

**Mississippi River Basin Panel (MRBP)  
on Aquatic Nuisance Species**

**Holiday Inn City Centre  
Peoria, IL  
August 24, 2006**

**Assignments/Actions Summary**

**Research and Risk Assessment Committee**

- Develop and publish the Proceedings of the Asian Carp Symposium.
- Conduct a Risk Assessment Workshop in early January 2007
- Complete an ANS Experts Data base.
- Put together an email survey for research priorities for the most troubled species we have on our web site.

**Prevention and Control Committee**

- Continue work on a model rapid response plan.
- Develop a list of control options available and gaps to be filled.
- Assist in funding an expansion of acoustic and habitat studies in the Illinois River and to help out in Lake Pepin.
- Work on the Corps of Engineers and industry themes for prevention and outreach.
- Work on a position paper for the AFWA on Wildlife Conservation Strategies to let them know that ANS issues are not being addressed.
- Work on a list of recommendations to the ANS Task Force.
- Work with Ron Martin to develop a position paper on whether to provide boat wash stations and what legal issues may be involved.

**Information and Education**

- Investigate hiring a writer/editor to work on final editing of the ANS Field Guide.
- Develop a proposal to poll the Mississippi River Basin states for ANS and boating surveys that may be available.
- Continue to evaluate development of an ANS poster to target elementary school children.
- Continue to evaluate development of a brochure information pack to send to schools or labs using ANS in their programs.
- Pursue printing of a pack of Asian carp watch cards for distribution to all members states.
- Further evaluate partnering with boat manufacturers on their use of an ANS message with boat sales.
- Work with outdoors catalogs like *Bass Pro Shops* and *Cabelas* to see if they might include an ANS message in their catalogs.
- Evaluate further the establishment of an ANS video footage library that all could use.
- Further evaluate development of partnerships with *Wildlife Forever* and B.A.S.S.
- Reproduce the Bill Dance DVD for distribution to Panel members.

### **Executive Board**

- Continue to oversee Committee and Panel activities.

### **Panel Member Activities**

- Plan to participate in the Risk Assessment Workshop in January.
- Continue to keep other Panel members abreast of ongoing issues and developments.
- Make plans to attend the next Panel meeting in June.

**Mississippi River Basin Panel (MRBP)  
on Aquatic Nuisance Species Meeting**

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**DRAFT Minutes**

Mike Hoff (FWS) called the meeting to order at 8 a.m. After introductions of all attendees (list of attendees attached), Hoff said that we have a new Operational Guidance document in place which requires our Committees to develop their annual work plans at our summer/fall meeting. So he said the main mission of this meeting is to develop those plans. He said they need to define and prioritize activities to be conducted over the next year, including requests for budget allocations to fund those activities. He said that those plans should be developed at Committee meetings this afternoon and that Coordinator Jerry Rasmussen (FWS/MICRA) has provided copies of the new Operational Guidance (copy attached) for our use. He said that our Committees will lead our Panel forward into the future by building on past accomplishments, and adding value to existing Aquatic Invasive Species (AIS) programs and activities.

Hoff then asked Mike Conlin (IL) to provide the welcome and opening remarks for the meeting. Conlin mentioned the Asian Carp Symposium (held on August 22-23), and said he was impressed with the quality of the presentations, and that thanks to Dan Sallee (IL) and Duane Chapman (USGS) the conference was very well done. He said that here at Peoria, we are at ground zero for ANS problems (zebra mussels, round goby and Asian carp). He said the electric fish barrier at Romeoville, IL is a good example of states and agencies working together, but that round gobies escaped the Great Lakes before the barrier could be put in place and are now below the lock and dam here at Peoria. He said that in one fishing tournament over 1200 Asian carp were taken out of the Illinois River just by driving around in boats and letting the carp jump into the boats with the participants. He said the winner had over 300 Asian carp in his boat. He said that the problem is serious and that people are getting hurt by the jumping carp. He said further that a couple of drownings may have occurred because of people being hit by jumping Asian carp hits. But he said that it's not all about Asian carp - there other aquatic invasive species issues in Illinois. He then made the following points in a Power Point presentation entitled, *Aquatic Nuisance Species Program in Illinois*:

- Zebra mussels foul boat hulls, clog pipes and litter beaches.
- Round gobies act aggressive toward native sculpins and interfere with yellow perch nesting. In Calumet Harbor, there has been an absence of mottled sculpin nests and young of the year sculpins since 1994, coinciding with round goby infestation. Round gobies can spawn every 20 days, while they aggressively defend their nests. Round gobies are now found in the LaGrange Reach of the Illinois River. The good news is that round gobies can eat 78 zebra mussels per day.
- Snakeheads are a federally listed injurious species, and an Illinois listed species. In fact, it is illegal to possess snakeheads in Illinois. One 24 inch adult was confiscated from an internet auction seller in northern Illinois, and approximately 50 juveniles were confiscated from an international shipment through Chicago's O'Hare Airport.
- Water hyacinth reestablishes or is reintroduced in the same lakes each year. It is readily available in home supply stores, and there is a lack of enforcement by responsible agencies
- Eurasian Water milfoil extensively covers the water surface making water use impossible in lakes where it occurs. Extensive effort is needed to maintain navigability in several Illinois lakes, and three priority lakes are undergoing a vegetative shift to native species.
- Purple Loosestrife is especially problematic in the northern part of state. Several teachers are

raising beetles for biocontrol, and it is listed as an “Illinois Exotic Weed.”

- Curly-leaf Pondweed causes devastating fish kills in late summer. It is expensive and difficult to control, and one priority lake in Illinois is undergoing a treatment regime.
- Other invasives include the river ruffe, rudd, and rusty crayfish.

With regard to Asian carp, Conlin said the concerns are:

- Boater safety,
- Reduced commercial catch of native fish on the Illinois and Mississippi rivers,
- Devastating economic impacts, and
- Possible impacts to the Great Lakes.

He said the electric barrier being used to keep the Asian carp out of Lake Michigan is a multi-state collaboration. He said the second barrier (still under construction) cost over \$9 million and the costs could exceed \$16 million. He said the cost breakdown by contributor is as follows:

- US Army Corps of Engineers (>\$6 million)
- Illinois Department of Natural Resources (\$1.8 million), and
- Seven other Great Lakes States (\$475,000 total)

Conlin said that unless the U.S. Congress takes decisive action, the State of Illinois is responsible for operation and maintenance of the Barrier II project. He said estimated annual operation and maintenance costs are \$500,000. He said that the State of Illinois supports non-equal shares for disbursement of available State management plan funding to help cover these costs.

With regard to development of markets for Asian carp, the following operations are underway in Illinois:

- Big River Fish Corp.
  - Basic content analysis
  - Accept commercial catch seasonally
  - Smoked, dressed fish for ethnic markets
- Carp Protein Products Ltd.
  - Illinois River population and biomass surveys
  - Proposed facility for protein extraction for pharmaceuticals
  - High start-up cost, availability/sustainability ??
- Schafer Fisheries
  - Working with prison industries for boneless patties and others
  - Potential to use 10 million lbs./year
  - 100% usage (Zero Waste Stream)

Conlin said the next invader will likely be the black carp. Two have already been collected in Illinois. One in Horseshoe Lake at the confluence of the Ohio and Mississippi rivers, and a second at Lock and Dam 24 on the Upper Mississippi River.

Under the *Illinois Administrative Code, Part 805 – Injurious Species*, the bighead and silver carp were listed as of May 1, 2005. Under that law: a) Injurious species shall not be possessed, ... unless a permit is first obtained from the Department of Natural Resources in accordance with Section 805.40 of this Part ...; and b) Injurious species shall not be released. Release of injurious species is a violation of Section 10-100 and/or Section 20-90 of the Fish and Aquatic Life Code [515 ILCS 5/10-100 or 20-90] or Section 2.2 of the Wildlife Code [520 ILCS 5/2.2].

A new legislative initiative, P.A. 094-592 – *An Act to Amend the Aquatic Life Code* defines “indigenous species” signed by the Governor on August 15, 2005 and effective on January 1, 2006:

- Excludes Asian carp from the definition of “minnows”;
- Makes possession of injurious species a Class A misdemeanor;
- Makes it unlawful to violate administrative rules of the Department.; and
- Provides for increased penalties for release of injurious species.

With regard to aquatic invasive species issues education is very important, and activities targeted to specific recreational activities in Illinois include the following:

- “Protect Your Waters”
- “Stop Aquatic Hitchhikers”
- “Habitattitude!”

Illinois participates in the following regional and national levels of ANS activity:

- ANS Task Force
- Mississippi River Basin Panel
- Great Lakes Panel
- Dispersal Barrier Advisory Panel
- Asian Carp Working Group
- Great Lakes Regional Collaboration
- Council of GL Governors ANS Task Force

State coordination efforts include the following:

- Illinois – Indiana Sea Grant Program
- Illinois Aquatic and Terrestrial Nuisance Species Task Force
- Illinois River Coordination Council
- Aquaculture Advisory Committee
- Illinois Invasive Plant Council

Success stories in Illinois include the following:

- Improved recreational opportunities on managed waterways.
- Eliminated sale of injurious species by closing loopholes.
- Increased penalties for ANS violations.
- Voluntary cooperation by public through outreach.

Future initiatives include the following:

- Continue/maintain current activities (VERY challenging with current budget constraints).
- Encourage federal action on several key issues.
- Develop administrative rule for regulating sales of all aquatic life.
- Revision of State ANS Management Plan.
- Seek increased, stable funding of ANS program.

Hoff thanked Conlin for his remarks and then asked for public comments. Hearing none, he then presented awards to Jay Rendall (MN), Kim Bogenshutz (IA) and Cindy Kolar (USGS) for their service as Panel chairperson, Prevention and Control Committee chairperson and Research and Risk Assessment Committee chairperson, respectively. Rendall said that the Panel had come a long way since Rasmussen and he met in a snowstorm in Red Wing, MN in 2002 to lay the groundwork for panel formation. He said we are in good shape now with approval of the new Operational Guidance. He said that we have met five times now, including once with the ANS Task Force and once in joint session with the Western Regional Panel. He said that we also co-sponsored the first Risk Assessment Workshop with the Gulf and South Atlantic Panel, and that he looks forward to our continued success.

Hoff said that Duane Chapman had stepped up to serve as the new Research and Risk Assessment chairperson and that we need to elect a new Prevention and Control Committee chairperson. He thanked Steve Schainhost (NE) for remaining on as Education and Outreach Committee chairperson

Hoff then provided a summary of new Operational Guidance in a Power Point presentation. He made the following points:

- The original “Organizational Framework” was developed by Jay Rendall, Jerry Rasmussen, and others and was approved by the ANS Task Force in Nov. 2002.
- It needed updating to provide more detail and to revise the Panel’s structure and processes.
- A Draft revision was developed by the EXCOM, and is now called the “Operational Guidance”.
- The EXCOM sent the document to Panel members along with a ballot and recommendation to vote for approval.
- The Panel approved the Operational Guidance on July 15, 2006. The most important changes include the following:
  - Titles and functions of two officers were changed from Chair and Vice Chair to 2 Co-Chairs;
  - Federal employees to serve as Co-Chairs;
  - EXCOM membership includes Immediate Past Co-Chair
  - Other Standing Committees received more detailed guidance for operations;
  - Additional members of MRBP include: U.S. Forest Service, National Park Service, State of Mississippi, Arkansas-Red River Sub-basin Group, and Tennessee River Sub-basin Group.
- Copies of the plan are provided at this meeting and that Rasmussen will post them on our Web Site.

Hoff then asked Rasmussen to discuss the recent election of the new First Term Co-Chair. Rasmussen said that the two members nominated to fill the position were Bogenshutz and Scott Steuwe (IL). He said that members voted and apparently recognizing Bogenshutz' skills in serving as Prevention and Control Committee Chair and elected her to the new position. He said that she was elected to a three year term during which she will advance from First Term Co-Chair, to Second Term Co-Chair, to Immediate Past Co-Chair. We will hold an election of a new First Term Co-Chair each year. He said that he felt by going to the current Co-Chair framework that it will be easier for members to serve and for the Panel to maintain better continuity of our programs, as we will always have experienced Co-Chairs in place.

Hoff then asked for the three Panel Committees chairs to report on their activities.

Steve Schainhost, Education and Outreach Committee chair said that his committee is designed to support the other committees and to coordinate with the other panels. He said his committee completed preparation of the "*Stop Aquatic Hitchhikers*" brochures, and completed a tabular listing of Education and Outreach projects done by member states in the Basin. He said they also completed a tabular listing of threatened, endangered and prohibited species. He said that this year the committee will look at publication of an "*Aquatic Invasive Species*" brochure for the Basin. He said the Committee will also look for ways to work with classroom labs and how they should conduct their work to ensure that invasive species aren't released to the wild. He said that the Committee will also look at other plans that are in place like ANS action plans, and for additional projects this afternoon that we may work on.

