

Mississippi River Basin Panel On Aquatic Nuisance Species

February 18-19, 2009
Meeting Notes

Decisions Points and Action Items

1. The Prevention and Control Committee will develop a model ranking system (using criteria and weightings) for prioritizing species recommended for detailed risk assessment.
2. Mike Hoff will continue to update and adapt the risk assessment-risk management approach as additional decision support tools and information become available.
3. O'Bara requested the Panel consider holding an annual meeting in January in conjunction with the MICRA Executive Board and other MICRA committee meetings.
4. O'Bara requested the Panel consider giving a presentation at an upcoming meeting on how to develop a state management plan to help the few states in the basin that have not developed plans.
5. Chapman will draft a letter to be forwarded through the Research and Risk Assessment Committee to make recommendations regarding barges as a vector for the spread of AIS.
6. The Executive Board was requested by the Research and Risk Committee to request ANSTF member agencies to provide links back to the Experts database from their agency's ANS-related websites to increase the website's visibility to and use by the general public.
7. Conover will follow-up with NOAA regarding funding for MRBP to develop a model rapid response plan. Prevention and Control Committee will begin work on model rapid response plan if NOAA funding is received.
8. Finney will lead a multi-stakeholder committee in the development of an RFP/SOW seeking an external review of the Triploid Grass Carp Program.
9. Holman will take the lead to develop a recommendation for risk management associated with dry hydrants and related vectors.
10. Conover will forward information on the USGS – UMESC Invasive Species Control Program to the MICRA Executive Board.
11. Patnaik will provide a more in-depth presentation on ballast water transport and movement by the inland river barge industry as well as their compliance with Coast Guard Ballast Water regulations at an upcoming MRBP meeting.
12. Panel members will continue to seek participation of the barge industry in the MRBP and discussions regarding this potential vector.
13. O'Bara requested the Panel develop a recommendation addressing paylakes and forward the recommendation to the MICRA Executive Board. Chapman will continue to work on this issue of paylakes and elevate it through the Panel to MICRA and the ANSTF.
14. Conover will update the MRBP web site once he can access the USGS server.
15. Conover will construct new MICRA/MRBP websites during 2009. Panel members should send suggestions for the new website to Conover.
16. Conover will update the MRBP membership directory during 2009. Panel members should send corrections to the 2007 membership directory to Conover.
17. Conover will work with the Executive Committee to address inconsistencies between the 2007 MRBP Membership Directory and the MRBP Operational Guidance. Recommended changes will be presented to the full membership.
18. Committee Chairs will submit 2009 committee Workplans to the Executive Board. Executive Board will rank and select projects for MRBP 2009 Workplan.
19. Conover will work with Thompson to organize an MRBP meeting in Pittsburgh, PA during Oct/Nov 2009.

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Welcome and Introductions

Doug Keller welcomed the meeting attendees ([Attachment 1](#)). A [final meeting agenda](#) and [member updates](#) were distributed.

Review of Milwaukee meeting

Doug Keller reviewed the Action Items from the joint meeting with the Great Lakes Panel in June 2008.

- Snakehead in Arkansas: Contact MRBP Arkansas representative to gather more information on the confirmed sighting of a breeding population of northern snakehead in state waters. More later.
- Risk Assessment: Develop letter to the ANSTF identifying the need to compare/combine risk assessment frameworks to develop a “gold standard. More later.
- VHS Control Guidelines: State/provincial Panel members should communicate with their agencies regarding the importance of consistency in VHS control guidelines. State action required.
- Asian Carp Monitoring Project: Investigate funding opportunities to purchasing transmitters to monitor the movement of Asian carp (\$300/transmitter). ACOE received funding for the entire project, which includes monitoring.
- Panel Funding Strategies: GLP and MRBP Executive Committees will investigate additional opportunities for funding Panel operations or special projects (with both federal and non-federal funding sources).
- Funding Statement of Need: Develop a statement of need regarding funding of regional panels and state management plans based on (a) federal mandate; (b) what panels/states are able to do with current funding; (c) what they are not able to do; and (d) what they need to fulfill their federal mandate. Get all six regional panels to sign on to the letter. More later.
- Research and Risk Assessment Committee Action Items:
 - Investigate barges as vectors
 - Investigate pay lakes as vectors
 - More on both later.

Informational Presentations

The remainder of the morning session was dedicated to informational presentations.

1. [Host Presentation: ANS issues in Texas](#) - Earl Chilton
Invasive plants are more problematic in Texas than are animal species. Texas has 1,900-2,000 water bodies. Chilton discussed status and control of four AIS species that are most problematic in Texas: giant salvinia, hydrilla, water hyacinth, and giant reed. Giant salvinia, water hyacinth, and hydrilla are the state’s three largest aquatic plant problems. Giant reed and salt cedar are the states two largest riparian plant problems. Water spinach is also an important issue in Texas due to its importance in the Asian community as food. The development of biofuels is an emerging issue in Texas; want to make sure that invasive plants or toxic algae or not used for biofuels. Texas established a Texas Invasive Species Coordination Committee.

Discussion:

Does Texas use an herbicide to control hydrilla? In stagnant water sonar or fluoridone is used. A copper based compound or aquathol has been used in irrigation canals. Texas will be experimenting with a new compound this year.

Have you had any issues with Mexico working with biocontrols? They have been a little skittish about Meirophimum? They do not like the salt cedar beetle.

Have you seen in spontaneous hydrilla die offs? On occasion.

Are you using triploid grass carp? Yes, it is illegal to possess diploid grass carp in Texas so all fish are bought from out of state suppliers.

Have you established any methods to prevent movement of vegetation on boat trailers? Aquatic hitchhiker and plant signs are posted at boat ramps. Passed legislation and boaters can be issued a citation for transporting aquatic vegetation. Some boat ramps have booms in the water to prevent vegetation from floating to boat ramps and getting caught on trailers.

2. [Screening Process: tools available to support regulatory decision-making](#) – Mike Hoff
The MRBP has developed a “Model for a State Natural Resources Agency Risk Assessment and Risk Management Process”. Part of this process is risk screening to rapidly evaluate the potential invasiveness of a non-native species prior to its importation into a jurisdiction. Risk screening outcomes can be low risk, high risk, or uncertain risk. If a species risk is uncertain, then a more detailed risk assessment is warranted.

The two best predictors of invasiveness are 1) history of invasiveness and 2) climate and habitat match with native range. Hoff reviewed a number of tools that are available or in development to assist decision makers to rapidly screen non-native species, including climate and habitat matching tools, and decision and support tools and information for prior invasiveness. Hoff provided a demonstration using CLIMATE software to rapidly assess climate match.

The next step for the Panel is for the Prevention and Control Committee to develop a ranking system (using criteria and weightings for those criteria) to prioritize the list of species recommended for detailed risk assessment. Hoff will continue to update and adapt the risk assessment-risk management approach as additional decision support tools and information become available.

MRBP and Great Lakes Panel made a joint recommendation to the ANS Task Force in November requesting an ANS Task Force member agency develop and fund an RFP for a project to 1) scientifically evaluate existing Rapid Screening Processes, 2) report on strengths and weaknesses of each screening process, and 3) use the results to recommend how to, or develop, a gold standard screening process or processes.

Hoff deferred questions and discussion until later to keep the meeting on schedule.

3. [Fire protection dry hydrants as a vector for invasive species spread](#) – Jennifer Holman
Dry hydrants are non-pressurized pipe permanently installed at a discrete point in an existing surface waterbody (lake, pond, river or stream). Dry hydrant intake screens are typically back-flushed twice annually (spring and fall) to remove any debris on intake

screens. Dry hydrants exist in all fifty states. There are 150 dry hydrants in Oneida County, Wisconsin alone. Tanker trucks can hold 1,000 – 5,000 gallons of water. Tanker trucks are used to back-flush dry hydrants, are used every month for training exercises, and in addition to fire departments are used by highway departments and general contractors.

Oneida County established a Dry Hydrant/Tanker Truck Ordinance and regulatory protocols. Fire departments are exempt from the ordinance while actively engaged in fire suppression; otherwise containers must be disinfected with 1 tablespoon of household chlorine bleach (sodium hypochlorite) per gallon of untreated water with a circulating contact time of 10 minutes. Treated water in containers must be neutralized with 3 grams of sodium thiosulfate (de-chlorinator) per gallon of chlorinated water for at least three minutes before discharging disinfected water. The estimated annual costs to fire departments for disinfectant are minimal: chlorine bleach (liquid) costs approximately \$154 / 55 gallon drum, and sodium thiosulfate (powder) costs approximately \$89 / 50 pound bucket. Estimated two year total cost is \$243.00.

