framework is largely a patchwork of laws, regulations, policies and programs. Some only peripherally address

nonindigenous species while others address the narrowly defined problems of the past rather than the broader, emerging issues of the present. In general, federal laws only partially match current problems and leave gaps in the regulation of nonindigenous species.

Most state laws have similar shortcomings. They are relatively comprehensive for agricultural pests but spotty for nonindigenous invertebrates, fish and plants. States play a larger role than the federal government in the importation and release of fish and wildlife. Some states have strong regulatory approaches to the issue while others are weak both in structure and implementation. Most state fishery agencies rate their laws as less, or more than less, than adequate. They stated that, on average, a 50 percent increase in resources would be needed to adequately address their responsibilities.

Federal and state programs to identify the risk of potentially harmful nonindigenous species have many shortcomings, such as long response times. When prevention fails, rapid response is essential. Agencies also lack broad authority over nonindigenous species and thus have been reluctant to act when there is a conflict over jurisdiction or when statutes are unclear. Consequently, ANS issues often receive attention on a disjointed basis after major infestations. The U.S. system for dealing with harmful nonindigenous species involves a complex interplay of federal and state authorities with numerous federal, state and regional coordinating bodies attempting to enhance consistency and resolve conflicts. Some roles are inadequately defined, especially for problems that cross state lines. This highlights the need for uniform regulations across state lines. Model state legislation will be very helpful in this regard.

Major relevant federal laws include the Lacey Act, the Noxious Weed Act, the Nonindigenous Aquatic Nuisance Prevention and Control Act and the National Invasive Species Act. The two major Canadian acts are the Federal Fisheries Act and the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act. The latter is new federal legislation containing provisions prohibiting the importation of ecologically injurious species. The 1990 U.S. federal ANS act included three core resource goals: to reduce the risk of new, unintentional ANS introductions; to ensure prompt detection of new and continuous monitoring of previously detected ANS populations; and to control established populations in a timely, cost effective and environmentally sound manner. The Act calls on states to develop and implement comprehensive management plans for ANS prevention and control. The Act's 1996 reauthorization expanded this section to include interstate plans for

In conclusion, Thiel suggested that the successful management of harmful aquatic nuisance species would depend on an integrated approach with several components: an increased focus on prevention; an emergency response plan; effective public education programs; and state, provincial and federal efforts that are mutually supportive and that contain uniform regulations. State and provincial ANS regulations are evolving, both in scope and geographic coverage, and the time is ripe for model legislation. States will be receptive to the model, which will provide an avenue for more uniform regulations from state to state, regionally, and nationally.

Donahue introduced Jay Rendall, the Minnesota representative to the Panel, and noted that he and several other state representatives would provide a state perspective on priorities for model state ANS legislation.

Jay Rendall, Minnesota Dept. of Natural Resources: Rendall explained that his presentation would include material from a number of sources as well from the statutory regime in Minnesota. He emphasized some basic points, including examining the full range of potential pathways of introduction; recognizing that introductions are permanent; anticipating the nonindigenous species that may be on their way to the region; emphasizing prevention of introductions when developing laws and regulations; and noting that state laws for agricultural pests

- *exclusion or exceptions*: facilities or users that might be excluded from regulations, such as pet shops or zoos.

Lang concluded by cautioning against emphasizing *uniformity*, when *compatibility* might be a better approach.

Mark Coscarelli, Michigan Dept. of Environmental Quality: Coscarelli did not have a formal presentation, but made the following observations:

- Michigan is conducting a comprehensive review of its statutes and regulations as part of its state management plan and this will help establish priorities for the ANS issue;
- consistency is important while recognizing difference between individual states, including a distinction between species that are already present in a state versus those could potentially be introduced in the future;
- regulations should be pursued only after other measures, such as voluntary and educational initiatives, have been exhausted; and
- financial commitments to support and enforce regulatory efforts are critical.