Duane Chapman, Research and Risk Assessment Committee chair, said that the major thrust of his committee has been the Asian Carp Symposium. He said that money will be coming back from that, and that the Committee didn't spend the entire \$10k put forward by MRBP, but that he would like to use that money for publication of the symposium proceedings. That project will stretch over the next year. Also,

he said, the Committee will be sponsoring a Risk Assessment (RA) Training workshop on Jan 7-9 in the Kansas City, MO area. He said the training will focus on how to conduct RAs, with several types of RAs being taught. He said that this training will enable participants to conduct RAs. The number of trainees will be limited to at about 60 people. He said that we have just confirmed all of the speakers for the workshop, and that his Committee will meet later today to talk about other projects.

Kim Bogenschutz, former Prevention and Control Committee chair, said that she has been working on a lot of Excom stuff this year, and as she leaves to fill the new Panel Co-Chair position she will be leaving the Committee with lots of things to do. She said that they are working on a matrix of ANS species in the basin and classifying them as to whether they are contained, controlled, etc. She said that many Committee members worked on the Asian Carp Management and Control Plan, and that additional projects will be talked about this afternoon. She said one thing that they will be talking about is a model rapid response plan. Also she said that as part of the joint meeting with the WRP, the Committee talked about ANS control measures, and that they will continue those talks this afternoon. She said the Committee will also be working on marketability of ANS, and whether or not we should support that. Also, she said they will be electing a new chair.

Hoff then asked Scott Newsham, Executive Secretary of the Aquatic Nuisance Species Task Force (ANSTF) to present an update. Newsham said that he is serving as the first ANSTF Executive Secretary and that he is housed in the U.S. Fish and Wildlife Service office in Arlington, VA. He said that his job is to support the ANSTF, the Regional Panels and the Committees, and to keep things moving administratively between meetings. He said that the ANSTF has been working on revision of their strategic plan and developing measurable goals. He said that the primary target audience of the ANSTF Annual Report is Congress, and that the report will summarize key activities going on, but also focus on the national picture. He said we need to get Congress to pay attention and ultimately fund our work at the national, regional, and State levels. He said we need to identify key areas where concerns are shared at the regional and state levels. He said there is still not a clear picture as to what the ANSTF should focus on, but that we need an Annual Plan to keep Congress focused on the issues. He said that the focus of future ANSTF meetings will be topical, focusing on fewer items to allow for more discussion time. The next meeting will focus on rapid response. He said that funding has remained static for the state plans, so as more state plans are completed there will be less money available per state. He said that the ANSTF will be publishing notices shortly for the Asian carp and New Zealand Mussel Control plans. He said that the ANSTF needs to hear from the panels in order to learn what is needed, and that even though the ANSTF has no funding of its own, the panels need to make recommendations to the ANSTF to make our interests known. If you have an idea, he said, send it forward anytime during the year. He also pointed out that even though the ANSTF is bound by the Task Force Advisory Committee acts, the panels are not. He said we need open public meetings, but that we are not bound by the strict regulations of the acts.

Rendall said that it is refreshing that we are encouraged to bring new ideas forward. He said that in our request for state plan money we suggested that federal actions are needed. But, he said, we need feedback on those recommendations, so we know what to expect. Newsham said it is not inappropriate to ask for a response by a certain time, but he said that things should be done on a professional level, not with an in your face attitude. Newsham said that if we are trying to deal with a political issue, we need to do it outside of the ANSTF procedures. He said the role of ANSTF is to develop an ANS program at the federal level, and the States need to take political actions up with Congress, not with the ANSTF. He said the ANSTF is not in a position to effect legislation. Rendall then asked if the ANSTF has a role in influencing its members to take more rapid action? Newsham said that the ANSTF does have that role, but that it is addressed on a case by case basis. He said the panels need to make our needs or desires known on what we would like to see at the state and regional levels.

Hoff then asked Jim Bean, BASF Corporation to discuss how the Panel can best work with industry.

Bean is an Environmental Resources Specialist with BASF developing funding relationships, education, technology transfer, elimination of barriers, partnerships, appropriations, and new legislation. He works extensively with Federal and State Agencies, NGO's, Professional Aquatic and Terrestrial ANS Organizations, Conservation Organizations, and Wildlife Groups. He serves as Vice Chairman, Mid-Atlantic Regional Panel, on the Board of Directors of the Midwest Invasive Plant Network and on the Tennessee Exotic Pest Plant Council, and is extensively involved with the planning for the National Invasive Weed Awareness Week. He made the following points in a Power Point presentation entitled: "*Strategies for Expanding Industry Involvement in Aquatic Invasive Species Management Initiatives*":

#### Why partner with BASF?

- Growing market for BASF products
- Only manufacturer who sees the value of a staff member like me
- Strong investment in service offerings
- Building landscape-level vision of the future of IS control
- Good corporate citizen

#### AIS: Today

- Good things are happening on the ground
- Lots of new research is being disseminated
- Animals get more attention than plants in many cases
- Lack of funding-level understanding of aquatic vs. terrestrial differentiation
- Congress does not necessarily fully understand and support AIS control initiatives
- Groups do not have a clear message and an attainable goal

#### What can we do?

- Need to build understanding of special aquatic species needs at funding level
- Need to build Congressional understanding and support
- Need to find a mechanism to gain non-agency participation in initiatives

**INCREASING FUNDING SHOULD BE A TOP PRIORITY—AIM HIGH!**

#### Preparation: Audience

- Prior to planning, identify your audiences
  - Who are the people you need to engage?
  - What moves/influences them?
  - What do you want them to do?
- Then match messages
- THEN plan your tactics

#### Preparation: Work the Plan

- Develop a top-down strategic plan based on identified audiences and your goals
- Design a few key initiatives and do them well, from start to finish
- Measure your results
- Expect to adapt as your measured results inform your process

#### Communications Points to Consider

- Use the Web wisely
- Keep your messages as simple and clear as possible
- Fewer words are often better
- Balance science communications against audience expertise (don't expect a Congressman to know what a rhizome is)

#### As You Succeed

- Move past awareness campaigns to demonstration of your management methods
- Use the media to your advantage
- See communication of success as a way to influence your audiences
- Share your roadmap with other stakeholders
- Focus on coordination

- Serve as a facilitator of relationships and informational exchange
- Don't re-invent the wheel with your program or your communications
- Learn from others as you share with them

#### Building the Bridge to Industry

- See them as an audience
  - Same analysis as any stakeholder
- Understand their motivation
  - They have to protect their bottom line
- Identify key players and approach the best fit first
  - Avoid creating conflict between competitors

#### Finding the right partner

- Understand who is already involved
  - Who can give you what you need and see a benefit on their end?
  - Who often partners with agency personnel?
  - Don't try to force something into existence
- Seek the most strategic partners
  - Chemical, biological, technical, service, research
  - Partners without excess "baggage"

#### Who is this potential partner?

- Understand their motivation before you start building the bridge
- Direct benefits to industry:
  - Sales, profit
  - Relationships with new potential customers
  - Industry leadership
  - Corporate reputation

#### How do I meet their needs?

- Design projects to produce tangible, measurable results
- Open doors to new approaches for them
- Take as much risk as they take in the partnership
- Measure activities in ways that are meaningful to both of you
- Create clear opportunities for engagement
- Start small if possible to build trust
- Gear activities toward building a long-term relationship
- Go for what they know (i.e. don't ask a chemical manufacturer for a GPS demonstration)

#### Picking the right partner

- Develop your criteria BEFORE initial contact
- Apply criteria consistently throughout
- Eliminate candidates that are a poor match based on your evaluation
- Be realistic in your assessment
- Choose industry leaders when possible

#### Articulating your needs

- What do you want from your new partner?
  - Insight?
  - Funding?
  - On-the-ground support?
- Communicate it in a way that is meaningful to them
  - Keep their goals and motivations in mind
- Be honest and timely
- Seek areas of mutual interest and point them out
- Ask for input on the benefit to your potential partner
- Ask for real answers on their limitations up front (understand what it costs them)

### Keep it building

- Ask for comments
  - Gauge satisfaction
  - Find ways to increase involvement
  - Ideas of partners should be respected and evaluated
- Learn from interactions
- Move on if it doesn't work

### Building the Bridge to Industry: Keep these in mind

- Invite them to participate in a win-win
- Be up-front about your needs and goals
- Engage in activities that inspire and reward your new partners
- Give credit where credit is due
- Don't be afraid to get creative (i.e. taking training or in-kind contributions)
- Treat it as you would any stakeholder relationship
- Good communication throughout the process is absolutely necessary
- Evaluate progress constantly
- Measure results for both sides
- Find ways to grow and adapt

Bean concluded by saying that the three most important things in ANS work are Funding, Funding, Funding. He said that you can have all the greatest ideas in the world, but you have to have money, and you have to do follow-up and measure the success of your results.

Hoff then made the following points in a Power Point presentation entitled, *Proposed MRBP Strategies to Work with Corporations*:

### Background

- NANPCA (1990) directed Regional Panels to:
  - “convene panels with representatives from Federal, State and local agencies and from private environmental and commercial interests to:
    - Identify ANS priorities for each region; and
    - Coordinate ANS program activities not conducted pursuant to the Act”

### Next Steps for Panel

- During the Mississippi Basin Panel's (Panel) short existence, we have not developed a strategy to work with corporations on aquatic invasive issues of common concern.

### Request of Panel Members

- I requested from Panel members submittal of the following:
  - List of recommended corporate partners for involvement with the Panel
  - Contact information, if available, for each corporate partner
  - Recommended activities to be covered under partnership between each corporation and the Panel
  - Your willingness to contact the corporation to discuss opportunities for partnerships

### Follow-up Promised

- I promised to collate the information I received from Panel members
  - I will summarize here.
- I sent this summary to the EXCOM
- I promised to include a speaker on this subject at the upcoming Panel meeting
  - Jim Bean just delivered his presentation on the subject

### Strategies Recommended by Panel Members

Corporations: Utilities

- In Kansas
  - “We have partnered with the utilities here in Kansas. This partnership has proved invaluable for us as we have been working to get our ANS program up and running. I have provided their contact information.
  - “Recommended activities include sponsoring informational releases in utility bills (we’ve done that)”
- “In the Mississippi River drainage of North Carolina, there are several corporate entities that we have worked with on endangered species and/or invasive species. These corporations include:
  - TVA
  - Duke Power
  - Progress Energy”
- ENTERGY and Others
  - Activities
    - Economic Impact Information
      - “It would be very helpful if we could get Entergy and other power companies within the Basin to give us economic impact information”
      - “We could request information on ‘costs for control and monitoring, as appropriate – and descriptions of what they are doing.’”
    - Monitoring and control, and personnel for them
      - “Would also be helpful to know whether ANS monitoring and control is built into someone’s job description – whether it is at that level within the power-generating plants.”
        - “In Louisiana, it is an add-on for water quality technicians.”
    - Education and Outreach
      - “These companies are also potential partners to educate the public about aquatic invasive species.”

#### Corporations: Goods Producers

- “In the Mississippi River drainage of North Carolina, there are several corporate entities that we have worked with on endangered species and/or invasive species.
  - These corporations include:
    - Blue Ridge Paper
    - Aloca”
- I suggest Genmar, the large boat building corporation as a potential partner.
- Don't have contact info, but can get it.
- Activity:
  - Seek opportunities for them to partner on educational activities and items
  - Boat key chains with Stop aquatic Hitchhikers.
  - Flying banners for dealers/boatshows, videos, ...
- I would be willing to help in contacting them and discussing ideas.

#### Corporations: Recreational

- “I would like to see partnerships with folks in the recreational community (i.e. Cabela’s, Bass Pro, Gander Mountain, Dicks, etc.) and major pet stores.
  - I do not have contact info for these folks but thought I’d mention them.”
- “Recommended activities include providing info with recreational purchases (stop aquatic hitchhiker in boat manuals, fishing equipment, every check out receipt, bag stuffers, etc.)”
- “I would be willing to contact a few corporations for partnership possibilities.”

#### Companies: ANS Control

- “...corporations and companies we have worked with. Perhaps this could be a start...”
  - Herbicide Contacts:
    - Syngenta Professional Products

- Jim Petta Field Technical and Development Manager (Contact information provided)
- SePro Corporation
  - Larry Hartmann (Contact information Provided)
- BASF
  - Crosby, Jim, BASF ProVM (Contact information provided)
- o Shredders
  - Masters Dredging
    - David Penney (Contact Information Provided)
  - A & L Aquatic Weed Control
    - Chester S. Catterton (Contact information provided)
- o Harvesters
  - Texas Aquatic Harvesting
    - Jim Vaughan, Owner (Contact information provided)

#### BASS/ESPN

- BASS/ESPN Outdoors has volunteered to discuss opportunities for partnerships with the Panel
- Contact information - Chris Horton, Associate Director, BASS Conservation, christopher.m.horton@bassmaster.com
- Recommended activities to be covered under partnership BASS/ESPN and the Panel
  - o “develop a strategy to work with the BASS Federation State chapters and clubs to address preventing the spread of ANS.”

Hoff concluded by noting that additional, detailed recommendations for working with corporate partners should be submitted to our Committees during their sessions this afternoon. Also ideas contained in this presentation, and those submitted during Committee meetings this afternoon, will be used to develop Committee Annual Work Plans today.