Back-flushing maintenance alternatives have been recommended:

- Back-flush with neutral water from well or municipal water supply
- Use water from different waterbody after it has been disinfected and neutralized
- Use water drawn from same hydrant; disinfect container once complete; travel between hydrants with empty container
- Use a Pneumatic (air) system

Discussion:

Contractors use tanker trucks to transport water to work sites. Chlorine treatment could be a problem in bare metal trucks. Another chemical called Virkon is available and is often used in hatcheries as an anti-viral agent, but has not been tested on zebra mussel veligers. Manufactures thinks it will be effective, but this needs to be evaluated. There are a number of variations available that need to be evaluated in the aquatic form. IL EPA settled on chlorine rather than Virkon, based on discharge consideration. Chlorine will break down faster than other chemicals. Want to prevent the need for discharge permits.

Note: “Virkon® Aquatic” is now available in single use foil packets. Each packet contains 37 grams (1.3 oz) of Virkon® Aquatic powder and will make 1 gallon of 1% solution. Virkon® Aquatic packets are available in packs of 3, and boxes of 25. Virkon® Aquatic foil packets are easy to use, store, and transport and they are ideal for field use and for disinfecting personal watercraft and fishing gear.

Have you had problems with chlorine damaging internal pump components? The recommended bleach concentration is a lower chlorine concentration than drinking water. Sodium thiosulfate is also an option.

4. [Eradication of zebra mussels at Offutt Air Force Base, Nebraska](#) – Steve Schainost
This project began as the result of a tip Kansas received on their web site in April 2006 that zebra mussels had been seen in the Offutt Air Force Base Lake. Within the month Schainost coordinated with the base, made a site visit, and confirmed the presence of zebra mussels in the lake. Offutt Lake drains into the Missouri River; zebra mussels not present within this portion of the basin.

The lake is only used by Base personnel and a number of actions were taken to prevent spread of zebra mussels from the lake: boat docks were closed, brochures and outreach materials were made available, and the lakes outlet pipes were plugged with concrete. The Nebraska Game and Parks Commission mapping crew constructed a bathymetric map in summer 2006.

A series of five meetings with numerous stakeholders were held to discuss treatment options. Four options were considered: Spectrus CT1300, Endothal, potash, and copper sulfate. Copper sulfate was selected in March 2008 as the method of treatment. DOD agreed to pay all costs. A treatment was to be planned and conducted before 1 May 2008, with a possible second treatment in the fall. A consultant (URS) was hired to carry out project planning, obtain permits, write EIS, etc. The lake application was subcontracted to Natural Habitats Unlimited.

A whole lake treatment was conducted on 17 September 2008. A total of 28,000 pounds of granular copper sulfate was distributed in the lake to achieve a targeted concentration of 1.0 ppm. The mean concentration measured on the day of treatment was 0.70 ppm. Copper concentration was 0.25 ppm 2-days following treatment and 0.10 after a month. Six live colonies of zebra mussels were placed in minnow pails at six locations prior to treatment to evaluate mortality. Minnow pails were examined at 24 and 72 hours and 7 days following treatment. Mortality was 30% dead after 24 hours, 70% dead after 72 hours, and 100% dead after 7 days. More than 100 rocks, etc. were examined at 96 hours following treatment and no live zebra mussels were found. Clean bricks and concrete blocks were set out before treatment and no new settling was observed. Water samples were collected from three locations post-treatment and no veligers were found.

A fish kill began the day following treatment. With a major airbase across the road, Offutt required that all fish be picked up (and buried) to avoid attracting fish-eating birds to eliminate the possibility of bird-strikes on the base. This provided good data on the fish kill. Estimated 39,000 lb. or 320 lb/acre of which 95+% were nongame fishes. Sport fish only comprised 0.4% of the fish kill, but carps (common, bighead, grass) comprised 23%. Bighead and grass carps were not known to be in the lake. A few paddlefish also turned up in the fish kill.

Actual cost figures are not available but the estimate was ~\$100,000 or \$820/surface acre. A second treatment is tentatively scheduled for the first week of April, 2009 and veliger monitoring will be conducted throughout 2009. The final costs will more than double with a second treatment and the veliger monitoring during 2009.

Discussion:

Bighead carp were found during the post-treatment fish kill. The lake does not flood, so the likely source for these fish is suspected to be bait bucket transfer or as contaminant in channel catfish stockings. Estimated 6,000 pounds of bighead carp, but no silver carp. Is there some potential application of copper sulfate to control bighead carp?

How big is the lake? 122 acre lake, max depth 30 feet, flat bottom, straight edges.

Is the estimated cost per surface acre? Yes, \$820/surface acre.

How long will you continue to monitor? Long-term annual surveys for veligers in mid-summer.

How close is the nearest lake with zebra mussels? North central Iowa. Zebra mussels are not in the Missouri River in this area.

Does the lake have an active stocking program? Yes, a paid consultant manages the lake.

A neighboring wetland was also treated.

Is there any military use of the lake? No, lake is purely recreational.

5. [Arkansas Snakehead eradication project update](#) – Brian Wagner

An unknown fish found on a gravel road was reported to the Arkansas Game and Fish Commission (AGFC) in April 2008. The fish was confirmed as a northern snakehead. An assessment conducted by the end of the month more than 90 snakeheads had been collected and the fish were confirmed in Piney Creek. In July 2008 AGFC Commissioners approved a budget increase of \$400,000 to address the issue.

The Piney Creek drainage has very diverse habitats that can be ideal for northern snakeheads and difficult for an eradication attempt. The agency used electrofishing, rotenone, and aerial surveys to assess the distribution of northern snakeheads. No snakeheads were collected outside of the Piney Creek drainage and the population is thought to be isolated within the drainage. Initial sampling resulted in 118 “adults”, 95 of these from the Lee County farm where the fish were first documented, two from Piney Creek, and 21 from drainages that empty into Piney Creek. Additional specimens have been documented since the large scale sample, totaling 135 larger snakeheads and 100’s of fry in two separate schools at different locations. Fifty of the captured snakeheads were necropsied and data collected. Sex ration was approximately 1:1; all females were “eggy”.

AGFC is conducting public outreach to create an awareness of why the agency is concerned and why so much attention is being given to this species, especially when other species like silver carp are so much more visible as a problem. Reasons for concern include: voracious predator, obligate air-breather, capable of spawning up to 5 times/season, strong parental care = greater survival, Piney Creek drains into the White River and Mississippi River Basin, the White River National Wildlife Refuge is just down stream of Piney Creek, and potential impacts of northern snakeheads may not readily be known or noticed, but past examples (i.e., silver carp) warrant immediate action. Silver carp have been in Arkansas waters 25 to 30 years, but are just now posing problems.

There were a number of conditions that had to be met for an eradication attempt, including the availability of the necessary supply of rotenone, landowner cooperation and permission to access land, crops harvested and fields drained, low flow in Piney Creek, and the completion of an Environmental Assessment as this is to be a joint effort with the USFWS. The eradication effort will be for approximately 110 square mile drainage area; at least 195 miles of creeks, tributaries, & ditches; numerous lakes, ponds, and flooded agricultural fields; and 4,000+ surface acres of water. The planned effort will require 24,000 pounds of powdered rotenone; 3,000 gallons liquid rotenone; 45+ personnel (utilize Incident Command System); and a 2 week implementation effort. The USFWS (Region 4) is providing the use of its helicopter for the aerial application of the liquid rotenone and providing the use of 8 Marshmasters for applying the powdered rotenone. The eradication effort was originally planned for October 2008, but two hurricane systems dumped so much rain that the agency decided to postpone the effort until

spring 2009. A trial run is planned for March 2-6, and the full eradication effort will be conducted between March 23 – April 15, conditions permitting. This window was chosen to allow flooded rice fields to be drained and crops planted. Fields are currently flooded and will be flooded again shortly after the crops are planted, which provides a short window of opportunity. Low flow in Piney Creek is also needed.

Discussion:

How did the snakehead get on the farm where it was reported from? Fisher farmer imported the fish in approximately 2000 to produce and sell in New York food fish markets. Farmer was advised by peers to get rid of the fish. Farmer seined, drained ponds, and threw the fish on the levees to rid the farm of the fish. The fish were not illegal to import or possess at this time, so the farmer had not done anything illegal.

Will farmers be planting in the spring and will there be water in the fields? They will have to dry the fields before planting and we hope to hit that window.

Who owns the marsh masters? USFWS. How do they handle in deep water? They float and the tracks propel them.

Did anyone eat the flesh? No. Chapman reported that he has eaten them twice in China and did not like them either time. They were a very soft flesh.