William Culligan, New York Dept. of Environmental Conservation: Culligan emphasized that any new legislative efforts should be directed at sources that have the highest potential for introducing or spreading unwanted species. In New York, recent history shows that ballast water is, by far, the most significant problem. He commended those working on the issue but suggested that much more needed to be done. It is not an issue that can be easily addressed at the state level, but if multiple states have similar issues or concerns, this could be helpful. Areas where New York is lacking adequate regulatory authority include the pet and aquarium industry; bait and recreational activities; and private aquaculture. He noted, however, that in the current legislative climate in his state, any legislation viewed as having serious negative impacts on small businesses would not be well received. If they were to propose such legislation, they would have to document that the industry being regulated had clearly caused a problem requiring the new regulations.

Ron Martin, Wisconsin Dept. of Natural Resources: Martin noted that, from his state's perspective, some issues to consider for model legislation included preventing new ANS introductions into the Great Lakes basin; preventing the movement of harmful species from one state to another within the basin; and distinguishing between intentional and unintentional introductions and recognizing that addressing the latter will require bringing many more players to the table. Key features to include in model legislation are a listing requirement for species to be excluded; guidelines or criteria for defining harmful species; permit requirements for possessing or transporting harmful species; enforcement, penalties and mechanisms for program funding; a process for certifying that bait shipments entering the region are clean and free of harmful species; requirements that equipment be cleaned before being transferred from an infested water body to an uninfested one; a ban on the collection of bait from infested water bodies; and provisions for classifying water bodies as being infested.

Donahue thanked the presenters and invited open discussion from all those present on elements and priorities for model state ANS legislation. The following additional input was provided during this discussion:

- strive for consistency, where possible, with existing rules, laws and initiatives
- address the live importation industry (i.e. fish, frogs, turtles)
- provide guidance at the appropriate level (e.g., statutes vs. regulations, rules vs. programs/practices)
- consolidate the "mosaic" of statutes, rules and laws
- use model legislation to provide a framework, but do not be overly prescriptive
- incorporate a clean, or approved, list of species that can be imported or introduced
- provide sufficient specificity, including definitions and consistency among jurisdictions
- focus on broad, encompassing terms and definitions to ensure adequate coverage of the ANS issue
- provide a means for resolving differences between states as to whether an exotic is, or has potential to become, a nuisance (i.e., meeting of governors, state DNR directors, etc).
- provide for emergency rule-making authority
- develop guidance on example language
- ensure that laws regarding ANS prevention and control are enforceable.

REPORT ON ANS ISSUES AND INITIATIVES

Ballast Technology Demonstration Project: Rick Harkins, Lake Carriers' Association, presented on the status of the project. Harkins reviewed the purpose of the project, which is to test filtering technologies to prevent the spread of aquatic nuisance species via ballast water. The *Algonorth*, a seaway size, 734-foot bulk carrier is being used as a test platform. The project is using filters developed by Ontario Hydro to keep zebra mussels out

of their facilities. Harkins showed slides of the filter setup and associated machinery. The filters are 24 inches tall with a mesh ranging from 25 to 250 microns. The filters were installed on the *Algonorth* in November 1996; however engineering problems led to a six-month delay in commencing testing. They are currently analyzing the data from last fall's runs, which Harkins reviewed in its preliminary format. There may be problems with this data, and they will be testing again next spring and summer, with final results expected to be released next year. The project steering committee has asked for an examination of several secondary treatment methods, including ultraviolet light, heat and ultrasonic treatment.

There was discussion about the cost of retrofitting ships' ballast tanks to include a filtration system such as the project is testing. One cost estimate was as high as one million dollars per ship. It was noted that costs of this magnitude would put most ships currently in use on the Great Lakes out of business. Another alternative cited was to solicit federal assistance in paying for ship retrofitting costs. The costs of various treatment options will be a key question. Harkins reported that new ships being constructed are incorporating design changes to accommodate some of the technologies being tested in the project.