Jason Goeckler (KS) noted that his state's message to utility subscribers was that the ANS problem is costing all of us, and this message reached 650,000. Bean said that one thing that BASF has brought to the table is that we have a license with MicroSoft software to conduct educational programs over the internet. Also, he said, with regard to marketing and communications he has had State Mid-Atlantic Regional Panel members sit in on BASF meetings to get ideas.

Jeff Rach said that we might also want to look into working with the Association of Fish and Wildlife Agencies (AFWA). He said that his lab has worked with private groups through the AFWA. Bean said that BASF is sponsoring a half day invasive species workshop at the AFWA in September. Richard Hartman (NOAA) wondered if academia is considered an industry partner. Bean said that the problem with academia is that they will be looking to you for money. Hartman said some institutions have resources we can tap into. Bean said that EPA has come to manufacturers with concerns regarding the limited number of aquatic chemicals or herbicides available. He said that they are recommending that we need more tools. Hartman wondered if there is any concern with industry regarding a competitive advantage that partners may develop by working with agencies? Hoff said that his hasn't come up, but it could be perceived as such, and we need to be aware of it. But with any government contract we would have to get three competitive bids anyway. Bean said that the motivation of corporations is that we're not going to spend hundreds of millions of dollars if your going to turn around and put something out for bids anyway. But, he said, we'll handle that problem when we come to it. Chapman said that his lab has not had a problem because the companies involved have already had rights to the chemical before we used it. Hoff said that the media is another partner that we need to use, but that he didn't know how you can do that on a long term basis because of the media's short attention span. Bean said that what you do lends itself to media work. Where we get involved with chemicals, he said, is that the message about chemicals is negative anyway. He said that people don't give the pesticide industry credit for what they are doing

for ANS issues. Hoff said that we should make it a standard operating procedure (SOP) to invite the local Congressional staffers to our meetings. Bean said that we may also want to have a university put a white paper together to send to Congressionals in order to raise their awareness. Don't forget, he said, that private individuals also influence Congressionals. You'd be surprised at the impact one citizen can have on political issues, he said. Newsham reminded the Panel that it cannot lobby, but that members can. Hoff agreed that we have to remember which hat we are wearing when. Rach said that that's what the AFWA did for his lab's therapeutic drugs -- a private individual did the lobbying. Hoff said that the coordinating work done here can be taken back by members to do the necessary information transfer, lobbying, whatever, and that our Panel will do no federal lobbying.

Rendall then presented a Power Point presentation entitled, *Public Awareness Partnerships*, which included a series of slides on a three state effort being used by Minnesota, Wisconsin and Iowa to get the ANS message out. The following techniques are being used:

- Lawn banners (MN and IA)
- Gas pump ads (MN and IA),
- Newspaper ads (MN),
- Backlit panels (3' x 5') at travel centers (MN and WI),
- Billboards messages (MN),
- Watch cards (MN and WI),
- Habitatitude bookmark (MN),
- Displays at the Minneapolis/St. Paul airport (MN), and
- Invasive Species calendar (MN)

He said that the flying lawn banners have been used at access sites, and people are coming up and asking what this is all about. He said they are also being used at state and county fairs, and some boat dealers are also using them. He said they cost about \$200 apiece. With regard to the gas pump adds, he said that they contracted with a California company and that they had some problems. He said the best place for gas pumps ads is at marinas. He said that the billboards in MN show all of the sponsors (i.e. Minnesota, U.S. Forest Service, U.S. Fish and Wildlife Service, SeaGrant, *Wildlife Forever*, etc.), and are being used on key transportation routes to lake areas. He said that *Wildlife Forever* set this up, so we saved agency staff time. He said that with regard to the Habitatitude bookmark, *Underwater Adventures* at the *Mall of America* and the MN DNR partnered to get a better message out. He said that they worked out the bookmark so that it provided a free child admission ticket to *Underwater Adventures*, so the bookmark became worth \$10.00. He said that a *Cabelas* display at the Owatanna, MN store cost about \$30,000. It includes a diorama of various ANS with a big screen TV. He said it will show PSAs, etc. Also, he said, a computer screen is available where you can click on a species or agency for additional information. He said that *Cabelas* is now the second most visited site in the state. He said that they worked on a traveler information system, but that we're having some trouble with that. He said that the FCC stopped us from telling people to come to the *Cabelas'* display. So now he said we just use a simple message and don't mention *Cabelas*. He said that the Minnesota program continues to grow, and that we have another \$500,000 in the budget now for a total of about \$2.2 million per year to deal primarily with aquatic invaders. Bean said that one of the things the plant people are trying to learn is how to get the word out, and that there are opportunities to cut some costs by working together. Rendall said that an evaluation is being done as part of the three state project to understand where people get their info and what would cause them to change their behavior.

Hoff then asked Dave Weir (U. S. Army, Corps of Engineers) to provide an update on the ANS barrier in Chicago. He made the following points in a Power Point presentation entitled, "*Aquatic Nuisance Species Dispersal Barriers, Illinois*":

- Chicago Sanitary & Ship Canal was built by the Illinois Metropolitan Water Resources District of Chicago around 1900.
- It provides the only connection between Lake Michigan and Mississippi River Basin.
- It provides a pathway for exchange of Invasive Species.
- Ironically the clean up of the Chicago River removed the former 'Pollution Barrier'.
- The current major concern – 2 Species of Asian Carp (Bighead and Silver).
- A demonstration electric barrier to prevent fish movement has been operational since April 2002.
- It was intended to be a temporary barrier and if effective replaced with a permanent barrier.
- Construction of a permanent, larger, longer-lasting barrier is underway.
- It was designed and built by Smith & Root, based on fish farming technology.
- The demonstration barrier used twelve steel cable electrodes mounted to the bottom in bedrock.
- Electricity is pulsed to repel fish.
- The upstream three electrodes are designed for benthic operation.
- Normal operation uses a pulsing charge at 1 mV/in, 4 pulse/sec, 3ms/pulse.
- The electric field is strongest in the middle and weaker at the edges.
- Demonstration project was effective overall.
- Approximately 150 common carp were tagged and tracked by University of Illinois scientists.
- One carp was found upstream of the barrier.
- We've discovered that metal barges effect the shape of the electrical field.
- Fish may either swim in a current void bubble under the barge hull or get pushed/pulled through the barrier by the turbulence caused by tow passage.
- Unfortunately, the dispersal barrier may not be effective on small fish.
- The temporary barrier has been in continuous operation since 2002.
- It was built as a temporary system with a 3-5 year design life due to corrosion.
- Three of the 12 electrodes are showing wear, one of them is a benthic electrode.
- The temporary dispersal barrier continues to provide support while the permanent barrier is constructed.
- Authorization to upgrade to the permanent barrier is in both the House & Senate versions of WRDA (Water Resources Development Act).
- June Appropriations allowed for reprogramming to operate the barrier through Spring 2007, pending unpredicted repairs.
- Design of the permanent barrier (Elective Fish Barrier 2 - See accompanying drawing) started in October 2003, with a 20 yr life for the electrodes.
- The new electrodes are solid steel billets, and two separate independent facilities provide for redundancy.
- Each facility has three separate pulsing systems to facilitate maintenance.
- Paired electrodes at different widths are used to ramp up pulsing.
- Both electrode sets are designed to operate together for maximum effect.
- The number and spacing of electrodes is designed to create a more complex overlapping field to eliminate any bubble weak spots.
- The new barrier may be operated at up to 4mV/in.
- Construction started October 2004.
- Construction of the first half of the permanent barrier and both electrode sets is complete.



- It is currently undergoing safety testing.
- Design of the second half of the permanent barrier will integrate lessons learned from 1st.
- Additional funding is needed to complete the second half of the permanent barrier.
- Safety issues have evolved as we learn more.
- Our main issues on the fish barrier are continuous operation and safety.
- Sparking has been observed between barges during field testing.
- Initial studies regarding someone falling into the water may not be adequate.
- Coast guard requires steel cables between barges and no passing, stopping or mooring in the barrier zone.
- Design procedures are underway to prevent sparking at a nearby coal loading facility.
- Further studies of sparking and man in the water issues are underway.
- Field testing has been conducted by the USACE research team from Urbana, IL.
- Field mapping shows pulsing above background levels into the fleeting area.
- Spark testing also showed sparking between barges in the fleeting area.
- Profile of pulsing shows the location of broad and narrow arrays.
- Several operational configurations and voltage levels tested positive.
- A protection cell is being designed to deflect barges and prevent this scenario.
- Long tows carrying explosive material could spark and cause an explosion.
- Forty-four blasting mats were placed in the water and grounded to building ground.
- Field mapping after mats were placed still showed significant current south of bridge.
- Testing using different operational configurations shows promise.
- Using the narrow array balancing grounding field showed reductions.
- Synchronizing both array sets with single pulsar unit also showed reductions.
- New congressional authorizations are under consideration to make dispersal barrier permanent.
- State of Illinois would like O&M to be federally funded.
- These issues are addressed in the current House and Senate versions of WRDA.

Hoff then asked Bogenschutz to discuss Iowa's Comprehensive Wildlife Conservation Strategies (CWCS) project. She said she attended several regional meetings in Iowa and that this is another chance for partnerships probably even in our own states. She made the following points in a Power Point presentation entitled, "*Coordinating Comprehensive Wildlife Conservation Strategies with AIS Program Activities*":

#### Required Elements of CWCS

1. Species of greatest conservation need (SGCN)
2. Locations and conditions of key habitats and communities essential to conservation of SGCN
3. Problems that adversely affect SGCN
4. Conservation actions necessary to conserve SGCN and habitats

#### Iowa's Fish Diversity

- 152 fish species historically found in Iowa
  - 11 extirpated species
  - 10 introduced species
- 67 fish species of conservation need

#### Iowa's Mussel Diversity

- 55 mussel species historically found in Iowa
  - 9 extirpated species
  - 2 introduced species
- 29 species of conservation need

#### Current Aquatic Threats

- Altered hydrology
- Accelerated eutrophication
- Invasive species

Midwest Association of Fish and Wildlife Agencies (MAFWA) CWCS Interstate Meeting (January 2006, St. Louis)

- States participating included: CO, IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, OH, SD, WI
- Goal: To identify and rank priority regional projects for coordinated action

Examples of Top Regional and Interstate Priorities

- Develop models to predict next likely invasive species (IS) threat
- Regional coordination to address IS movement
- Coordinated efforts to prevent, respond to, and develop more effective tools to combat IS
- Develop a strategy to improve legislation and enforce existing policies regarding IS
- Monitor populations and effects of IS

Outcomes of MAFWA CWCS Interstate Meeting

- Priority list of projects recommended for funding did not include AIS or IS components.
- Attendees thought others were dealing with AIS issues.

The question is: How can we integrate AIS Programs with CWCS Projects?

She said that the CWCS deals with wildlife diversity grants that require a 50/50 match. She said the CWCS deals with keeping common species common, and that the Prevention and Control Committee should address how to deal with IS under the CWCS. Tom Mosher (KS) said that he was able to get CWCS money to develop the state ANS Plan. He said that is how Jason Goeckler was hired. He said it was a good avenue for Kansas, but said he didn't know where the plan is now, but that we need to stay on top of the IS issue. Marilyn O'Leary (SeaGrant) said that several Southern states have done the same thing. She said that all of the Southern plans have the common thread of habitat health, so we can build our ANS work into the habitat health work. In most cases they deal with watersheds that cross state boundaries. Hoff suggested that the Prevention and Control Committee take this up.

Hoff then asked Nick Schmal (Forest Service) to provide an overview of Forest Service activities. Schmal made the following points in a Power Point presentation entitled, "*Aquatic Invasive Education and Outreach*":

- Thousands of exotic invasive plants and animals are infesting our local lands and waters.
- They cause massive disruptions in ecosystem function, wipe-out our native fish and wildlife habitats, and hurt the health of our forests, prairies, mountains, wetlands, rivers, lakes, and oceans.
- These invaders know no boundaries and they can ruin your outdoor recreational experience.
- Nationwide, they threaten our agriculture, our economy, and human health.
- The U.S. Forest Service "Threat Campaign" includes use of print, billboard, dioramas, and television media. A total 110 Million Impressions have been made
- The Forest Service is working with *Wildlife Forever* who is connected to the hunting, fishing and industry groups, so we decided to focus on them. These are our forest customers.
- Babe Winkelman (<http://www.winkelman.com/invasivespecies.php>) and *Wildlife Forever* (<http://www.wildlife forever.org/>) web pages are being used.
- A portable vehicle washing machine has also been developing interest.
- The USDA Forest Service San Dimas Technology and Development Center in partnership with the National Forest System Invasive Species Program, the US Department of Transportation Federal Highways Administration, the US Department of the Interior Fish and Wildlife Service, and the Pennsylvania Department of Transportation has developed a training video called,

*"Dangerous Travelers: Controlling Invasive Plants Along America's Roadways"*, for road maintenance crews

Ron Martin (WI) said we're looking for people to provide input into the script of a DVD entitled, *"Dangerous Travelers: Controlling Invasive Plants Along America's Roadways"* this is being done in cooperation with the Forest Service. He said that *Wildlife Forever* is helping with this as well. And, he said, there will be a lot of video available for other uses.