Will you have access to any caged snakeheads to evaluate the toxicity during treatment? Unsure of any such plans.

Has there been any additional sampling to determine the current distribution of snakeheads since it has been nearly 1 year since the initial assessment? No

If fish show-up outside of the Piney Creek Basin before the eradication attempt, will it be called off? That decision would be made at a higher level and I cannot answer that.

Is there a significant largemouth bass population in Piney Creek? It is mostly rough fish. There has been some concern from Chinese that largemouth bass may be suppressing their northern snakehead populations. There is a very good largemouth bass fishery in the Potomac River where snakeheads are established. The biologist from Virginia has reported that most northern snakeheads in the Potomac River are found in the shallows and near shore areas, possibly as a result of the largemouth bass population.

You should make sure that local fishers are instructed to report catches of northern snakeheads to your department.

Is Arkansas looking for any help? Is there anything the MRBP can do to be of assistance? Ground application will be headed by Arkansas biologists. USFWS will provide and man the helicopter and marsh masters.

Hoff has spoke with Armstrong in the past about a small group observing the effort. Has there been any discussion regarding the high water in 2008 effects on distribution? There have been no reports of snakeheads from outside of the Piney Creek drainage.

Will there be a webpage managed for public information during the event? Unsure of any such plans, but not sure if there would be enough staff to do this.

How much potassium are you planning to use? Not sure.

Are there any fish farms that you will be eradicating? I don't think so. There may only be two fish farms in the watershed.

6. [Viral Hemorrhagic Septicemia \(VHS\) update](#) – Steve Shults

VHS was first reported in freshwater drum in Lake Ontario during 2005. It was later confirmed in samples collected from Lake St. Claire during 2003. In 2006 the virus was isolated in Lake Erie, Lake St. Claire, the St. Lawrence River, and Lake Ontario, and some large-scale mortality was observed. Fish tested positive for VHS in Lake Michigan and Lake Huron in 2007. One collection in Ohio during 2008 was outside of the Great Lakes Basin.

VHS is a regional issue to MRBP states. The Western Great Lakes were considered VHS (+) before isolation of the virus due to *connected* waters. Illinois, Indiana, Ohio, Wisconsin (Mississippi River Basin states) are under quarantine. The MRBP requested the ANSTF recognize VHS as an ANS and as a severe threat to the natural resources of North America.

What are the next steps for APHIS? The Official Rulemaking (Interim Rule) is still under development. Species list may change due to further studies in host susceptibility and virulence. APHIS received a great deal of stakeholder and public input which is currently being given consideration. The Federal Order that was supposed to be implemented January 2, 2009 has been delayed indefinitely. It may be moving towards a watershed basis rather than entire Great Lakes state basis. Movement restrictions have gradually relaxed to movement based on risk.

Discussion:

The delay of the order does not mean that APHIS is not regulating, rather the states continue to implement the components of the emergency order.

What has Illinois done to prevent transfer by recreational boaters? Very similar to regulations implemented by WI and MN. Require susceptible species to be killed on harvest and require boaters to drain all water from boat. Officers in IL do have authority and discretion to issue citations.

WI has implemented recommendations but is not a regulation.

There is no bait or water transfer in Illinois? Correct. Live or dead bait may only be used on waters from which they were obtained. APHIS is working with IL DNR and can press federal charges under the emergency order.

Committee Meetings

Each committee chair provided an overview of what their committee will be addressing during the breakout session. The remainder of the day was spent working as committees in breakout sessions.

MICRA update

Chris O'Bara, MICRA Chairman, reported that he had a productive meeting Tuesday night with the MRBP Executive Board and reviewed some of the issues discussed.

MICRA has hosted the MRBP since it formed in 2002 and fully supports the Panel's activities. In December 2007, the MICRA Executive Board voted to formally adopt the MRBP as a standing committee of MICRA. This helped to justify the MICRA Coordinator's time being spent on MRBP activities. Approximately 20% of the coordinator's time should go towards MRBP.

During the most recent MICRA Executive Board meeting in January 2009, there was some discussion with MICRA's accountant regarding the organizations tax status. The accountant explained that MICRA is a 501(c)3 membership organization and has certain restrictions as a not-for-profit organization. We need to make sure that MRBP and MICRA operate within these restrictions. The organizations cannot lobby and cannot fund raise. No more than 15% of funds can come from outside of the membership. If activity could be construed as lobbying, please talk to MRBP chair and others before proceeding.

As a committee of MICRA, the panel should remember that MICRA may be able to help provide additional funds when necessary. MICRA receives \$50,000 funding from the FWS each year for hosting the Panel. MICRA keeps 10% overhead and maintains the remaining \$45,000 as a separate budget for the Panel.

MRBP is a subcommittee of MICRA, but reports to the ANS Task Force as a Regional Panel.

MRBP payments should be submitted to the Coordinator (Conover). The MRBP co-chair will review payments forwarded by the Coordinator. Approved payments will be sent to the MICRA chairman for signature since the funds come out of MICRA's bank account. Once signed, documents are sent to the MICRA accountant for payment. This may take a little longer than in the past, but should not take too long for payments to be received.

MICRA would like the Panel to consider holding an annual meeting in conjunction with the MICRA Executive Board and its other committees in January each year. The MICRA Executive Board has gone to an annual budget cycle and would like to have all committees meet immediately prior to its meeting at the beginning of each year. This will help the MICRA Executive Board make decisions regarding the annual budget each year, and could benefit the panel and other committees as well as a result of improved communication by having every one together in the same place. Also could help with meeting arrangements and costs.

MRBP may want to consider giving a presentation at an upcoming Panel meeting on how to develop a state management plan to help those few states in the basin that do not have plans.

MICRA is addressing the Panels website concerns and Conover will provide more details on this during the Coordinator's report later this afternoon.

Committee Reports

Each Committee Chair reported out on the previous day's breakout meeting. Committee meeting notes and 2009 Workplans are included in [Attachment 2](#).

Education and Outreach Committee – Steve Schainost

The committee had a very small group at this meeting. Discussions were focused on current and future work plans.

- Progress continues on the publication of the AIS Field Guide. Contractor is dealing with family medical issues and this has caused some delays.
- Hydrilla watch cards are printed and available.

- Boater surveys were completed in Indiana and Oklahoma during 2008. The committee wants to fund boater surveys in two more states during 2009.
- Committee members have contacted the large retailers about adding ANS information to their store catalogs. This request was not welcomed because the companies consider every inch of the catalog as potential income. This effort will not be continued.

New issues identified by the committee include:

- Water Gardens: IL/IN Sea Grant may develop guidelines and an informational DVD regarding the handling of water garden materials. Funds will be needed to move this forward.
- The committee discussed impediments to the use of Asian Carps. The fishes' name and bony flesh are considered the two largest impediments. IL/IN Sea Grant and LA Sea Grant are going to work together to create a DVD on how to clean Asian Carp. Duane Chapman will assist with this project. Chapman may need funding assistance from the Panel to cover his travel costs to make the DVD.
- A clearing house is needed to compile AIS regulations and create a database. Charlebois will give a presentation with more information on this later today.

Discussion:

Have you ever looked into doing Public Service Announcements on hunting or fishing channels? Hopefully this is something that Wildlife Forever or other partners can help us with.

What markets have been discussed for commercial markets of Asian carp? The committee has only discussed trying to get the general public to utilize Asian carp. Chapman estimates about 20 million pounds being exported annually. Other smaller markets exist, but commercial fishermen are not getting paid enough to make fishing for Asian carp economical. The largest demand is the ethnic market

Prevention and Control Committee – Steve Shults

The committee discussed the Regional Panels funding letters and presenting the issue to the ANS Task Force as a "statement of need". Final or draft letters in hand from all panels. This action item from the Milwaukee meeting will be completed in early March. A more simple approach to distributing funding for State Management Plans in future years was proposed.

An existing action item to develop a model ranking system for prioritizing species that need a detailed risk assessment has not been acted upon yet. Holman volunteered to lead this effort during 2009. (Jennifer Holman resigned as the Oneida County Wisconsin AIS Coordinator shortly after the February meeting, so this action item no longer has an identified lead.)

The committee recommends that the Panel develop a model Rapid Response plan. NOAA may provide \$20,000 to MRBP for development of a rapid response plan. The committee will pursue this action item if NOAA funding is received. Conover has been in contact with NOAA and will let the committee know if the NOAA funding comes through.

The Triploid Grass Carp Inspection Program review was discussed. Finney was asked to take the lead on this project for the committee because of its strong ties to the Asian carp management and control plan. Kim is on the agenda to provide additional information later.