U.S. Legislative and Appropriations Update

Several Panel members requested additional time to review and comment on the draft policy statement. **Donahue suggested, and the Panel agreed, that members shall submit input by Jan. 15. A revised version will be mailed to the members at that time, with final input requested by Feb. 4. Unless major issues remained outstanding, the statement will be considered finalized after that date. Input should be directed to Matt Doss, Panel support staff at the GLC.**

Chicago Waterways Dispersal Barrier Project: Phil Moy, Army Corps of Engineers, provided a brief update on project activities since the Panel's previous meeting. There have been three significant occurrences. The Great Lakes Science Center has begun lab testing of an electric barrier. They have had about 80 percent success in deterring the goby from crossing the barrier, although this is a very preliminary result. This is only the first step to a barrier, and ultimately it probably will be considered in conjunction with other approaches. In September the project's advisory panel met and confirmed that an electric barrier was the best approach in the short term. Finally, the Corps has been appropriated \$500,000 and the U.S. EPA \$200,000 toward development of the barrier. Additionally, the Illinois International Port and the Great Lakes Protection Fund have contributed \$75,000 and \$71,000, respectively, toward the project. The Protection Fund grant will support monitoring by the Illinois Natural History Survey. Lab testing of the electric barrier and toxicity testing will continue and channel surveys will begin soon to examine where the barrier should be located. A small-scale field trial will be conducted this spring in the Shiawasee River. A long-term approach may be to revise discharge permits to allow for chlorination in the tertiary treatment process for the effluent going into the Sanitary and Ship Canal. This would provide a "bath treatment

to end next year. The St. Croix River management plan is almost finalized and is expected to be submitted to the Task Force soon. Wisconsin and Minnesota are each requesting \$20,000 to fund the plan. He noted that weevils for control of Eurasian watermilfoil are now being marketed and they are developing a strategy for using them in the state.

Mike Ripley, Chippewa-Ottawa Treaty Fishery Management Authority: They will be assisting U.S. F&WS with lamprey control, including a catch and release of sterile males on a tributary to Lake Huron below the St. Marys River and construction of an electric weir on another Lake Huron tributary. Their director, Faith McGruther sits on the national Task Force and is also a member of the Native American Fish and Wildlife Society. She hopes to organize a panel on ANS issues for the Society's national meeting in May and invites input from the Panel.

Dan Thomas, Great Lakes Sport Fishing Council: The Council will be having its annual conference in January.

Rich Klukas, National Park Service: Purple loosestrife control efforts are underway at Indiana Dunes and Sleeping Bear National Parks. At Indiana Dune, three species of beetles were released three years ago to control the plant. A report on the results of this effort will be released this year. A similar effort is underway at Sleeping Bear Dunes.

David Garton, Ohio Sea Grant: Garton had only been on the job for six weeks and did not have much to report. The state Sea Grant program recently submitted their omnibus proposal for research funding, which included several projects related to the ecosystem impacts from zebra mussels in Lake Erie.

Rhae Giacoma, U.S. Coast Guard: They are working on the ballast water management strategy and are taking samples from NOBOBs to be analyzed. They are working on a project to ensure that sanitation systems on foreign vessels are working properly to ensure that pathogens are not released via this pathway.

Randy Lang, Indiana Dept. of Natural Resources: Approval to begin developing the state management plan is expected soon. They are working on best management practices for state facilities to prevent the spread of zebra mussels. He expects to have more to report on this at the next Panel meeting. They are developing rules to prohibit importation of five new exotic species.

Jay Rendall, Minnesota Dept. of Natural Resources: They are in the midst of a rulemaking process to list of variety of new species as either prohibited, regulated, or unregulated. This has led them to work more closely with the horticulture industry on aquatic plants. The first interstate management plan for the St. Croix River is nearly complete. They have developed new ANS signs. They have a contract with the Army Corps of Engineers' Aquatic Plant Control Group to examine which aquatic plants are already present in the United States and which could be invasive in Minnesota. This information may be interest to the other Panel members. The governor is proposing a lakes initiative that includes a one-time appropriation ANS activities. Of this, \$400,000 would be earmarked for sea lamprey control on Lake Superior. It is unclear what the fate will be of this proposal. They are submitting a proposal to the state Environment and Natural Resources Trust Fund to support biological control of buckthorn.