Hoff then asked Byron Karns (National Park Service) to discuss activities of his agency. Karns made the following points in his Power Point presentation entitled, *"Aquatic Invasive Species: From Park to Region"*:

St. Croix National Scenic Riverway, Upper St. Croix River : (200 miles) including it's major tributary the Namekagon River was one of the eight original rivers protected under the Wild and Scenic Rivers Act of 1968

- Nationally Significant River less than an hour from a major metropolitan area
- Renown for its scenic and recreational values
- Outstanding biological resource – fish, birds, insects, plants...especially freshwater mussels:

The ANS theme throughout all parks includes the spiny waterflea, rusty crayfish, ruffe, goby, and quagga mussels.

In 1992, upstream in Minneapolis the St. Croix Zebra Mussel Task Force was formed. It includes the National Park Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Coast Guard, Minnesota DNR, Wisconsin DNR, Minnesota SeaGrant and the Northern States Power Company.

The Task Force focused on information and education, inspections and access management, remediation, and monitoring.

Zebra Mussel Plan on the St. Croix

- First NPS prevention plan, maybe 1st in the feds?
- Annual Action Plan
- *Education & Information* includes, Ranger Talks, Boat Landing Outreach, Brochures, Billboards, PSA, Watch Cards, State Fair Exhibit, Web Sites
- *Access Mgmt.* – State & Fed. Regulations, limiting boat access into sensitive areas
- *Monitoring* – SCUBA [qualitative (DNRs & quantitative (Army Corps of Engineers)], artificial substrate, H<sub>2</sub>O samples, plankton tows, watershed sampling
- *Remediation* – clean native mussels
- *Research*
- ZM Task Force renamed Aquatic Invasive Species to reflect change in focus

National Park Service Exotic Plant Management Teams consist of small, self-contained, mobile units, patterned after the fire response model.

Sleeping Bear Dunes National Park ANS issues include:

- Zebra and Quagga Mussels
- Increase in native filamentous algae cladophora
- Invasive changes the nutrient regime causing the native run amok!
- If we can't reduce the ZMs can we reduce the phosphorous?
- Round Gobies are also in the mix
- Mississippi River and Recreation Area (Twin Cities) ANS issues (Pool 2) include:
  - Very Low Zebra Mussel Densities
  - Catch and Release Fishery
  - Possible Native Mussel Refugia

The Panel meeting then adjourned for lunch and reconvened in Committee meetings in the afternoon.

Bogenshutz called the Panel meeting back to order at 4 p.m. and asked for the Committee reports.

Chapman said that the Proceedings of the Asian Carp Symposium is first item on the agenda of the Research and Risk Assessment Committee. He said that it will be a peer reviewed, high quality publication. He said that papers will be in by the end of November, with the first draft done by February. He said that his Committee is requesting \$9,000 from the Panel for this work, and this does not include any money left over from the Symposium. He said that the Risk Assessment Training Workshop and materials that go along with it have been budgeted to cost \$15,000. He said that the Committee is also working on an Experts Data base, and that he will be in contact with the other members on this project, but that no funding is being requested at this time for this project. He said that he will work with Pam Fuller on the project, and that she will probably contact everyone on this to see how they will be listed. He said the Committee will also put together an email survey for research priorities for the most troubled species we have on our web site. He said that Mike Hoff will circulate the questionnaire and that Rasmussen will collate the responses. A copy of the Committees Work Plan for 2007 is displayed below:

**Research and Risk Assessment Committee (RARC) Work Plan for FY 07**

Activity	Description	Milestones	Deliverables	Dollar Request
Proceedings	Asian carp symposium proceedings - Peer-reviewed, high quality document. Probably published	Duane will talk to AFS to work out details at Lake Placid. Papers submitted by end of November 2006 First round review done Feb 28 Finished drafts submitted to AFS	Proceedings	\$9000  (If people want color there will be additional page charges)
Plan Risk Assessment Training Workshop	Training workshop	January 7-9 2007	Workshop Training materials and about 60 trainees	Cost probably about \$15K.
Experts database	Duane Chapman is contact point for Pam Fuller's effort. Chapman will report to committee.	Work with Pam on her schedule.		?
Put together email survey for research priorities for our most troublesome species	Hoff will send email out requesting research priority opinions by state. Rasmussen will collate responses	Email request by end of August. Collate by March 07	List of priorities to be published on web site	\$0

Schainhost said that the Education and Outreach Committee may hire Mandy Beale to work on final editing of the ANS Field Guide. He anticipates a need for \$2,000 to compensate Mandy. He said that a proposal is also being developed to poll the Mississippi River Basin states for ANS and boating surveys and that \$30,000 was budgeted for this last year. He said that ANS posters to target elementary school children were discussed. He said the Committee would look to Habitatititude to partner on this. He said that no funding will be requested at this time. He said the Committee is also looking at a brochure information pack to send to schools or labs using ANS in their programs. He said that there is an interest in printing the Asian carp watch cards. He said that this is well advanced and needs a little editing. He said that these cards should be ready to print by March 2007 and that 10,000 cards per state would be produced with the option for each member to purchase more. He said that \$15,000 is being requested for this project at this time. He said that the Committee is also partnering with boat manufacturers, but that no budget has been developed for this work at this time. He said the Committee is also discussing working with outdoors catalogs like *Bass Pro Shops* and *Cabelas* to see if they might include an ANS message in their catalogs. He said that the Committee is also looking at establishing an ANS video footage library that all could use, and that this will be discussed further at the next Panel meeting. He said the Committee is also looking into partnerships with *Wildlife Forever* and B.A.S.S., and that the Committee would like to reproduce the Bill Dance DVD for Panel use. A budget request of \$500 was submitted for that work. A copy of the Committee's 2007 Work Plan is displayed below:

**Education and Outreach Committee (EOC) Work Plan for FY 07**

Activity	Description	Milestones	Deliverables	Dollar Request

Bogenshutz introduced Steve Shults (IL) as the new Prevention and Control Committee chair. She said that the Committee is developing a model rapid response plan, and has come up with a list of recommendations, but no funding is needed at this time. She said that a list of control options available and gaps is being developed and that up to \$10,000 may be needed for this project by next year. She said that Committee members plan to help fund an expansion of acoustic and habitat studies in the Illinois River and to help out in Lake Pepin. She said that the Committee will also be working on the Corps of Engineers and industry themes for prevention and outreach. She said that the Committee will also be

working on a position paper for the AFWA on Wildlife Conservation Strategies to let them know that ANS issues are not being addressed. She said the Committee will also be working on a list of recommendations to the ANS Task Force. She said that the Committee will also be working with Ron Martin to develop a position paper on whether to provide boat wash stations and what legal issues may be involved. A copy of the Committee's 2007 Annual Work Plan is displayed below:

**Prevention and Control Committee (PCC) Work Plan for FY 07**

Activity	Description	Milestones	Deliverables	Dollar Request

It was decided that time did not allow for individual member reports, so they have been attached in written form to these minutes.

Bogenshutz then called for Old Business, and noted that a handout (copy attached) had been provided regarding how we plan to work with the WRP on joint actions. She also noted that Iowa recently received a boat registration fee increase which helped her to add staff to her office. She said that they worked for three years on getting that, and that they now have a fairly large chunk of money every year from this source.

Regarding the next Panel meeting she said it was recommended that we meet in Montana in June, and Eileen Ryce will begin working on local arrangements. It was also decided that in the future Panel meetings will not be held in conjunction with other activities, because they tend to diminish participation by Panel members rather than enhance participation.

The meeting adjourned at 5:00 p.m.

**Mississippi River Basin Panel (MRBP) on Aquatic Nuisance Species (ANS)  
Meeting No. 6  
Attendance List**

Peoria, IL  
August 24, 2006

Marilyn Barrett-Oleary	Louisiana Sea Grant	moleary@lsu.edu
Kim Bogenschutz	Iowa Dept. of Natural Resources	kim.bogenschutz@dnr.state.ia.us
Neal Jackson	Kentucky Dept. of Fish & Wildl.	neal.jackson@ky.gov
Duane Chapman	USGS - CERC - Columbia	duane_chapman@usgs.gov
Jason Goeckler	Kansas Dept. of Wildlife and Parks	jason@wp.state.ks.us
Michael Hoff	USFWS - Fort Snelling, MN	michael_hoff@fws.gov
Doug Keller	Indiana Div. of Fish and Wildlife	dkeller@dnr.in.gov
Scott Longman	Louisiana Dept. of Wildl. and Fisheries	slongman@wlf.louisiana.gov
Ron Martin	Wisconsin Dept. of Natural Resources	martir@dnr.state.wi.us
Tom Mosher	Kansas Dept. of Wildlife and Parks	tomm@wp.state.ks.us
John Navarro	Ohio Dept. of Natural Resources	john.navarro@dnr.state.oh.us
Jay Rendall	Minnesota Dept. of Natural Resources	jay.rendall@dnr.state.mn.us
Eileen Ryce	Montana Fish, Wildlife and Parks	eryce@state.mt.us
Steve Schainost	Nebraska Game & Parks	schainost@ngpc.state.ne.us
Steve Shults	Illinois Dept. of Natural Resources	sshults@dnrmail.state.il.us
Bobby Wilson	Tennessee Wildlife Resources Agency	bobby.wilson@state.tn.us
Jeff Rach	USGS	jrach@usgs.gov
Rick Hartman	NOAA	richard.hartman@noaa.gov
Nick Schmal	USDA Forest Service	nschmal@fs.fed.us
Andy Burgess	South Dakota Game, Fish & Parks	andy.burgess@state.sd.us
Dave Weir	USACE - Chicago	david.m.weir@usace.army.mil
Byron Karns	National Park Service	byron_karns@nps.gov
Jim Bean	BASF Corporation	james.bean@basf.com
Scott Newsham	ANSTF	scott_newsham@fws.gov
Scott Stuewe	Illinois Dept. of Natural Resources	scott.stuewe@illinois.gov
Mike Conlin	Illinois Dept. of Natural Resources	mike.conlin@illinois.gov
Jerry Rasmussen	MICRA	ijrivers@aol.com

# **Operational Guidance For the Mississippi River Basin Panel On Aquatic Nuisance Species**



**Prepared by**

**Mississippi River Basin Panel on Aquatic Nuisance Species  
P.O. Box 774  
Bettendorf, IA 52722**

**Adopted July 15, 2006**



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**Adopted July 15, 2006**

## **INTRODUCTION**

The Mississippi Interstate Cooperative Resources Association (MICRA), an interstate entity with membership of 28 state departments of conservation and natural resources in the Mississippi River Basin is hosting the Mississippi River Basin Panel on Aquatic Nuisance Species (MRBP) under the guidance of the National Aquatic Nuisance Species (ANS) Task Force. The MRBP was formed by MICRA in 2003 and this Operational Guidance was prepared by Panel members to guide MRBP operational procedures into the future. It includes (1) brief background information on nonindigenous aquatic nuisance species in the Mississippi River Basin, (2) a framework for developing and implementing an MRBP work program; (3) MRBP operational procedures; and (4) suggestions for securing requisite funds for carrying out the spirit and intent of Section 1203, Public Law 101-646 (the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 as amended by the National Invasive Species Act of 1996) - See Appendix A.

## **BACKGROUND ON HARMFUL AQUATIC NUISANCE SPECIES AND PATHWAYS OF INTRODUCTION**

Twenty-three of MICRA's 28 member states reported 149 aquatic nuisance species in the Mississippi River Basin during a 1999 survey. These included 56 plants, 16 invertebrates, 75 fish, 1 amphibian and 1 mammal. Invasion of aquatic nuisance species can occur through many pathways. These include connections between waters and watersheds; escape from aquaculture facilities; aquarium and live bait releases; horticultural and water garden aquatic plant sales and use; attachment to barges; and attachment to boats, trailers and other water/outdoor recreation equipment.

The sanitary and shipping waterways that connect Lake Michigan with the Illinois River in Chicago are an especially troublesome pathway through which aquatic nuisance species can move between the Great Lakes and Mississippi River basin ecosystems. This was the pathway

that allowed zebra mussels and round gobies to invade the Mississippi River Basin, and now appears to be the route that the river herring and other aquatic nuisance species of the Great Lakes may follow as they expand their ranges into the Mississippi River Basin.

An equally troubling aquatic nuisance species problem presently plaguing the Mississippi River Basin is the invasion of four species of Asian carp. These nuisance species were introduced into the waters of southern U.S. states in the 1970's and 80's by and for aquaculture interests (i.e., catfish farmers) as biological controls for aquatic vegetation, plankton blooms and snails. Three of these carps escaped captivity or were intentionally or accidentally released to the wild and are now reproducing and spreading northward throughout most of the rivers of the Upper Midwest. This northward colonization now also threatens the Great Lakes via the same pathway that Great Lakes invasives are entering the Mississippi River Basin (i.e., the sanitary and shipping canals in the Chicago area). Effective control measures (i.e. barriers and treatment of diversion waters) are needed to block such pathways of infestation. Additionally, controls are needed to better regulate introduction of exotic species into the U.S. in the first place, and to control their use as aquarium/baitfish and transport between states and watersheds once they are here.