The committee had drafted a letter to the states recommending states discontinue the use of diploid grass carp. The letter needs to be revised to include information from the August 2008

Triploid Grass Carp Program workshop. As a follow-up to the Program review, the letter will be forwarded to MICRA with a request to distribute to member states.

MRBP provided tags to track movements of bighead and silver carp near the dispersal barrier in the Chicago Sanitary and Shipping Canal. USACE will continue early detection monitoring efforts and will be purchasing the necessary equipment. The committee does not recommend the Panel purchase additional tags in 2009.

Holman will take the lead to develop a recommendation for risk management associated with dry hydrants and related vectors.

Terry Hubert provided information on the UMESC Integrated Pest Management research program. UMESC is requesting partners provide letters of support to congressional offices. Conover will forward the information to the MICRA Executive Board.

Steve Shults presented information on a Central Hardwoods Invasive Plant Network, which is a combination of 4 Cooperative Weed Management Areas in 4 states along the Ohio River.

Discussion:

Is the USACE Waterways Experiment Station handling the Asian carp monitoring near the barrier? No, the Chicago District has the lead for that work.

Research and Risk Assessment Committee – Duane Chapman

Updates and additions to the Experts Database have been on-going. The committee discussed the need to make the database more visible and accessible. MICRA may want to add a link to their web page.

Hoff requested that any new information on risk assessments be provided to him.

Lt. Cdr. Keister was invited to this meeting to address questions related to barges as vectors to AIS spread. Chapman will draft a letter to be forwarded through the committee, MRBP Executive Board, and the full panel to the ANS Task Force making recommendations regarding barges. Some concerns have been identified, especially concerning shipping in the vicinity of the Chicago Sanitary and Shipping Canal. Outreach materials will be developed and provided to shipping industry.

Paylakes were identified as an information gap during a previous panel meeting. Chapman provided an overview of a presentation on this topic that he developed for the Panel meeting and an upcoming ANS Task Force.

Wild bait is a data gap that remains to be addressed, but no one has volunteered to take this on yet.

Informational Presentations

The remainder of the morning session was dedicated to informational presentations and updates.

7. National Asian Carp Management and Control Plan Update – Sam Finney
Sam Finney introduced himself as the new Assistant Project Leader at the Carterville National Fish and Wildlife Conservation Office and provided a brief update on the status of the national Asian carp management and control plan.

The plan was approved by the ANSTF in November 2007 and the FWS was requested to lead in implementation of the plan. There has not been major progress on plan implementation since it was approved due to a large amount of turnover in key FWS personnel at the field, Regional, and Washington Office levels following the plan's approval. Many of these positions have recently been filled and the FWS is moving forward with implementation as requested by the ANSTF. Finney will lead plan implementation/coordination for FWS Region 3.

8. Triploid Grass Carp Review Project Update – Kim Bogenschutz
MICRA approached the Panel a few years ago to explore the possibility of a review of the inspection program. The Panel recommended to the MICRA Executive Board that a committee be put together to organize and seek an external review of the Program. MICRA requested the Panel involve other Regional Panels and the triploid grass carp producers to broaden support and involvement in the process of initiating an external review of the Program.

The FWS hosted a Program workshop in August 2008. Bogenschutz presented the idea to the producers and inspectors at a business meeting following the workshop last year. The idea was met with support and some producers volunteered to work with the panel on a committee to move forward with this idea. There was no further progress on this project following the August workshop. The Prevention and Control Committee discussed this project during yesterday's committee meeting and Finney agreed to lead this effort for the Panel as it ties directly to the Asian Carp management and control plan.

9. River barges as a vector for ANS spread

- a. Inland barge industry – Lieutenant Commander Rob Keister
There are more than 65,000 barges documented in the United States. The Coast Guard only regulates "red flag" barges that carry petro-chemicals.

Barges are not ballasted down. Fixed ballast systems were used occasionally in the 1970s, but are no longer used. Empty hoppers do collect rain water and this water is pumped out by onboard sump pumps. Barges are double-hulled and can take on water when they are damaged.

Discussion:

It sounds like damaged barges have the potential to transport water and AIS throughout the inland waterway system. Under normal circumstances, barges that are damaged are shipped to locations for repair before the water damages (rusts) the hull. Damaged barges typically do not get moved far for repair. What about tug boats? Tows take on ballast regularly to move under bridges and as their fuel load burns off. Is this ballast treated? No. This could be a problem, especially with moving Asian carp eggs and larvae upstream of the electrical barrier. This is mostly a concern with movement upstream, since water flow could move AIS downstream.

Are the Lake Huron folks working with the American Waterways Operators on BMPs? No.

- b. [Federal ballast water regulations for the Tug and Barge Industry](#) – Bivan Patnaik
The US Coast Guard is authorized under the National Invasive Species Act of 1996 to “Ensure to the maximum extent practicable that ANS are not discharged into waters of the U.S.” and to “Apply to all vessels equipped with ballast water tanks that operate in waters of the U.S.”

The current ballast water regulations for tugs and barges were adopted from voluntary guidelines and made mandatory in 2004. All vessels must conduct best management practices and have on board a vessel specific ballast water management plan. Vessels must submit ballast water reporting forms to the National Ballast Information Clearinghouse. Reports are required for all barge traffic, including those that operate only within the inland waterway system. Reports are required whether ballast is being used or not. Reports are required every time a vessel is moved from one U.S. port or place to another U.S. port or place. There are some legislated exceptions. A “port or place” refers to any place that a vessel is docked or moored. On-board ballast records must be maintained for 2 years. There is an initiative to amend the reporting and record keeping requirements

Patnaik recommended that the Coast Guard provide a more in-depth presentation on ballast water transport and movement by the inland river barge industry as well as their compliance with Coast Guard Ballast Water regulations, and that the Panel continue to work toward shipping industry participation in MRBP.

Discussion:

What is the requirement when a tow ballast down several times to pass under multiple bridges on a single trip? Not required to file a report if all movement is within the same zone.

Is the ballast water reporting database accessible? Yes.

Is there an informational component to help the captains understand the importance of preventing spread of AIS? Yes. How good is this understanding? Not well known among the tow boat operators.

Do you hold workshops? Yes. Is there a captain certification program? No. What percentage of captains attend? We don't know.

10. [State ANS regulations database](#) – Pat Charlebois

Illinois-Indiana SeaGrant (IISG) identified a need for easily accessible compilation of state AIS regulations and has secured funding to create a user-friendly web accessible database. IISG proposes to contact states for information and to populate the database. IISG will also market the website. States will be asked to maintain the website with annual updates. The database is intended to provide easily accessible information on all state and federal AIS regulations to improve awareness of regulations and ultimately reduce import and introductions of regulated AIS. Charlebois requested feedback on the proposed project.

Discussion:

You should consider asking the states to provide links to their own lists of regulations.

Definitions will be important. Terminology is different between states. For example, the term prohibited often means restricted.

A plain language approach and consistent terminology is recommended for the web site so the audience understands the information.

This is similar to a project in the Ohio River Basin for fishing regulations. The group decided not to create their own regulations page, but only to provide links to the individual states' regulation pages. Also, have you considered including information on fish disease?

The database as proposed is intended to be searchable. It is possible now to conduct a web search for each state's regulations web sites, and regulations are written in "legalese". In some cases it is difficult at best to find answers on state regulation web sites. The database is intended to provide quick information from all states when a search is conducted for a specific species. The web site can provide the link to the specific regulation.

There could be some legal issues if the information is out of date or incorrect.

It may be difficult to link directly to specific regulations. Adding links to the regulatory agency may be a necessary alternative.

There could be trouble when you interpret state statutes. It would be good to have some one from each state help you and point you to the actual regulations.

You may want to try it with just a couple of states first.

There may be a federal web site where this has already been attempted. APHIS has compiled information on noxious plants.

11. [Integrated pest management of common carp](#) – Peter Sorensen

Common carp were introduced into the United States in 1877. U.S. Fish Commission (pre-cursor to US Fish and Wildlife Service) actively stocked carp throughout most of the United States. Common carp populations have reached extremely high densities in thousands of Midwestern Lakes, Wetlands & Rivers and carp are possibly the most invasive fish species introduced into the United States. Many invasive characteristics including: high fecundity, fast growth, variable/adaptable diet, and rooting feeding behavior has a devastating effect on water quality and submerged aquatic vegetation.

Current control strategies (e.g., poisoning, harvest, water drawdowns) are damaging and unsustainable. Dr. Sorensen's lab is working to develop an understanding of carp sufficient to permit the development of a biologically and economically sound plan for controlling common carp. Common carp, especially in closed systems, provide great opportunities to research control methods and may serve as a good model for other invasive fish species.