Bill Culligan, New York Dept. of Environmental Conservation (reported by Mark Coscarelli): New York has received \$20,000 from the national Task Force to continue biomonitoring on the Finger Lakes. Eight lakes are being monitored for water quality and zooplankton parameters related to the effects of zebra mussels. Brochures have been produced and the department is contributing to a permanent nuisance species display being constructed at the New York State Museum in Albany.

Mark Coscarelli, Michigan Dept. of Environmental Quality, Office of the Great Lakes: They have received \$100,000 in general fund dollars for ongoing implementation of the state's ANS management plan. This underscores the governor's commitment to the ANS issue. The state has also contributed \$3 million in state funds, over three years, to augment the Great Lakes Fishery Commission's sea lamprey control program, targeted specifically at the St. Marys River. This is not intended to replace federal funds, but to challenge other states and provinces to come forward with funding assistance. The final report has been released on the use of gluteraldehyde as a control agent to prevent ANS spread in ballast water; copies are available upon request. Additional lab work is being conducted to take the research to the next level.

Chris Goddard, Great Lakes Fishery Commission: Sea lamprey are currently present in the Great Lakes at about 10 percent of their historical abundance. The St. Marys river is the one major uncontrolled source and contributes about half of the parasitic lampreys in the lakes. The river has been difficult to treat since it is more than 20 times larger than any other river ever treated. Through a tremendous partnership with the states, provinces, tribes and the federal government, they have developed an alternative treatment program for the river over the past ten years. They use enhanced trapping of spawning lamprey and release of sterile males to control

the populations. With the new funding from Michigan, they will also be able to do a very targeted chemical application using a new bottom toxicant. Through these methods, they expect to reduce the number of parasitic-phase lamprey entering lakes Huron and Michigan by approximately 85 percent over the next five years. This is a triumph of partnerships and an integrated control approach.

Ron Kinnunen, Michigan Sea Grant: Several members of the Great Lakes Sea Grant Network have funding for a project to work with the bait fish industry to identify critical points in the harvest and sales process where aquatic nuisance species could be spread. The project will use an approach, used by the seafood industry, called Hazard Analysis Critical Control Point Monitoring.

OTHER BUSINESS

Coscarelli indicated that he had received correspondence from the national Task Force requesting representation from the Panel on the Task Force's Recreational Activities Committee. The letter noted that Panel member Jay Rendall was particularly knowledgeable in this area and Coscarelli recommended that he be appointed to serve in this capacity. Donahue recommended that an alternate also be appointed in case the representative is unable to attend a meeting. Rendall stated that he had seen a preliminary list of individuals being invited to serve on the committee and that it was quite broad and included many interest groups. Coscarelli invited members from the Panel's I/E committee to serve as alternate. There being no volunteers, Rendall suggested that Doug Jensen, Minnesota Sea Grant and Rendall's alternate on the Panel, be appointed as alternate. **There was no further discussion and Coscarelli made a motion that Rendall and Jensen be appointed to serve as representative and alternate, respectively, on the Recreational Activities Committee. The motion was seconded and approved on a voice vote. Support staff will draft correspondence to the Task Force relating the Panel's actions on this matter.**

Donahue reported that Ron Harris of the company ITV had contacted him about the possibility of producing a 30 to 60-minute television documentary on aquatic nuisance species. They are seeking funding for the project and have tentative agreement from Sen. Glenn to moderate the program. There is an opportunity for the Panel to submit a preproposal to GLNPO for funding for the project under its exotic species funding category. While the Panel would not have total editorial control, it would have substantial input into the program's content and free or low-cost copies of it. The Panel's input and co-sponsorship would also enhance the Great Lakes focus of the program. Donahue reviewed the purpose, target audiences, and proposed distribution for the program and invited comments from the Panel and a decision as to whether it wished to submit a preproposal to GLNPO to seek funding for the initiative. Harris indicated that approximately \$50,000 would be needed to supplement funding from other sources to proceed with the project.