The best defense against aquatic nuisance species invasions is prevention. Once an invasion occurs, and a species becomes established, it is usually impossible to achieve complete eradication. Control measures are also usually very expensive, and require widespread cooperation to be effective. Regional panels on aquatic nuisance species provide one mechanism to coordinate cooperative actions over wide geographic areas or watersheds involving all stakeholders and interests (i.e., Federal, State and local agencies; economic interests; environmental interests; etc.). The latter is what makes the Regional Panels more comprehensive in scope than the previously existing MICRA Aquatic Nuisance Species Committee. Additionally, MICRA presently is not recognized by Congress under any formal statute, and holds no regulatory authority. MICRA does, however, offer the only known basinwide coordination mechanism in the Mississippi River Basin, and therefore provides a logical focal point for hosting the MRBP. Under such arrangement, MICRA is charged with carrying on the day to day operations of the MRBP. Partial funding for operations and staff is provided by the ANS Task Force.

## **REGIONAL PANELS ON AQUATIC NUISANCE SPECIES**

Public Law 101-646 (The Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990) had several purposes:

- to prevent unintentional introductions;
- to coordinate research, control, and information dissemination activities;
- to develop and carry out environmentally sound control methods;
- to minimize economic and ecological impacts; and
- to establish a research and technology program to benefit state governments.

Section 1204 of the act allows states to prepare comprehensive state and interstate aquatic nuisance species control plans that describe state and local programs; identify needed federal programs; and provide a schedule for plan implementation. Approved plans are eligible for federal grants, with no less than a 25% state cost-share.

## **Establishment of Regional Panels**

Section 1203 of the act (Appendix A) provides direction for regional panels to be established by the national ANS Task Force:

“The Task Force shall -- (1) encourage the development and use of regional panels and other similar entities in regions other than the Great Lakes and western regions (including providing financial assistance for the development and use of such entities) to carry out, with respect to those regions, activities that are similar to the activities described in subsection (a) and (b); and (2) cooperate with regional panels and similar entities that carry out the activities described in paragraph (1).”

## **Panel Membership**

Section 1203 also provides direction for panel membership to include “representatives from federal, state and local agencies and from private environmental and commercial interests.”

## **Panel Responsibilities**

The act established six responsibilities for regional ANS panels:

- identify priorities;
- make recommendations to the National ANS Task Force;
- assist the National ANS Task Force in coordinating federal programs;
- coordinate non-federal programs within the region;
- advise public and private individuals; and
- submit an Annual Report to the National ANS Task Force describing the various activities underway.

Another important task which was not specifically listed by the Act is to develop an emergency response strategy for use by Federal, State, and local entities in stemming the invasions of aquatic nuisance species.

## **FRAMEWORK FOR MRBP IMPLEMENTATION**

The design and conduct of MRBP activities is guided by the following objectives.

- Participation by all diverse interests in the basin will be maximized to ensure that Section 1203 goals and responsibilities are fully addressed.
- The MRBP will not duplicate or replace ongoing ANS efforts; rather it will build upon and showcase them.
- The MRBP will adopt a consensus-based approach in priority-setting and all related decision making activities. The consensus-based approach is defined here as follows: Every attempt will be made by the MRBP to reach consensus on any decision making situation. However, in the event that consensus cannot be reached, a vote will be taken, with minority opinions expressed as deemed necessary by the MRBP.
- The MRBP will serve as a coordinator, catalyst and convener, relying upon its membership and other cooperators for the conduct of most program activities (e.g., research, public information, outreach, etc.).

- The MRBP will provide basinwide clearinghouse/referral services.

Completion of all of these objectives will, of course, be limited by the amount of funding (federal and member) and in-kind contributions and services made available to the MRBP. On the basis of the above objectives, the following discussion presents key aspects in Section 1203 implementation for the MRBP.

## Membership

Section 1203 provides limited guidance in establishing membership, calling only for the convening of a panel of "..... representatives from Federal, State and local agencies and from private environmental and commercial interests..." However, a careful balance must be struck to ensure that the MRBP is both broad in representation and yet manageable in size. To achieve this, a two-tiered approach will be employed:

- MRBP members will be drawn from key agencies/organizations pursuant to the "categories" of interest identified in Section 1203.
- MRBP observers will also be identified and will have the opportunity to contribute fully to MRBP discussions. They will not, however, have an official vote on any MRBP recommendation or decision related action. An agency or organization will be designated as an observer (as opposed to a member) if:
  - 1) Section 1203 does not provide for direct membership of the subject agency or organization;
  - 2) the subject agency's or organization's category of interests (e.g., environmental, commercial) is already adequately represented on the MRBP; or
  - 3) the agency's or organization's role in aquatic nuisance species research, control and monitoring is comparatively limited.

In the interest of maintaining functional size, MRBP membership policy will dictate that, where available, associations or other "umbrella" groups will be requested to designate a single individual to represent all members within the group's association (i.e., aquaculture association, towing industry, etc.).

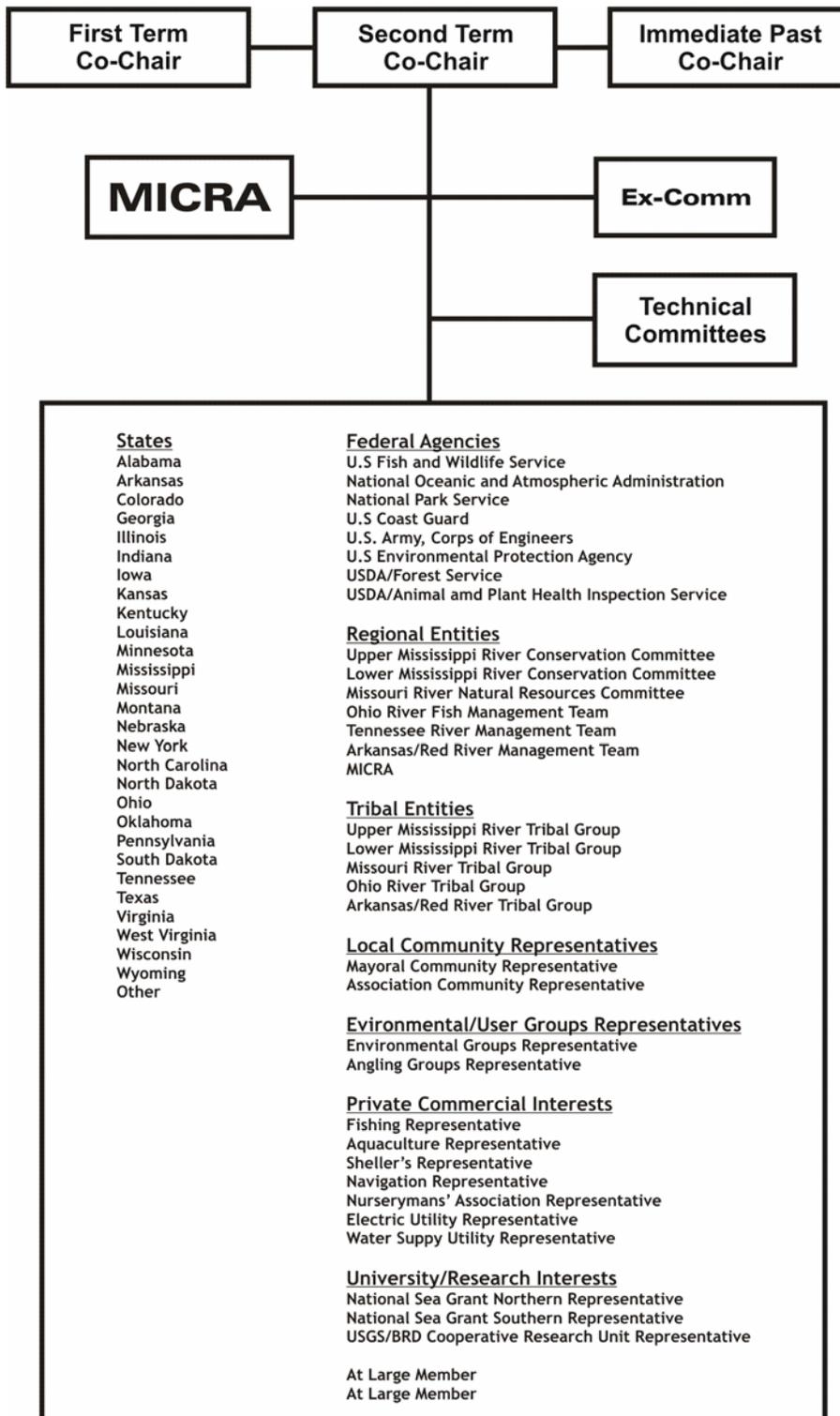
The proposed membership arrangement is as follows (See Figure 1):

**Federal** - One member each from the U.S. Fish and Wildlife Service; National Oceanic and Atmospheric Administration; U.S. Coast Guard; U.S. Army Corps of Engineers; U.S. Environmental Protection Agency; USDA/Forest Service; National Park Service; and the USDA/Animal and Plant Health Inspection Service.

**State** - One member each from the Mississippi River Basin states' natural resource agency charged with management and control of aquatic invasive species.

**Regional** - One member each from the Upper Mississippi River Conservation Committee, Lower Mississippi River Conservation Committee, Missouri River Natural Resources Committee, Ohio River Fish Management Team, Tennessee River Management Team, Arkansas/Red River Management Team, and MICRA.

**Tribal Authorities** - One member each (a total of five) representing the tribal interests of the five major sub-basins (Upper Mississippi, Lower Mississippi, Missouri, Ohio and



**Figure 1. MRBP Organizational Chart.**

Arkansas/Red) in the Mississippi River Basin.

**Local** - Two members representing mayoral, chambers of commerce or waterfront owners associations in the Mississippi River Basin.

**Private Environmental/User Groups** - Two members representing the angler and environmental interests of the Mississippi River Basin.

**Private Commercial** - One member representing each of the following commercial interests: fishing; aquaculture, baitfish, and aquarium trades; nurserymen's association; shellers; navigation; electric utility; and water supply.

**University/Research** - Two members from the National Sea Grant College Program (one from the northern half and the other from the southern half of the Basin), and one member from a USGS/Biological Resources Division Cooperative Research Unit.

**At Large** - Anyone possessing a special expertise, interest, significant reason, or advisory capability may be elected by the MRBP members to serve as an "at large" member. At large members may duplicate the interest or expertise of another member.

- MRBP membership may require approval of the two co-chairs of the National ANS Task Force (i.e., U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration) and must meet all criteria for a federally chartered advisory body.
- MRBP Co-Chairs will be responsible for extending MRBP membership invitations.
- MRBP members will suggest any agencies/organizations that might be given an "observer" status. Similarly, such agency/organization can request that designation via communication with Panel members.
- With regard to membership, in some instances, it is recognized that one representative may be in a position to speak for a larger group. For example, the 28 states may wish to appoint one or two individuals as key MRBP contacts and regular meeting participants to speak on their behalf.
- With the exception of at large members, all members will be appointed by the agency, organization or interest they represent.

In finalizing MRBP membership, the following points are emphasized:

**Term of Service of Members.** A voting or alternate member shall serve until: (1) the member resigns, (2) the member's appointing organization completes its term of office, (3) the member is removed by or resigns from his or her appointing organization, or (4) the member or his or her appointing organization is removed by two-thirds majority vote of the Panel. If removed by vote of the MRBP the member's term of service shall end with the vote of the Panel. There is no limit to the number of terms that a member may serve.

**Alternate Members.** Appointing organizations may appoint alternate members to represent them, if the voting member is not able to attend an MRBP meeting.

**Duties of Members.** Duties of members include participation, when possible, in MRBP meetings and committees. To enhance coordination of activities, members should communicate ANS management and policy initiatives to other Panel members through

presentations at Panel meetings or via the list server or email consistent with the current policy of the Panel. Members are expected to communicate the Panel's recommended actions to the organizations they represent, and strive to improve the organization's ability to address ANS issues.

### **MRBP Structure and Procedures**

The MRBP will be responsible for addressing the provisions of Section 1203 and for carrying out all identified elements of a work program.

**Meetings.** The MRBP will meet in full session on a regular basis, anticipated to be 1-2 times per year. At a minimum the MRBP will meet once annually. All voting members, alternate members, participating members and the ANS Task Force Co-Chairs shall be provided notice of the meetings at least four weeks prior, and a draft agenda at least two weeks prior, to any Panel meeting. A Panel meeting may not take place without such notice. The Second Term Co-Chairperson (see below) shall be responsible for drafting the agenda, subject to the direction of the Executive Committee or Ex Comm (established by the Panel and described later in this document). All voting members, alternate voting members and participating members shall be mailed a notice of any mail-in vote, including language of the issue to be voted on and the period during which votes will be accepted, at least 2 weeks before the close of the vote.

**Quorum.** The necessary quorum for making a decision at Panel meetings shall be all of the voting positions for which voting members or alternate members are present at the meeting. On a mail-in vote, half of the voting positions for which voting members or alternate members are appointed must cast a vote for a vote to be valid.