Dr. Sorensen provided an overview of research projects being conducted out of his lab to investigating the potential for integrated approaches to control the species. There appears to be potential for the use of carp pheromones to aggregate carp. Spawning sabotage was used successfully to eradicate carp from a lake in Tasmania.

Telemetered carp in a Minnesota lake study did not show a strong spawning site preference which will make it hard to stop carp from spawning. However, the fish appear to only recruit periodically. In fact, recruitment was strongly correlated with winter kill. Dr. Sorensen hypothesis is that the fish kill reduces the number of predators, specifically adult bluegill, allowing for recruitment of a strong yearclass of carp. Telemetered carp did demonstrate strong aggregations during winter, suggesting that harvest of adults may have some utility as a component of an integrated control program.

Based on this research, Dr. Sorensen proposes 3 principle steps to successful control of common carp: 1) identify nurseries and suppress recruitment, 2) block movement of recruits into refuges, and 3) remove adults. He has a 10-year project with the Riley Purgatory Bluff Creek Watershed District to remove common carp from the watershed. Results will be monitored and population modeled using CarpSim.MN.

A symposium on common carp control is being organized for the 2009 AFS meeting in Nashville, TN.

Discussion:

What makes you think the bluegill are eating the carp eggs and that carp aren't disrupting bluegill spawning? It could be a little bit of both going on. Did you conduct any gut analysis? Not yet. At this point this is just a correlation, but not explanation.

Do you recommend removing adults or not? Not alone, only as part of an integrated approach. Controlling recruitment is an important component of a carp control program.

12. Paylakes – Duane Chapman

Paylakes (or fee lakes) were identified during the Panel's June 2008 meeting with the Great Lakes Panel as a big data gap. Chapman researched the issue following the meeting and provided an overview of what he learned.

Chapman searched the internet, emailed state personnel, and requested information from NASAC about paylakes and learned of at least 400 operations in the US. There are likely many more. Most paylake operators do not have websites and the Carp Anglers Group website provides information on approximately 200 paylakes in Pennsylvania alone. Kentucky is the only state that maintains a list of registered lake owners. Angela Caporelli, KY aquaculture coordinator, stated that paylakes are of substantial economic importance in her state.

Paylakes are a potential vector for the distribution and spread of AIS. Fish are intentionally transported to and from paylakes, and fellow travelers (e.g., non-target fish species, invertebrates, plants, and pathogens) are at risk of unintentional transport. Paylakes are an outlet for aquaculture fish. Appears that most stock wild caught fish as well. Greatest risks are probably associated with the transport and stocking of wild caught fish. Wild fish are more likely to be moved by small time operators that may not know the rules and have less to lose by overlooking rules. Paylakes have been largely overlooked as a vector, and have not been well studied as a risk or regulated.

There are many business models by which paylakes are operated and there is no overarching association of paylake operators. Many lakes are stocked with a combination of farm-raised and wild-caught fish. It appears that some are rather large

operations that stock their ponds frequently (e.g., several times per week). The most common aquaculture species appear to be channel catfish, white bass X striped bass hybrids, sunfish hybrids, pike X muskellunge hybrids (Tiger Musky), occasionally black bass and crappie, grass carp (risk of moving diploids), and rainbow trout (in winter). Wild fish are typically purchased from commercial fishers and are primarily catfishes (flathead, blue, and channel), bullheads, common carp, grass carp, buffalos, bowfin, freshwater drum (rarely), and probably others.

Wild caught fish come from different sources. Bullheads, large carp, and drum are most commonly transported from the Great Lakes, common carp were reported by CAG and the MD DNR to come from the Chesapeake Bay; and river systems throughout Eastern and Central USA are major sources wherever commercial harvest and live transport is legal. According to Mike Freeze, Arkansas limited commercial harvest of large catfish for this reason. Chapman was not able to find out much information about the commercial fishermen that supply paylakes. There are many unknowns, for example: how many fishers are involved, the size of operations, how far fish are transported, how many fish are transported in a typical load, the level of awareness and adherence to state regulations, and hauling and pond-side procedures used (e.g., water exchanges). Chapman found paylakes with grass carp and bighead carp, but found nothing with regard to silver carp. Not known if the carp species were stocked intentionally or unintentionally.

Biosecurity is an issue with paylakes. Different pond types pose different escapement risks. Farm pond type operations may be the most problematic because of potential to overflow during rainfall events. Some lakes are catch and release only, but generally there is no control over disposition of fish and offal once caught. Most states reported no regulations specific to paylakes, but most do have regulations that affect paylakes. Arkansas, Kentucky, and Illinois require an operator license. Arkansas also requires operators to register each fisher (name, address, etc), operators cannot stock wild fish, and operators must prevent ingress or egress of fish from paylakes. Arkansas also has limitations on its licensed commercial fishers for supplying paylakes in other states.

Following are examples of state regulations that affect paylake operators: Wisconsin has strict regulations on fish import, Kentucky requires health certificates for fish imported from VHS states, West Virginia requires a health certificate for all fish imported into the state (not certain how this applies to wild fish), Maryland requires a permit to stock any pond, and Ohio restricts movement of VHS susceptible fish. Kentucky reported distributing AIS education materials to paylake operators, and Florida and Kentucky provided Ag extension products to operators/potential operators.

The potential for AIS transport in association with operation of paylakes seems high. Licensing would provide regulators with an ability to provide AIS education and information about regulations.

Discussion:

This does appear to be a potential problem, especially with VHS right now. Some states addressing directly or indirectly, but many states don't appear to be directly addressing.

O'Bara recommended that the Panel elevate this issue. He stated that there are a lot of allies in other groups (e.g., AIS, fish disease). He would like to see a recommendation come from the Panel to the Exec Board.

IL recognizes these as Fee Fishing Areas. Some aquaculture facilities allow fee fishing in their monoculture production ponds before harvest. This will probably be addressed soon in IL because of VHS.

The biggest concern is wild fish. Transport of wild fish can lead to Lacey Act violations.

Bait dealers are another similar issue of concern. That issue has been identified but no one in the committee has volunteered to take that on yet.

KY had a difficult time trying to deal with bait and eventually made it illegal to import wild bait.

Chapman will continue to work on this issue and elevate it through the Panel to MICRA and the ANSTF.

Doug Jensen would be a good contact on the bait issue. Fred Snyder is another potential contact.

ANSTF update – Doug Keller

Susan Mangin was introduced as the new Executive Secretary for the ANSTF. Susan introduced herself to the Panel and provided an update on the ANSTF. Susan has worked with the FWS for nearly 20 years in fish health, ANS, and coastal program before being assigned as the new Executive Secretary. The ANSTF charter is up for renewal. That process takes about 6 months. The next ANSTF meeting is 19-21 May in Bozeman, MT. She is currently developing the meeting agenda. Kari Duncan was formerly Chief of FWS Branch of Invasive Species; Craig Martin is the new Branch Chief. Craig can be reached at craig_martin@fws.gov. Susan can be reached at susan_mangan@fws.gov or 703-358-2466.

Keller provided an overview of the MRBP 2008 annual report provided to the ANSTF and information from the ANSTF Fall meeting. Four state management plans were presented to the ANSTF by MRBP states. Plans submitted by Kentucky, Oklahoma, and Tennessee were approved; South Dakota's plan was conditionally approved. MRBP states have 16 approved plans and 9 more are in development (status of 3 state's plans is uncertain).

Mike Hoff presented the ANSTF with the MRBP and Great Lakes Panel joint screening recommendation. The ANSTF was requested to: 1) scientifically evaluate the accuracy, sensitivity, ease of use, and cost effectiveness of existing risk assessment screening tools; 2) report on the strengths and weaknesses of each screening tool; and 3) recommend how to adapt screening approaches and risk assessment methods that rapidly and accurately assess risks to native species and ecosystems.

Keller brought forth the MRBP recommendation for the ANSTF to co-sponsor the upcoming International Symposium on Genetic Biocontrol of Invasive Fish being planned for 6/22-25/2010 in Minneapolis, MN. This recommendation was discussed with the other Regional Panels during the preceding Panel Principals meeting and was supported by the other Regional Panels. Keller reminded the ANSTF of their previous decision during their fall 2006 meeting to co-sponsorship such a symposium as the opportunity presents itself. The request for funding support was not approved. Bolen asked if the EPA had been approached for funding. Bolen will talk with Hoff and Keller to get more information.

ANSTF discussed 2009 funding. FWS anticipates funding decreases across the board in FY09, but hopes to be able to fully fund panels. ANSTF brainstormed strategies to secure funding.