Following discussion, Donahue proposed that he seek answers from ITV to several questions raised by Panel members and submit a preproposal to GLNPO. This would allow the necessary elements to be put in place, including additional funders, to inform a full proposal to GLNPO. There was consensus that the GLC should pursue this approach on behalf of the Panel.

On behalf of the Panel members and staff, Donahue thanked Coscarelli and Rendall for their service as Panel chair and vice chair over the past several years. Their leadership has helped make the Panel a highly successful example of how NISA can work on a regional basis. Doss reported that, based on the ballots submitted, Gary Isbell and Ron Martin would be the new Panel chair and vice chair, respectively. There were no nominees for chair of the Policy and Legislation and Information/Education committees, so the current chairs, Donahue and Rendall, respectively, will continue in their current positions. It was reported that Jeff Reutter was contacted by phone and had agreed to serve as the new chair of the Research Coordination Committee.

Donahue noted that the next Panel meeting would be held in late spring and invited suggestions for locations that might offer the opportunity for an ANS-related field trip or site visit, such as the tour of the Chicago Waterways held in conjunction with last June's meeting.

ADJOURN

Coscarelli thanked the Panel members and interested parties for attending. There being no further business, he invited a motion to adjourn. A motion was made and seconded and the meeting was adjourned at approximately 4:00 p.m.

GREAT LAKES PANEL ON AQUATIC NUISANCE SPECIES
Ann Arbor, MI
Dec. 17-18, 1997

Tom Busiahn	U.S. Fish and Wildlife Service	715/682-6185
Pat Charlebois	IL-IN Sea Grant/IL Natural History Survey	847/872-0140
Mike Conlin	Illinois Department of Natural Resources	217/782-6424
Mark Coscarelli	Michigan Department of Environmental Quality	517/373-3588
Tom Crane	Great Lakes Commission	313/665-9135
Mike Donahue	Great Lakes Commission	313/665-9135
Matt Doss	Great Lakes Commission	313/665-9135
Rhae Giacoma	U.S. Coast Guard	216/962-6050
Richard Harkins	Lake Carriers' Association	216/861-0591
Kathe Glassner-Shwayder	Great Lakes Commission	313/665-9135
Allegra Cangelosi	Northeast-Midwest Institute	
Gary Isbell	Ohio Department of Natural Resources	614/265-6345
Randy Lang	Indiana Department of Natural Resources	317/232-4094
Ron Martin	Wisconsin Department of Natural Resources	608/266-9270
Ed Michael	Great Lakes United	847/831-4159
Philip Moy	U.S. Army Corps of Engineers	312/353-6400
Bob Peoples	U.S. Fish and Wildlife Service	703/358-1718
Eric Reeves	U.S. Coast Guard	216/902-6049
Jay Rendall	Minnesota Department of Natural Resources	612/297-1464
Randy Sanders	Ohio Department of Natural Resources	614/765-6344
Pam Thiel	U.S. Fish and Wildlife Service	608/783-8434
Dan Thomas	Great Lakes Sport Fishing Council	630/941-1351
Chris Wiley	Transport Canada	519/383-1837
Mike Ripley	COTFMA	906/632-0072
Carlos Federoff		313/426-2975
Al Dextrase	Ontario Ministry of Natural Resources	705/755-1950
Beth MacKay	Ontario Federation of Anglers and Hunters	705/748-6324
Marc Tuchman	U.S. EPA-GLNPO	312/353-1369
Bill Culligan	New York Dept. of Environmental Conservation	716/366-0228
Dr. David Garton	Ohio Sea Grant College Program	614/292-8949
Tom Nalepa	Great Lakes Environmental Research Lab - NOAA	313/741-2285
Sandra Keppner	U.S. Fish and Wildlife Service, Northeast Region	716/691-5456
Rich Klukas	National Park Service	402/221-3603
Peggy Britt	Michigan Sea Grant	313/763-1437
Chris Goddard	Great Lakes Fishery Commission	313/662-3209
Don Schloesser	USGS, Great Lakes Science Center	313/994-3331
Ronald Kinnunen	Michigan Sea Grant	906/228-4830