**Decision Making.** The MRBP will attempt to achieve consensus in all aspects of its work. In the event that recommendations from the MRBP reflect a majority view, but lacks consensus, the Panel may use its discretion to accompany any such recommendation with a minority opinion. The procedures for conducting a mail-in vote shall be as follows: The Ex Comm shall specify a period of at least two weeks, with a definite closure time, during which ballots will be accepted; and ballots shall be e-mailed, mailed or faxed to the Panel Coordinator. The Panel Coordinator shall not provide any information on the ballots received, including information on the total number of ballots received, to any Panel Member, until the closure time has passed. The Panel Coordinator shall reject any ballots that arrive after the designated closure time, and shall reject any ballots not cast by a voting member or alternate member. If a voting member and his or her respective alternate member both cast a ballot, the Panel Coordinator shall reject the alternate member's ballot. If the total number of accepted ballots is less than half of the voting positions for which voting members or alternate members are appointed, then the vote is invalid and no tally shall be made. If the vote is valid, the Panel Coordinator shall list the names and votes of all accepted ballots, tally the ayes, nays and abstentions, and provide the list and the tally to the Ex Comm to provide to the Panel members.

**Panel Leadership.** The first MRBP Chairperson and Vice Chairperson were appointed by MICRA to serve one year terms. After completion of these terms, selection or election of future Co-chairpersons will be made by MRBP members. The Co-Chairpersons shall be selected from among state and federal members. The initial Chairperson and Vice Chairperson (appointed by MICRA) will serve as initial Co-Chairs (upon approval of the MRBP membership), with the State

member serving as Immediate Past Co-Chair (one-year term) and the Federal Member as the first Second Term Co-Chair (two-year term). A new First Term Co-Chair (three-year term) will be elected from among the State and Federal MRBP members. Emphasis will be placed on having at least one of the Co-Chair positions filled by a state member at all times, and on rotating the Co-chairs geographically among the six sub basins (i.e. Upper Mississippi, Lower Mississippi, Missouri, Ohio, Tennessee, and Arkansas/Red river basins). The full term of a Co-Chair will be three years, during which time the person will serve as Co-Chair for two years and Immediate Past Co-Chair for one year. Each year as the Immediate Past Co-Chair's term expires the MRBP will elect a new First Term Co-Chair, so that all three positions always remain filled. These three officers will assist the MICRA staff in facilitating Panel operations, and will serve on occasion as spokespersons for the MRBP. Panel meetings will be chaired by the Second Term Co-Chair; by the First Term Co-Chair in the absence of the Second Term Co-Chair; by a member of the Ex Comm selected by the Ex Comm members present, in the absence of all of the Co-Chairs; or by a member of the Panel selected by the Panel Voting Members present, in the absence of the entire Ex Comm.

**Committees.** The MRBP will establish committees, working groups, and task forces, as needed, to accomplish its mandate. This will include technical committees related to prevention and control, education and communication, and research and risk assessment. The Panel shall also appoint an Ex Comm and may appoint or dissolve other committees as needed. Technical Committee Chairs serve as Ex Comm members and are expected to participate in Ex Comm meetings as needed to keep the Ex Comm apprised of committee actions.

**MRBP Ex Comm.** An MRBP Executive Committee or Ex Comm will be composed of the two MRBP Co-Chairs; the Immediate Past Co-Chair; the Chairs of the technical committees; one representative each from the Panel's commercial, environmental and tribal representatives (as desired) and the Coordinator. The Ex Comm will act on behalf of the MRBP to conduct day-to-day operations between MRBP meetings, and will make recommendations to the MRBP for major actions requiring a full Panel vote between meetings. MRBP Committee chairs will submit their Annual Work Plans to the Ex Comm for review and approval. The Ex Comm and Coordinator are authorized to commit and spend funds necessary to carry on day-to-day MRBP operations. The Ex Comm may meet in person or by conference call. It shall be the responsibility of the Panel Coordinator to notify all members of the Ex Comm of the time and place of a meeting at least one week in advance by mail or email. The Panel Coordinator shall be an ex-officio member of the Ex Comm and shall not vote. The Ex Comm may invite others to participate in meetings as needed. The necessary quorum for making decisions is five of the elected, voting members. The Ex Comm shall make decisions by simple majority vote.

**Technical Committee Structure and Procedures.** Technical committees will be formed as needed from among the MRBP membership, its associates and interested parties. Committee membership is open to anyone interested in participating in discussions and projects. Committees will operate under consensus, but if an official vote is necessary to pass on a given item or activity, votes will only be recorded from official MRBP members of the respective Committee. Committees will be chaired by official MRBP members, and elected by acclamation of Committee members or by official vote of the MRBP members of the Committee. The terms of Committee chairs will vary, depending on the interest and ability of members to serve, but are anticipated to be no more than three years. Each Committee chair should make known well in advance his or her desire to step down so that a smooth transition can be made to another member.

**Funding Issues.** The breadth of MRBP activities will be a function of funding levels and the extent to which members and observers can contribute “in-kind” services, including staff resources. Limited support for travel and associated meeting expenses of non-federal MRBP members may be available at the discretion of the MRBP Ex Comm. MICRA will administer all funds received for MRBP operation, and expenditures recommended by the MRBP will be overseen by MICRA. Most MRBP funding activity will originate from within the respective technical committees, and funding requests will be forwarded to the MRBP Ex Comm through development of committee work plans. Annual Work Plans will also be prepared by committee members, under the leadership of committee chairs, and submitted to the Ex Comm for review and approval by September 1 of each calendar year. Upon Ex Comm approval, committees are free to implement work plan activity. However, if award of a competitive contract is anticipated, committees will be required to develop an official Request for Proposal (RFP) to ensure competitive bidding.

**Amendment of Procedures.** These Procedures may be amended by two-thirds majority vote of the voting Panel members; or by simple majority vote if such action has been noticed in the draft meeting agenda mailed to each Panel member at least two weeks prior to the meeting at which the vote is to take place.

**Public Attendance and Participation.** All Panel meetings shall be open to the public, and there shall be an opportunity for public comment on any agenda item, or on any other issue which is properly a matter for comment before the Panel, subject to these guidelines as they may be amended by the Panel. These guidelines shall apply equally to all who are not members of the Panel.

- (a) Members of the public may be required, at the Panel Chair's discretion, to fill out speaker cards before commenting.
- (b) Public comment on any agenda item shall occur at the time of Panel discussion on the item, but before any Panel vote on the item. Comments by any member of the public shall be limited to a maximum of three minutes on any agenda item.
- (c) Public comment on issues not on the agenda shall occur during the General Public Comment period. Comments by any member of the public during the General Public Comment period shall be limited to a maximum of three minutes. The Chair of the Panel meeting shall determine whether an issue is properly a matter for comment before the Panel; however, such determination may be overturned by a majority vote of the Panel.

These requirements for enabling public participation and comment shall not apply to mail-in votes.

**Staff Support.** MICRA will provide staff support to the MRBP. The level of support provided will be a function of availability of funds. At a minimum, a portion of existing MICRA staff time will be dedicated to facilitate MRBP activities. Under ideal funding circumstances, a full time ANS coordinator or staff totaling 1 FTE will be hired and dedicated exclusively to MRBP support. The Chairperson of MICRA will be responsible for oversight of all personnel assigned to support MRBP activities.

**Work Program.** The Panel will develop a Work Program at an annual meeting, based on input from the Committees, and with agreement from the Panel members in attendance. The plan will include proposed work items, estimated costs, and background information for prioritization within the program. The Ex Comm is responsible to assure that Panel activities and

administration are conducted in accordance with the work plan or to approve changes based on Panel program priorities. This includes commitments of Panel financial resources.

The Work Program will have six elements that collectively respond to MRBP responsibilities specified in Section 1203 (a) (1-6) of P.L. 101-646. Each element is presented below, accompanied by a statement describing the MRBP's implementation approach.

**Priority Setting** - The Act calls for the panels to identify priorities for the subject basin with respect to aquatic nuisance species. The MRBP interprets this broad statement as applying to the areas of research and risk assessment, prevention and control, and education and communication. Position statements will provide guidance for program development, budgeting and operational purposes, and will be of use at the regional and national levels, particularly for the National ANS Task Force. The MRBP may wish to use a survey and/or workshop approach in establishing such positions. In the area of research, the MRBP will contract as necessary on a limited basis (depending on available funding and agency participation) for this work. With respect to policy priorities, the MRBP will determine policy, program, legislative, regulatory and budgetary needs to ensure that the Mississippi River Basin-related provisions of P.L. 101-646 are pursued to the maximum extent possible. Such priorities will be regularly conveyed to the National ANS Task Force, as well as agency and elected officials at all levels of government.

**Make Recommendations to the National ANS Task Force** - The legislation calls upon the panels to "make recommendations to the Task Force". The MRBP will make these recommendations based on consensus of its members, or by majority position with minority position stated as appropriate.

**Assist National ANS Task Force in Coordinating Federal ANS Activities in the Mississippi River Basin** - The National ANS Task Force has oversight and primary coordination responsibilities for federal programs called for in P.L. 101-646. The assistance of the MRBP, however, is considered vital because the MRBP has primary coordination responsibility for all other (i.e., non-federal) Mississippi River Basin programs. The MRBP will offer the National ANS Task Force advice and recommendations relative to the coordination of priorities and the relationship of those programs to non-federal efforts, both public and non-governmental.

**Coordinate Non-Federal Programs in the Mississippi River Basin** - The MRBP is charged with coordinating, "where possible" all non-federal program activities not conducted pursuant to the Act in the Mississippi River Basin. As indicated above, the MRBP recognizes that a multi-jurisdictional "partnership approach" is required to address the aquatic nuisance species issue, and a single system for tracking and coordinating activities is advisable. On the basis of its broad membership, the MRBP will design a system to permit the assembly of research and risk assessment, prevention and control, and education and communication activities. Current efforts to compile this data (e.g., Sea Grant clearinghouse services) will be relied upon to the extent possible. Through its own membership, workshops and other networking techniques (e.g., newsletter inserts), the MRBP will convey its research and risk assessment, prevention and control, and education and communication priorities to all applicable agencies and

interests, and promote coordination of efforts among them.

**Provide Advice on Control Methods** - The MRBP is mandated to “provide advice to public and private individuals and entities concerning methods of controlling aquatic nuisance species.” This activity will be accomplished primarily by MRBP members who have special expertise in this area and presently maintain active information and outreach programs. The MRBP will serve primarily as a vehicle for coordinating the efforts of the Sea Grant programs, government agencies, basin and sub-basin groups, and other entities presently or potentially engaged in public information and education activities. Further, the MRBP will identify and prioritize information/ education needs and work with applicable public entities to address these needs. In those instances where the MRBP itself is determined to be the preferred vehicle for delivering a public information/education service, the design and implementation of such will be pursued. Given its role and prospective stature within the overall aquatic nuisance species control effort, the MRBP will operate in conjunction with existing agencies and organizations to assume a clearinghouse function with government agencies, the public and industry. The MRBP will make referrals, provide its own documents (e.g., priority lists, annual reports, technical reports), and distribute public information materials that its members make available. A descriptive listing of all entities providing public information/referral services is a particularly valuable initiative the MRBP could undertake.

**Annual Report on Mississippi River Basin Activities** - The MRBP is required to submit an annual report to the national ANS Task Force at the end of August each year describing activities within the Mississippi River Basin related to aquatic nuisance species prevention and control, research and risk assessment and education and communication. The MRBP will prepare such a document and consider the following for inclusion in its outline:

- background on the aquatic nuisance species issues;
- state of the problem and current and emerging trends;
- current work plan of the MRBP;
- MRBP priorities for research and risk assessment, prevention and control, and education and communication;
- MRBP activities and accomplishments by state;
- status reports submitted by various jurisdictions/MRB members; and
- recommendations for consideration by the National ANS Task Force, the Congress and governments at all levels.

The Annual Report process is viewed as a collective one, and all MRBP members will contribute to its development. The MRBP also recognizes that funding levels will determine the extent to which work program elements are pursued.

**Funding.** Section 1301 (b) (6) of P.O. 101-646 authorizes funding to support regional panels. The MRBP and its members will also continue to pursue “creative financing” arrangements for the MRBP and its special projects. Prospective sources include relevant federal agencies (i.e., grants, budget “add-ons”, general operating funds, etc.); sport fishing associations and companies; recreational boating associations and companies; and various regional and national foundations.

**Coordination and Overlap with Other Regional Panels.** Membership in other regional panels

(i.e., Western Panel, Gulf and South Atlantic Panel, and Great Lakes Panel) and focus may overlap with that of the MRBP. The MRBP will work to avoid duplication of effort and establish good relationships with the other panels, clarify boundaries, and determine which states have dual representation in two panels. It will be considered beneficial for states to participate in two panels if the state is located in two major watersheds (e.g., portions of Illinois, Minnesota and Wisconsin are located in the Mississippi River watersheds and the Great Lakes watersheds).