Keller reminded the group that there was a joint action item from the MRBP and GLP meeting last June to send a "statement of need" letter to the ANSTF regarding the Panels' inability to accomplish their mandate due to inadequate funding. Model letters were provided to other Regional Panels and draft letters have been received from all Panels. MRBP is packaging final letters from all Regional Panels and will submit as a package to the ANSTF in early March to present a united "statement of need" regarding the panels and states abilities to meet our mandated mission.

The triploid grass carp program review was discussed during the Panels Principals meeting. There was some support, however the Northeast Panel doesn't feel that grass carp is an issue to them. A more specific request that doesn't address financial support will be presented to the other panels.

The lists of state regulated AIS that were provided to Doug were submitted to the ANSTF per their request. The request sent from the ANSTF to the Regional Panels was very vague. This was discussed by the Panel Principals and a recommendation was made that the ANSTF be more clear and to even provide templates for future requests.

The Great Lakes Panel presented a recommendation regarding State Management Plans guidelines (i.e., eliminate restricting or no longer applicable, streamline reporting, timeline for distribution of funds, incentive for states to acquire other funding, continue equal \$ to states). The Mid-Atlantic Panel recommended that the Regional Panels and ANSTF discuss the proposed Non-Native Wildlife Invasion Act (H.R. 6311) to determine whether it is adequate to meet our needs for prevention. The Communication, Education, and Outreach Committee recommended that a series of workshops be delivered around the country to help agencies use SAH and Habitattitude campaigns to engage citizens and communities as the next level for implementation and evaluation. The Detection and Monitoring Committee recommended that standard sampling protocols be developed with an explicit application or implementation plan in mind, and that the committee should focus on providing advice to ANSTF for priorities and needs in the area of monitoring and detection. The Prevention Committee recommended that the ANSTF identify a new chair for the Prevention Committee and assign a chair to the Aquatic Organisms Screening Working Group. The Research Committee recommended that the *"Protocol for Evaluating Research Proposals Concerning Nonindigenous Aquatic Species"* be revised. The Control Committee recommended the ANSTF decline the request to construct a national invasive species list or to select any species for special consideration beyond those species previously selected as suitable for ANSTF national management and control plans.

Other issues discussed included the ANSTF Strategic Plan, NPDES vessel discharge permits, development of an action plan by the Western Regional Panel in response to invasive mussels western spread, brown tree snake, and control of the European green crab on the pacific coast.

Discussion:

The Western Regional Panel is developing an action plan for zebra and quagga mussels in the west? Yes. Why is this only being developed for the West?

Bolen will send a copy of the rapid response plan for quagga and zebra mussels developed by the National Park Service.

Does MRBP have a community outreach plan to network with the public and municipal agencies?

Hoff added that Gary Fraser is new FWS co-chair and NOAA will be assigning a new co-chair. Dynamics are changing internally and externally.

AFWA invasive species committee report – Kim Bogenschutz

AFWA represents all 50 states. The unique thing about AFWA is it is a policy and legislative group, so AFWA can lobby.

Kim is the new vice-chair of the Invasive Species Committee. Tom Remington, Director Colorado, is the new committee Chair. The Invasives Species Committee Chair attends NISC meeting, and the vice-chair attends the ANSTF meetings.

AFWA meets in conjunction with the North American Wildlife and Natural Resources Conference each spring. The group also meets each fall. Next meeting will be March in DC. There is an adaptive management workshop also being held in DC that same week.

AFWA has National Conservation Needs (NCN) and funding is available for these.

Invasive Species Committee submitted an NCN to update and evaluate a previous Stop Aquatic Hitchhikers related NCN. All states have a State Wildlife Action Plan. The Committee wants to get invasive species into the plans.

Larry Riley, previous Invasives Species Committee vice-chair, participated in an ANSTF oversight hearing last year and identified the need for appropriation of the full authorized funding for state management plans.

AFWA has been involved with the screening legislation (H.R. 669 Nonnative Wildlife Invasion Prevention Act), Clean Boating Act of 2008 (S. 2766), and drafted letters and provided testimony on Ballast Water legislation.

There have not been a lot of state aquatic or terrestrial ANS coordinators at meetings in the past. AFWA would like to have more participation from states. AFWA recently requested a list of coordinators from all states.

Coordinator's Report – Greg Conover

Budget / Funding

FWS paid MICRA funds owed for hosting the MRBP during FY06 and FY07.

FWS obligated \$50,000 for MICRA to host the MRBP during FY08. MICRA invoiced the FWS for FY08 funding in November 2008; funding has not been received to date.

MICRA submitted paperwork requesting the FWS obligate MRBP FY09 funding (\$50,000).

FWS cannot modify agreement and obligate funds until FY09 appropriations received.

Project Status

2008 Funded Projects:

- Print "Field Guide to Aquatic Nuisance Species"
 - project not completed, still progressing
- Support state ANS and boater surveys (\$5,000/state)
 - 3 projects funded in 2008 (IL, IN, OK)
 - IN and OK surveys completed; IL survey about to be started
- Asian carp symposium
 - project not completed; still progressing

- Print Hydrilla/Brazilian elodea watch cards
 - 65,000 WatchCards purchased by MRBP (\$0.09 each)
 - Coordinator has received the WatchCards and will mail them after the meeting to those MRBP members that requested them
- Purchase 10 radio tags for Asian carp telemetry project in Upper Illinois River
 - 9 transmitters were purchased; price increased before tags were purchased
- Support Leah Sharpe's PhD Project "A Decision Support System for Improved Management of Established Aquatic Invasive Species"
 - \$10,000 obligated for this project in 2008; request was only for \$5,000
 - additional \$5,000 was used to fund a third ANS and boater survey in 2008 (IL)
 - partially completed during 2008, project is progressing
- ICS-based Mock Rapid Response Exercise
 - Completed in 2008 and an After Action Report was received and distributed

MICRA Website

Conover reported that he has not been able to access the USGS server to update/manage the MRBP (and MICRA) web site since starting as the Coordinator in March 2008. This issue was discussed at the January 2009 MICRA Executive Board meeting. The USGS may have solved the problem for the short-term, but as of last week he was still unable to update the web site. He will update the website as soon as possible. Note: Access to the USGS server was restored in March 2009. Please bring needed changes to the MRBP website to the Coordinator's attention.

MICRA has approved commercial web hosting as a long-term solution for the web sites. This will eventually allow MICRA and MRBP to register simpler domain names (e.g., www.MRBP.org) and to maintain an email address separate from the USFWS. MRBP's current web address is <http://www.waux.cerc.cr.usgs.gov/MICRA/>; current email address is MRBP@fws.gov. New web sites for MICRA and MRBP will be constructed during 2009. Please forward suggestions for a new website and requests for updating the existing website to MRBP@fws.gov.

If the MRBP wants to register a new domain name separate from the new MICRA domain (probably will be www.micrarivers.org), the panel will need to agree to a domain name to register. Domains can be registered for approximately \$10/year.

Membership Issues

There are some inconsistencies between the 2007 MRBP Membership Directory and the MRBP Operational Guidance. There are also a number of vacant member positions. An e-mail was sent to MRBP members in May 2008 requesting potential candidates to fill the vacant positions. The Executive Committee needs to evaluate these inconsistencies and vacancies, and make recommended changes to the full membership. Changes to the membership structure will have to be approved by a majority vote of the full MRBP membership.

Coordinator's 2009 Workplan

- Funding / budget
- 2009 Directory
- Web page / hosting
- Administrative help for new and existing projects

Rapid Response exercise review – Mike Hoff

Hoff provided an overview of the ICS exercise completed in November 2008.

Following the exercise, several MRBP members that attended held a conference call to discuss the training and next steps. Overall the exercise moved us forward as a group and there are clearly some next steps. The group made four recommendations:

1. incorporate video footage into future training
 - identify footage needed to improve training
 - solicit existing stock of available video footage
 - identify the new video footage needed
2. future training should be step-wise complexity
 - step 1: participants observe Planning-P process
 - step 2: trainers guide participants through an AIS related rapid response scenario
 - step 3: no, or limited, guidance by trainers
3. panel should pursue completion of a model rapid response plan
4. All panel members who could be involved in a response and seek federal funds should take the online ICS training to become familiar with terminology and process.

Discussion:

Banek recommended that the Panel develop a general framework that could be used by anyone needing to develop a rapid response. The on-line training was beneficial, but if you don't practice or use it often it will be difficult to remember.

Dr. Burda stated that ICS isn't just for rapid response. We can and do use the planning P in the execution of our everyday tasks. Thinking about the steps in everyday decision making is a good way to keep familiar with the planning P process.

Bolen encouraged the panel members to take advantage of future opportunities to observe or participate in EPA rapid response training. Bill will continue to forward opportunities to MRBP members via the coordinator.

Boater Surveys

Schainost provided background on the boater survey projects that have been forwarded through the Education and Communication Committee. WI/MN developed these surveys to measure the effectiveness of their outreach efforts. The Panel has provided funding to two MRBP states to conduct boater surveys each of the last two years. Montana and Kansas were the first two states to receive funding. Oklahoma and Indiana both received funding in 2008. Illinois also received funding in 2008 when additional funds became available. Three more states have requested funds to conduct boater surveys in 2009.

IL Boater Survey – Steve Shults

Illinois is using MRBP funds to conduct a survey in the state's southern 11 counties. The study will be conducted as a pilot, with the intent of expanding the survey statewide using alternate funds. Illinois is working with Southern Illinois University to conduct the survey and is just now at the point of distributing surveys.

Discussion:

Are the boater surveys standardized across the states? The MRBP funded surveys are not standardized, however each state that has conducted the survey receives the original survey questions used by WI/MN as a starting point.

IN Boater Survey – Doug Keller

Indiana completed a survey in 2008. Indiana surveyed licensed anglers rather than registered boaters. Indiana used Survey Gold to conduct an electronic survey. The survey was sent to 10,825 anglers; 1,015 surveys were returned within 30 days. No follow-up requests were made. A summary of the survey results was presented.

Discussion:

Do anglers get any AIS information with their license? Most sales are done on-line. Illinois license renewals for boat registrations are sent in envelopes printed with the stop aquatic hitchhikers logo.

KS Boater Survey – Jason Goeckler

Sea Grant completed an ANS survey in 2000 and Kansas used the MRBP funds to complete a second survey in 2007. This allowed Kansas to compare 2007 data with 2000 data and measure the effectiveness of the states outreach and education efforts over the last 7 years. Goeckler presented a summary of the 2000 and 2007 data for zebra mussels.

Discussion:

What are you doing to provide information via the TV? Nothing, that information is from news reports related to ANS. Kansas has produced videos and made them available on the website.

Are you getting any funding from boater registrations? No, just put ANS brochures in envelopes.

Both presentations have provided great information that the public is willing to pay increased fees to provide funding directly to AIS programs.

OK Boater Survey

Oklahoma completed a survey in 2008. A written report is provided in the member updates.

Public Comment

No public comments.

MRBP 2009 Workplan

Any requests from the committees for funded projects?

- Genetics Biocontrol Symposium support - \$5,000
- Travel support for Chapman to attend ANSTF to present briefing on paylakes.
- Travel support for Chapman to assist with the carp cleaning video.
- MO, WI, PA boater surveys. \$15,000
- Triploid grass carp program review: \$10,000
- October 2009 meeting: \$1,500

Next meeting: October 2009, Pennsylvania will host.

Attachment 1 – Meeting Attendees, February 18-19, 2009, San Antonio, TX

Name	Affiliation	E-mail Address
Glenn Thomas	LSU Sea Grant	gthomas@lsu.edu
Chris O'Bara	MICRA Chairman	chrisobara@wvdnr.gov
Duane Chapman	USGS-CERC	dchapman@usgs.gov
Earl Chilton	TPWD	earl.chilton@tpwd.state.tx.us
Brian Wagner	AGFC	bkwagner@agfc.state.ar.us
Kim Bogenschutz	Iowa DNR	Kim.Bogenschutz@dnr.iowa.gov
Steve Shults	Illinois DNR	Steve.Shults@illinois.gov
Sam Finney	USFWS	sam_finney@fws.gov
Jason Goeckler	Kansas Wildlife and Parks	jasong@wp.state.ks.us
Susan Mangin	USFWS	susan_mangin@fws.gov
Bivan Patnaik	US Coast Guard	Bivan.R.Patnaik@uscg.mil
Bill Bolen	USEPA – GLNPO	Bolen.Bill@epa.gov
Mike Hoff	USFWS	Michael_hoff@fws.gov
Kathy Burda	USDA – APHIS	Kathleen.J.Burda@aphis.usda.gov
Richard Hartman	NOAA / NMFS	richard.hartman@noaa.gov
Terrance D. Hubert	USGS – UMESC	thubert@usgs.gov
Steven Schainost	NE G&P Commission	steve.schainost@nebraska.gov
Eugene C. Braig	Ohio Sea Grant	braig.1@osu.edu
Tim Holman	general public	
Jen Holman	Oneida County, WI AIS Coordinator	jholman@co.oneida.wi.us
Frank Jernejcic	WV DNR	frankjernejcic@wvdnr.gov
Sue Thompson	PA Fish & Boat Commission	suethomps@state.pa.us
Tim Banek	Missouri Department of Conservation	tim.banek@mdc.mo.gov
Doug Keller	IN DNR	dkeller@dnr.in.gov
Pat Charlebois	IL-IN Sea Grant	charlebo@illinois.edu
Lt. Cmdr. Rob Keister	US Coast Guard	
Peter Sorensen	University of Minnesota	soren003@umn.edu
Greg Conover	USFWS - MRBP Coordinator	mrbp@fws.gov

Attachment 2 – Technical Committee Meeting Notes and 2009 Workplans

Outreach and Education Committee – Chair: Steve Schainost

The meeting began at 1:30.

Meeting attendees: Pat Charlebois, IL/IN
Glenn Thomas, LA
Steve Schainost, NE, Chair

Unfortunately, attendance at this meeting failed to meet a quorum so the meeting consisted of reviewing the previous workplan and updating it for the next year. We began with budgeted items.

The first of these was the “Field Guide to Aquatic Nuisance Species”. It was explained that this would be a resource for those that need the information but not considered to be a freebie for the general public. Mandy Beall, working as a private contractor, was not able to do much do to medical problems at home. We got a report that she is back at work on this so the milestone of 1 August was left in place as well as the requested \$18,000. These funds are to pay Mandy and print as many as possible.

The next budgeted item was the “Aquatic Nuisance Species and Boater Survey”. This survey is designed to collect information about our public’s knowledge of ANS, where they get their information, and their boating activities. Designed as a phone or mail survey, it has proven useful in directing (or redirecting) agencies information programs. It was suggested that the survey, in addition to the individual states, would prove valuable to the MRBP in addressing its public outreach efforts at the basin level. We have offered to cost/share the completion of more surveys in more states to get a more complete, basin-wide picture of the situation. To date, four states were able to conduct surveys (KS, MT, IN and OK) and each was given \$5,000 to help pay for these. In addition, Illinois has begun a survey with leftover funds from another project. This next year, we have received requests from PA and Oneida County, WI, for conducting surveys.

The final budgeted item was the hydrilla watchcards. Illinois/Indiana Seagrant is heading up the design of these cards. This project is complete and the cards are in Greg Conover’s office and will be shipped soon.

The workplan had several items that had not been budgeted but were in there for further development.

It was proposed that we investigate the possibility of contacting major sporting goods catalog retailers to see if they would be willing to put ANS messages in their catalogs. All attempts, to date, have gone nowhere. It was concluded to drop this from the workplan.

Next was the idea that we partner with NGOs like Wildlife Forever and B.A.S.S. For instance, this past year, Wildlife Forever sent me a copy of a TV spot they had developed. We were unable to view it at the meeting but it suggested they type of thing we could help develop. It was suggested that we contact the MRBP membership for ideas on other groups to contact.

At previous meetings, it was suggested that a letter be written to boat manufacturers encouraging the design of boat and trailers in a way that would facilitate inspection and cleaning. This was discussed at the last meeting with the recommendation that such a letter

should probably come directly from the MRBP and be directed towards the Marine Manufacturing Association. No report was received on the status of this so we moved on to new business.

Pat Charlebois reported that IL/IN Seagrant was working on ideas for the water garden hobby and retail outlets of plants. Ideas included development of a “black list” of plants, development of general guidelines for handling materials, production of a DVD that could be used by retailers to train employees, and production of a poster for retail shops. We need to find out if the MRBP is interested in pursuing this concept as they would need funding to produce these.

At the Milwaukee meeting, Pat broached the idea of looking for ways to control Asian carp via increased harvest. What are the barriers to increasing the use of these fish? It was suggested that the “carp” name is one as well as the bony nature of their flesh. We want feedback on this to get people’s opinions and ideas. We did discuss the role of University food science departments in coming up with marketing ideas. She went on to mention that they were working on a video showing how to remove the bones. It just so happened that Glenn Thomas said they were trying to do the same thing in LA with the help of Duane Chapman. Pat and Glenn will be cooperating on this project.