# **Appendix A**

**SECTION 1203  
OF THE NONINDIGENOUS AQUATIC NUISANCE PREVENTION AND CONTROL  
ACT OF 1990**

*(P.L. 101-646, 11/29/90, as amended through 10/26/96)*



**Appendix A - SECTION 1203 OF THE NONINDIGENOUS AQUATIC NUISANCE PREVENTION AND CONTROL ACT OF 1990**

*(P.L. 101-646, 11/29/90, as amended through 10/26/96)*

**SEC. 1203. REGIONAL COORDINATION.**

**(a) GREAT LAKES PANEL.--**

(1) IN GENERAL.--Not later than 30 days following the date of enactment of this Act, the Task Force shall request that the Great Lakes Commission (established under Article IV of the Great Lakes Compact to which the Congress granted consent in the Act of July 24, 1968, P.L. 90-419) convene a panel of Great Lakes region representatives from Federal, State and local agencies and from private environmental and commercial interests to--

- (A) identify priorities for the Great Lakes region with respect to aquatic nuisance species;
- (B) make recommendations to the Task Force regarding programs to carry out section 1202(i) of this Act;
- (C) assist the Task Force in coordinating Federal aquatic nuisance species program activities in the Great Lakes region;
- (D) coordinate, where possible, aquatic nuisance species program activities in the Great Lakes region that are not conducted pursuant to this Act;
- (E) provide advice to public and private individuals and entities concerning methods of controlling aquatic nuisance species; and
- (F) submit annually a report to the Task Force describing activities within the Great Lakes region related to aquatic nuisance species prevention, research, control.

(2) CONSULTATION.--The Task Force shall request that the Great Lakes Fishery Commission provide information to the panel convened under this subsection on technical and policy matters related to the international fishery resources of the Great Lakes.

(3) CANADIAN PARTICIPATION.--The panel convened under this subsection is encourage to invite representatives from the Federal, provincial or territorial governments of Canada to participate as observers.

**(b) WESTERN REGIONAL PANEL.--**Not later than 30 days after the date of enactment of the National Invasive Species Act of 1996, the Task Force shall request a Western regional panel, comprised of Western region representatives from Federal, State, and local agencies and from private environmental and commercial interests, to--

- (1) identify priorities for the Western region with respect to aquatic nuisance species;
- (2) make recommendations to the Task Force regarding an education, monitoring (including inspection), prevention, and control program to prevent the spread of the zebra mussel west of the 100th Meridian pursuant to section 1202(i) of this Act;
- (3) coordinate, where possible, other aquatic nuisance species program activities in the Western region that are not conducted pursuant to this Act;
- (4) develop an emergency response strategy for Federal, State, and local entities for stemming new invasions of aquatic nuisance species in the region;

(5) provide advice to public and private individuals and entities concerning methods of preventing and controlling aquatic nuisance species infestations; and

(6) submit annually a report to the Task Force describing activities within the Western region related to aquatic nuisance species prevention, research, and control.

**c) ADDITIONAL REGIONAL PANELS.--**The Task Force shall--

(1) encourage the development and use of regional panels and other similar entities in regions other than the Great Lakes and western regions (including providing financial assistance for the development and use of such entities) to carry out, with respect to those regions, activities that are similar to the activities described in subsection (a) and (b); and

(2) cooperate with regional panels and similar entities that carry out the activities described in paragraph (1).





## **STOP AQUATIC HITCHHIKERS!™**

Prevent the transport of nuisance species.  
Clean all recreational equipment.

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### **What can you do?**

**When you leave a body of water:**

- **Remove any visible mud, plants, fish or animals before transporting equipment.**
- **Eliminate water from equipment before transporting.**
- **Clean and dry anything that comes into contact with water (boats, trailers, equipment, clothing, dogs, etc.).**
- **Never release plants, fish or animals into a body of water unless they came out of that body of water.**



## MRBP Member Updates

**Peoria, IL  
August 24, 2006**

### Colorado

During the 2006 Fiscal Year, Robin Knox served as the Colorado Division of Wildlife (CDOW) representative to the Western ANS panel and the Mississippi River Basin ANS panel. He was the point person for all ANS information requests. He prepared and distributed a specific New Zealand Mud Snail Status and Management Plan; developed and conducted training workshops on ANS topics for biologists working in Colorado; presented ANS training at in-service to non-commissioned employees; responded to numerous requests for ANS information from the public, worked with fly fishing industry to raise awareness of anglers about the dangers of spreading ANS; developed informational brochures and posters for distribution across the state; worked with regional biologists to develop signs for posting along streams; worked with Colorado Department of Agriculture to register pesticides used for WD and NZMS control with appropriate federal agencies. Robin retired June 30, 2006. Vicki Milano is serving as interim ANS coordinator until Robin's position is filled. She has been working on an ANS survey throughout Colorado. Her plans are to develop a Colorado Statewide ANS Management and Control Plan for the upcoming fiscal year. Mardy Nelson, CU graduate student, has authored a book titled "Field Guide to the Mollusks of Colorado" which will be a useful tool for future ANS identification.

Major Accomplishments include:

- Surveys of approximately 42 sites. Asian clam found at 5 sites. Nothing else of significance found.
- Completion of NZMS Management plan
- Completion of book "Field Guide to the Mollusks of Colorado"; distribution of brochures and posters.

### Iowa

The Iowa AIS Program worked with the Iowa DNR's Law Enforcement Bureau to train all permanent conservation officers and summer water patrol officers in AIS identification. Water patrol officers in the Iowa Great Lakes area performed watercraft inspections in addition to their patrol duties. The AIS Program's increased annual budget (~\$650,000) due to receiving a portion of boat registration fees took effect 1 July 2006. As a result, we are in the process of hiring one additional full-time permanent employee and will be hiring up to 12 seasonal employees for additional AIS monitoring and watercraft inspections. Iowa is cooperating with the Minnesota and Wisconsin Sea Grants and the Minnesota and Wisconsin DNR's to implement a multiple level outreach campaign featuring the Stop Aquatic Hitchhikers brand and message. We are using face-to-face and self-administered surveys to evaluate the effectiveness of different outreach methods. This project will continue in 2007.

Two zebra mussels were found in Clear Lake in August 2005. Monitoring through the summer and fall revealed no additional zebra mussels. Local residents and surveys in 2006 reported very low densities (<1 per square foot) of mostly one-year-old zebra mussels throughout most of

the lake. This was Iowa's first interior lake infestation. The second interior lake infestation was reported from Lake Delhi in July 2006. Lake Delhi is an impoundment on the Maquoketa River, which is a direct tributary to the Mississippi River. Low densities of multiple sizes of zebra mussels were located at several sites in the lower part of the lake and directly below the dam in the river.

### **Illinois**

State of Illinois efforts have been directed toward supporting legislation to secure additional authorization and funding for the electric barriers in the CSSC. Five priority lakes have been treated to control and manage Eurasian water milfoil and curlyleaf pondweed. Staff have been working on a revision to the state's Comprehensive Management Plan, and hosting the Asian Carp Symposium. Contracts for an Asian Carp population study on the Illinois River and GIS data should be finishing shortly, and we look forward to using some of this data to help enhance control efforts and support commercial harvest.

### **Indiana**

Indiana began implementing a Brazilian elodea eradication program in the spring of 2006. The DNR Lake and River Enhancement program funded a whole lake Sonar treatment on 109 acre Griffy Lake in an effort to eliminate Brazilian elodea from the only known public water location in Indiana. Eleven private waters are also known to contain this plant. State funded Sonar treatments took place on six of the ponds, pond owners treated three without state funding, and treatment will begin on the other two in 2007 as they were not discovered early enough to implement chemical controls. A temporary administrative rule which bans the sale of Brazilian elodea for anywhere other than indoor aquariums was established in the spring of 2006. The rule also states that if Brazilian elodea is present anywhere other than an indoor aquarium, steps must be made to eradicate the species.

Indiana is laying the ground work for the development of white/black list of aquatics in trade. We hope to address plants, snails, fish, and bait. September meetings are being planned to bring together folks in the aquarium and water garden industries to address the issues of aquatic invasive species in trade. The meetings are jointly organized by Illinois-Indiana Sea Grant, the Great Lakes Commission, and Indiana DNR.

### **Kansas**

- Continue to monitor zebra mussel reproduction in El Dorado Reservoir with monthly plankton tows. Record veliger densities were observed in July 2006 (236 veligers/L). Settling structures have also been deployed to determine daily settlement rates. Research is also being conducted to determine risk of zm transport from El Dorado reservoir via recreational boaters. Survey will also evaluate educational campaign effectiveness.
- Continue to monitor all department waters and the Kansas/Missouri River @KC for presence of zebra mussels. No new introductions discovered.
- Develop and distribute educational materials in cooperation with El Dorado Lake Stakeholders to educate lake users about zebra mussels. Produced numerous press releases about ANS including front page of the Wichita newspaper. Also, included large section in fishing regulations dedicated to ANS.
- Conducted boater surveys as part of the 100th Meridian survey program.

- Surveyed silver carp in the Kansas River.
- Participated in regional zebra mussel forum for surface water users (municipalities and industry).
- Continue to investigate zebra mussel report from Cheney Reservoir. In Aug. 2004, plankton tows (taken by Oklahoma biologists) revealed veligers to be present. Subsequent samples have been negative for veligers. No adults have been found.
- Implemented a 'triploid only' grass carp program for department use.
- Added the requirement that fishing tournament directors must certify that all registered tournament participants are 'ANS free'.

### **Kentucky**

As far as what is happening in KY - we are involved in putting together our state ANS plan. University of KY has been contracted to assist us with the plan. We have a task force meeting scheduled for August 8. We hope to have a draft of the plan completed by next year.

### **Louisiana**

It has been a year of ups and downs for ANS in Louisiana. The state management plan for aquatic invasive species in Louisiana was signed by the Governor and accepted by the National ANS Task Force. The Louisiana Aquatic Invasive Species Council and Task Force has met several times this year in an attempt to begin implementing the management plan and to foster communication of AIS issues between the various stakeholders. The Louisiana Department of Wildlife and Fisheries was given greater authority over import, movement and possession of nuisance aquatic vegetation by the state legislature this year. The legislation also gave the LDWF the ability to construct and maintain its own black list of nuisance aquatic vegetation.

On the negative side, surveys have found that the Rio Grande Cichlids have survived Hurricane Katrina and are reproducing in Lake Pontchartrain and adjacent waterways. Cichlids have been observed on nests in 8ppt salinity. Surveys are still ongoing to determine the effects of last years hurricanes on other invasive species located in our coastal parishes. Giant salvinia has begun to spread throughout the State of Louisiana. This summer giant salvinia has been found in four new waterbodies, the Intracoastal Waterway and most recently the Atchafalaya Basin, the nations largest overflow swamp.

### **Montana**

Montana is now in the third year of its ANS Program. Main activities for this year included public outreach, training for fisheries field staff both for state and federal agencies, training for wildfire personnel, boat inspections, angler interviews, outreach evaluations including an evaluation on Traveler Information Systems (TIS), ANS inspections at all state, federal and private aquaculture facilities and monitoring for new invasions and current invasive populations. During fall of 2005 it was suspected that Fort Peck reservoir was intentionally infested with zebra mussels, the area suspected to have been contaminated has been sampled throughout the year using substrate sampling, plankton samples, and shoreline surveys and to date no zebra mussels have been located, Fort Peck reservoir will continue to be sampled annually. Almost every waterbody within the state has been sampled for invasive aquatic plants and aquatic invertebrates. As of August 2006 no Eurasian watermilfoil or zebra mussels were reported within the state, there was some slight expansion of both New Zealand mudsnails and whirling

disease but no new watersheds were reported positive. New Zealand mudsnails are still absent from the portion of the state that is west of the divide. Angler interviews and boat inspections have proved to be very effective methods of public outreach and TIS continue to be very poor methods of public outreach.

## **Nebraska**

In April, the existence of an established population of zebra mussels in a Nebraska lake was confirmed. The lake is Offutt Base Lake which is owned by the US Department of Defense and on the property of Offutt Air Force Base in Bellevue, Nebraska. The lake was excavated for the gravel needed to build the runways but is now a recreation area for base personnel and is located about 1 mile from the Missouri River. Now several feet low due to the drought, there is no evidence that they have escaped as yet. As this time we have collected water quality data and have constructed a bathymetric map of the lake. A supply of ANS literature has been given to the Base to hand out to personnel in an effort to contain the population in the short term. We are working on a longer range plan to (hopefully) eliminate the population.

A pilot project was begun in a stream watershed in western Nebraska to eliminate two exotic plants; the Russian olive and saltcedar. A cooperative project between state and local governments, the project involved enrollment of landowners to fence the riparian corridor followed by physical removal of the two species of trees. A long-term monitoring program has been started to note changes in the stream and watershed over time.

Continued working with several ANS groups including 1) the 100th Meridian Initiative, 2) the Missouri River ANS Workgroup, 3) the Missouri National Recreational River ANS Workgroup as well as the Mississippi Basin and Western Regional Panels.

## **Oklahoma**

2006 was a bad year for zebra mussels in Oklahoma. New populations were discovered on the Arkansas River in Tulsa, Sooner Lake, Skiatook Lake, and Grand Lake. Press releases have been issued and outreach efforts expanded to increase public awareness of the need for boater vigilance in curtailing the spread of zebra mussels. A second treatment of alligator weed flea beetles was used to control alligator weed on homeowner association ponds in Oklahoma City. Hydrilla was discovered in Arbuckle Reservoir. This is the first record of hydrilla in Oklahoma. Curlyleaf pondweed is expanding its range on the Arkansas River. Two bighead carp were caught by anglers below the low-water dam on the Neosho River in Miami, OK.

## **South Dakota**

The major change in South Dakota's ANS program over the past year has been the departure of Jeff Shearer from the coordinator position. Jeff moved to a new position as the SD Department of Game Fish and Parks (SDGFP), Coldwater Fisheries Biologist in Rapid City in January. I began work as the new SDGFP Aquatic Ecologist /ANS coordinator in Pierre in July. Over the past year, South Dakota has seen its cooperative boat and trailer wash program increase by three additional facilities. In cooperation with USGS, EROS data center, the state has begun a project to map curly pondweed distribution and spread on Lake Sharpe. Biocontrol and herbicide treatments continue on purple loosestrife and salt cedar infestations throughout the state. Though zebra mussel veligers were first documented from 2003 samples in both the Ft. Randall and Gavins Pt reach of the Missouri River, substrate samples distributed through these areas in 2004-2006 have failed to indicate the establishment of adult ZM populations. Research

funded by the state of SD, involving USFWS and South Dakota State University, has established an active monitoring program for zebra mussels in SD and NE, continuing through 2007. The USFWS has continued its study of larval and juvenile bighead and silver carp diets and the influence Asian carp presence or absence on native fish diets and distributions in the Missouri River in SD and NE. Reporting on this research is scheduled for 2007. SDGFP personnel are currently developing a study to examine the impacts of the exotic diatom, *Didymosphenia geminata*, and a variety of control measures, on the composition of biological communities in Rapid Creek (Black Hills of SD).

Other accomplishments include:

- Cooperative Boat and Trailer wash program – 3 additional facilities have joined in 2006.
- Development of SD Game Fish and Parks gear handling policy for ANS prevention.
- Establishment of a spatially expansive monitoring program for zebra mussels 2006-7
- Regulations restricting baitfish harvest on the Missouri River below Gavins Point Dam (upstream limit to Asian carp distribution).
- Purple loosestrife control: Biocontrol and directed herbicide treatments show substantial control over the past several years.
- Salt cedar control: Limited herbicide treatments undertaken. Currently testing directed biological control measures with release of populations of a defoliating beetle.
- Study of the distribution and diet of YOY bighead and silver carp on the Upper Missouri River and influence of their presence and absence on native fish diet and distribution. Reporting scheduled before FY 2007.
- Currently developing a study of the impacts of an introduced diatom (*Didymosphenia geminata*) and directed control measures on the biological community composition of Rapid Creek (Black Hills of SD).

## **Tennessee**

Tennessee is in its second year of meetings in trying to develop the statewide ANS management plan. The goals, objectives, and some strategies have been identified and the first draft is due to be completed in September. Tennessee is also looking at its regulations regarding bait issues such as collecting and selling wild bait, an approved list of bait species imported into Tennessee, and some type of law restricting the use of bait from different watersheds.

## **Texas**

Although the number of giant salvinia infestations in large public water bodies had not changed for six years, this summer the plant was discovered in three more public water bodies including Caddo Lake (27, 472 acres) on the border with Louisiana, Lake Pinkston (447 acres), and Center City Lake (89 acres). Texas Parks and Wildlife Department is working with Louisiana Department of Wildlife and Fisheries to help control the problem in Caddo Lake. A whole lake eradication program is being planned for Center City Lake, and the infestation in Lake Pinkston is still small enough to make eradication possible. The use of triploid grass carp to control hydrilla without lake wide eradication of all aquatic vegetation in Lake Austin is still going very well. Hydrilla has been reduced from 320 acres to less than 30 acres, and has hovered from 2-26 acres over the last year and a half. Plans to form a Texas Invasive Species Council (TISC) are proceeding slowly, but well. Former opponents seem to have agreed it is a workable idea. However, there have been delays somewhat by minor legal issues we hope to have resolved within the next few months. Texas' Comprehensive Management Plan for Aquatic Invasive

Species should be ready for submittal to the ANS task force sometime in late 2006 or early 2007. We are hoping to have the document reviewed by a new TISC before final submittal.

### **Wisconsin**

Wisconsin DNR, in collaboration with the Habitattitude Campaign, UW Sea Grant, and UW Extension, designed a poster and point of contact cards (tip cards) to be distributed and displayed at aquarium retail stores around the state. The project, which began in December of 2005, was completed in June 2006. Wisconsin DNR also designed a second poster that is displayed at the Northern Aquaculture Demonstration Facility in Bayfield, WI. The project shows how to protect your aquaculture facility and was developed in cooperation with the Department of Ag, Trade & Consumer Protection, UW Sea Grant and the Wisconsin Aquaculture Association.

Thirteen Clean Boats Clean Waters workshops were held around Wisconsin this spring and summer. Approximately 300 volunteers were trained as watercraft inspectors at these training sessions. DNR conservation wardens had a significant increase in presence at the boat landings during the week leading up to and including the fourth of July. Their effort received a great deal of press and increased awareness among boaters of the precautions they should take to avoid spreading AIS.

### **NOAA**

In the last year, with the oversight of the Louisiana Department of Wildlife and Fisheries, Louisiana has developed an aquatic invasive species management plan. It can be found online at:

<http://is.cbr.tulane.edu/LouisianaAIS.html>. Much of this our office's (National Marine Fisheries Service) efforts in the last year have been in response to impacts caused by Hurricanes Katrina and Rita. In terms of aquatic invasive species, in addition to various asian carp species, I have a lot of concerns about the Rio Grand cichlid which is being found in increasing numbers in Lake Pontchartrain where salinities previously thought to control it, have not. Giant salvinia is also of concern and was helped to disburse in southwest Louisiana by Hurricane Rita. Blue tilapia has been found in southwestern Mississippi and there is concern that it will expand into coastal Louisiana.

### **LMRCC**

The Lower Mississippi River Conservation Committee (LMRCC), through the Fisheries Division personnel of the Mississippi Department of Wildlife, Fisheries & Parks, has continued to work closely with the U. S. Army Corps of Engineers (USACE) on the Bend of Island 63 Habitat Restoration Project (River Mile 640). This project encompasses fish passage/aquatic habitat restoration features in a 5.47-mile secondary channel off of the Mississippi River in Coahoma County, MS.

Recent activities include:

- USACE Channel Maintenance engineers of the Memphis District and Mississippi Valley Division have completed the design and specifications for the project.

- The LMRCC and Mississippi Limestone Corporation (Friars Point, MS) have finalized a contract for construction of the project.
- The Quapaw Canoe Company (Clarksdale, MS), American Land Conservancy (San Francisco, CA), and Wildlife Mississippi (Stoneville, MS) have made financial contributions to support the Bend of Island 63 fish passage/aquatic habitat restoration project.
- An agreement has been reached with Harold Morgan, a former Corps of Engineers employee now working as a private consulting engineer, to serve as Project Manager.
- Long-term drought has caused abnormally low stages in the Mississippi River that have thus far prevented construction of Bend of Island 63 fish passage/aquatic habitat restoration project. Project construction requires a >15' Mississippi River stage at Helena, AR for 5 consecutive days. A project extension has been granted so that funding will not be lost.

The LMRCC has continued working with Environmental Protection Agency Region VII (Kansas City, KS – Larry Shepard) and Office of Research and Development (Duluth, MN – Dave Bolgrien) to expand the Environmental Monitoring and Assessment Program for Great River Ecosystems to the Lower Mississippi River. EMAP-GRE is designed to: a. provide representative water quality information on three of the Nation's great rivers, and b. demonstrate an approach to monitoring these resources that will serve the needs of state and federal water quality management agencies. EMAP-GRE is an EPA-funded program designed to monitor water quality, sediment, biotic assemblages (including fish, invertebrates, zooplankton, phytoplankton, periphyton, and submersed aquatic vegetation), and habitat. LMRCC member-states with water quality responsibilities have prepared draft proposals in preparation for a meeting with EPA personnel at the 2006 annual meeting of the LMRCC.

The LMRCC and American Land Conservancy have begun developing the first segment of the Lower Mississippi River Fish and Boating Trail (Trail), which will begin at Helena, AR and traverse a 106 river-mile reach to Arkansas City, AR. Prairie Point Towhead, a 1,498 acre island directly across the leveed from Helena, was purchased at auction in 2005 by the American Land Conservancy to serve as the northern terminus of the Trail. The Arkansas Game & Fish Commission purchased Choctaw Island WMA, an 8,300-acre island located directly across the levee from Arkansas City, AR, in 2001. The ultimate goal of the LMRCC, ALC, Arkansas Game & Fish Commission, and the cities of Helena and Arkansas City is to allow primitive camping and other designated uses of the islands by recreational boaters on the Lower Mississippi River. These public use areas will be among the first on the Lower Mississippi River designated for recreational boaters and will allow them to anchor out of the main navigation channel and camp without trespassing on private property. The Great River Road State Park (Rosedale, MS) will also serve as a designated stopping point for boaters on the Trail.

The 2006 annual meeting of the Lower Mississippi River Conservation Committee will be conducted in Vicksburg, MS on September 19-20. Information for this meeting can be found at [www.lmrcc.org](http://www.lmrcc.org).

**Western Regional Panel/Mississippi River Basin Panel (MRBP)  
on Aquatic Nuisance Species (ANS)  
Joint Meeting**

**Wichita, KS**

**September 7-9, 2005**

**Assignments/Action Items Summary**

*(Note From Joint WRP/MRBP Ex Comm Conference Call)*

1. **Risk Assessment Workshop** - Plan and convene a Risk Assessment Workshop.

*The MRBP has the lead for this activity. The planning team includes Mike Hoff, Cindy Kolar (USGS - Washington, D.C.), Tina Proctor (WRP Coordinator), Ron Lukens (Gulf and South Atlantic Panel Coordinator), Pam Fuller (USGS - Gainesville) and Jerry Rasmussen. Speakers have been lined up, and we anticipate holding this Workshop in January 2007 somewhere in the Kansas City, MO vicinity. Announcements will come out in the fall.*

2. **Saltcedar** - Determine if an adequate website exists on saltcedar, and develop a website if needed.

*There appear to be adequate websites addressing this issue. They can be accessed through: <http://www.invasivespeciesinfo.gov/profiles/saltcedar.shtml>*

3. **100th Meridian Boater Survey** - Extend 100th Meridian boater survey to states east of the meridian.

*This task was forwarded to the separate 100<sup>th</sup> Meridian Initiative Committee. Tina Proctor is a member and will keep the WRP and MRBP informed of its progress.*

4. **Classroom Programs** - Develop a policy on classroom programs including live release of organisms, how *Habitattitude*<sup>TM</sup> might be integrated, and submit policy to the ANSTF.

*Robyn Draheim (Portland State University) volunteered to be the lead for this with the WRP. She will convene a subcommittee.*

5. **Coast Guard Auxiliary** - Brief them, as invited, and provide packages of outreach materials.

*Karen McDowell, San Francisco Estuary Project, agreed to be the WRP contact for this.*

6. **Stock Recruitment Models** - Develop list of species of common concern, and provide expertise to develop models.

*Mike Hoff was the driving force behind this at the WRP-MRBP meeting. He thinks that stock recruitment models can be used to reduce populations of unwanted fish species and would like to pursue this as a management tool. We need to query the entire panel to find someone interested in pursuing this with him. A fisheries biologist might be the*

*best fit.*

- 7. Injurious Species Listing** - Develop and maintain lists of state-regulated species, add to Panel websites, and provide data and recommendations to the USFWS that will assist in injurious wildlife listings.

*According to Erin Williams (USFWS - Washington, D.C.), the Task Force/USFWS will be requesting panel involvement in assembling this information. There have been several requests for this in the past few years*

- 8. Interpanel Communications** - Panel EXCOMs should communicate on activities, issues, and species of common concern.

*Tina Proctor, Kevin Anderson (Puget Sound Action Team) and Eileen Ryce (Montana) will take the lead for this. Activities will include e-mail updates, keeping the website updated, and conferences calls as needed.*

- 9. Aquatic Animal Species Control** - Develop a more organized effort on how to control aquatic animal species, including development of a control symposium/workshop.

*Kevin Anderson and Tina Proctor will find a WRP lead for this. It will help with rapid response capability.*

- 10. AIS Control Database** - Review what is being done, where, how and by whom.

*Kevin Anderson and Tina Proctor will find a WRP lead for this. The animal portion could be addressed at a workshop. The plant portion may evolve from a Freshwater Plant Research Symposium (Sytsma 2005), but if not, it will be an identified research need.*

- 11. Experts Database** - Integrate with USGS data base on species.

*Robyn Draheim has already worked on this. Tina Proctor will assist with future actions*

- 12. Global warming** - A risk assessment may be needed.

*Tina Proctor did a quick google search and found that lots of organizations, including international ones, are addressing this issue and there is a lot of research ongoing. She suggested that a practical course of action is to include pertinent links on our website. This could be tackled by the WRP website committee.*

- 13. Survey Needs on Shared Waters** - Coordinate baseline (ecological) survey needs on shared waters.

- 14. Tribal Involvement** - Improve tribal involvement by developing a model for panel use.

*Susan Ellis (California) will be attending a workshop entitled "Building Effective Government and Business Relations with American Indian Tribes" on February 24. She will see if there are any models currently being used for this type of coordination activity.*

- 15. Shared Resource Priorities** - Coordinate on research priorities for shared waters.