Finally, a brief discussion was held regarding the development of a database of state regulations and prohibited species lists. It would be an online resource that could be used by anyone but the target audience is the biological supply houses. As it is now, they would have to contact an individual state for this information every time they ship an order. A single online database that is easily searchable would make it much easier for them and help fulfill the mission of the MRBP. As she had a presentation on this the next day, we did not beat this one to death.

The meeting adjourned at 2:55.

Outreach and Education Committee FY2009 Workplan:

Activity	Milestones	Deliverables	Funding Request
“Field Guide to Aquatic Nuisance (Invasive) Species”	1 Aug	Print-ready copy, print and distribute	\$18,000
ANS and Boater surveys	Next meeting	State survey results	Up to \$5,000 per state, two states per year
Wildlife Forever and B.A.S.S.	Next meeting	Continue contacts and see if how we can work together.	None at this time
Water Garden outreach	Next meeting	Poll MRBP states for their ideas	None

Prevention and Control Committee – Chair: Steve Shults

Meeting attendees: Tim Banek, MDC
Kim Bogenschutz, IA DNR
Bill Bolen, USEPA - GLNPO
Dr. Kathleen Burda, USDA - APHIS
Earl Chilton, TPWD
Greg Conover, USFWS
Sam Finney, USFWS
Jason Goeckler, KDWP
Mike Hoff, USFWS
Jennifer Holman, Oneida County Wisconsin
Terrence Hubert, USGS - UMESC
Frank Jernejcic, WV DNR
Susan Mangin, USFWS
Bivan Patnaik, USCG
Steve Shults, IL DNR

Old Business:

1) Panels “statement of need” letter for ANS Task Force:

Letters or draft letters have been received from each of the Panels. MRBP next step is to package the Panel letters, draft a cover letter with the Great Lakes Panel, and submit to the ANS Task Force by early March.

The letter stemmed from a request from the ANS Task Force in 2007 regarding allocation of State Management Plan and Regional Panel funding. The MRBP and Great Lakes Panel identified the “statement of need” letter as a joint action item. This was discussed at the MRBP – GLP joint meeting in Milwaukee (2008) after being forwarded from the joint committee meeting (MRBP Prevention and Control and GLP Policy Coordination).

The earlier request dealt with allocation of State Management Plans. No need for Request for Proposals from states; each state already has a detailed plan. A simpler approach may be to send a request to the states asking if intend to use a full share of the equally divided funding for implementation of State Management Plans.

Hoff has asked states in Region 3 to respond to the FWS request with the full amount of funding that each state can justify, and not limit the request to the amount anticipated (equal share).

Does the Panel statement of need letter indicate a specific level of funding? No, we wanted to avoid lobbying.

Is there a new NOAA ANSTF co-chair to replace Tim Keeney? Mary Glackin is acting.

Action Item:

- Keller, Shults, and Conover will work with GLP to draft a cover letter and submit letters from each Regional Panel as a single package to the ANS Task Force.

2) ICS Exercise / follow-up

a. Risk Assessment Tool:

Hoff introduced this with his presentation during the general session. Hoff reviewed the Action Item from the MRBP to the Prevention and Control Committee. One of the outcomes of the rapid risk assessment is a list of species about which a rapid decision cannot be made; therefore a more detailed risk assessment is required. A model ranking system is needed to prioritize the species for which limited funds will be used for a full risk assessment. Criteria, algorithm, or weighting need to be identified. There are approximately 15 criteria that already exist in the rapid risk assessment that need to be considered. It may be helpful to run a few species through the proposed criteria. Models and existing tools from Montana and Wisconsin are available.

Action Items:

- Develop a model ranking system to prioritize species for which a full risk assessment is needed. Holman volunteered to lead the effort.
- Hoff will send the risk assessment/risk management plan to Holman as a starting point.

b. Model Rapid Response Plan:

Federal dollars require that rapid response be Incident Command System (ICS) based. There is at least one model rapid response plan that is ICS based and could be used a model for the MRBP model plan.

Hoff stated that this could be a good joint effort between the MRBP and GLP, and nominated Bolen to lead both Panels in the effort. The model plan for a fish species could include an overview of ICS, a rotenone component, and an antimycin component. We may eventually need additional rapid response plans for invertebrates (e.g., zebra and quagga mussels) and plants.

Bolen said that much expertise was present in the room, and many plans already exist. Bolen suggests that a new plan should focus on a specific state or geographic location.

Are you looking for a plan on how to respond to a specific organism or a plan on how a response would be implemented over a geographic area, specifying the communication and authorities? Hoff responded that those decisions would be covered in the ICS component of the rapid response plan. The Standard Operations for rotenone and antimycin are readily available. It is the architecture that will be difficult.

Bolen stated that a rapid response plan would need to be followed-up with Memoranda of Understanding between cooperating agencies. Hoff stated that he drafted MOU for the Midwest Natural Resources Group (MNRG) to respond to garlic mustard.

First step is to develop this model within the ICS framework identifying communication and authorities, resources available, etc. Second step to develop mutual agreements among states (Mutual Assistance Agreements). This may be an opportunity for MICRA leadership. Third step is to identify specific training needs (species / location).

Hoff stated that specifics are needed so that the rapid response plan could be used as the guts of an Environmental Assessment which would speed up the process for NEPA approval. Pre-planning is critical.

Is a plan developed for a specific species in a specific location with a specific approach as a model? Yes, this would allow us to identify some of the particular information that would be necessary for a rapid response plan for a new species or a new location. Programmatic EA and EIS allow approval in advance of an actual situation. An example of a PEIS to review would be the Helena National Forest Noxious Weed EIS.

Potentially \$20k is available from NOAA. Funding available from NOAA could be used for travel or to hire a consultant. Action Items: Confirm \$20k funding from NOAA during 2009, and develop a project plan to define the product that we are looking to develop.

Look for available information from National Invasive Species Council NEPA guidance for invasive species working group.

Action Items:

- Confirm NOAA funding and notify Prevention and Control Committee – Conover
- Develop an outline for the response plan – Hoff may be willing to develop a strawman outline once funding confirmed
- Identify co-chairs for the working group (ICS expert and biologist)

3. Triploid Grass Carp Inspection Program Review

Action Items:

- Finney volunteered to lead this effort.

4. Triploid Grass Carp Letter

The letter needs to be revised to include information from the August 2008 FWS Triploid Grass Carp Program Workshop. The letter will be followed-up on after the Program Review is initiated. MRBP should request MICRA Executive Board to distribute a letter under MICRA letterhead to the MICRA delegates. MRBP could also send the letter to ANSTF and other Regional Panels for consideration.

Action Items:

- None until Triploid Grass Carp Program Review initiated.

5. Monitoring / tags for EDRR Asian carp in upper Illinois River

Kelly Baerwaldt, COE - Rock Island District, provided information to Conover. Monitoring project will continue in 2009. COE plans to purchase 5 more VR2s and 10 additional transmitters in 2009. Prevention and Control Committee will not request MRBP funds to purchase additional transmitters for this project in 2009.

Action Items:

- Keep informed of EDRR efforts related to the ANS Dispersal Barrier in the upper Illinois River.

New Business

1. NOAA funding for ICS Rapid Response development:

Action Items:

- See discussion above (2.a.).

2. Guidance / Policy recommendation for risk management associated with dry hydrants and related vectors:

Action Items:

- Holman volunteered to lead this effort and will provide a draft recommendation to Shults.
- Banek will provide Shults with Missouri's BMPs for dry hydrants for additional information for developing the committee guidance/policy recommendation. MO concentrations will need lowered for MRBP document.
- Draft will be sent to PCC for review.

3. UMESC proposal "Integrated Pest Management Research Program"

Hubert provided an overview and hand-out of the planned expansion of UMESC's Integrated Pest Management Research Program. *MicroMatrix*TM technology has been used to deliver vaccines to fish and may work as a tool for selective delivery of fish toxicants for control of AIS. Terry can be contacted at thubert@usgs.gov.

Is there some form of agreement for working with private industry to develop technologies? Yes, this was signed just last week.

UMESC has presented this information to Representative Kind (WI) and staff. Legislative efforts may be able to provide some direct funding.

What can MRBP do to help? A letter supporting this initiative would be helpful, but MRBP cannot do this without the perception of the Panel conducting lobbying activities.

Action Items:

- Individual Panel members and representatives can provide letters from their respective agencies and organizations as desired.
- Shults will bring this request to the attention of the Executive Committee for further discussion and consideration.

4. Central Hardwoods Invasive Plant – Network (CHIP-N) project
Informational item brought forward by Shults. Cooperative Weed Management Areas (CWMA) in four Ohio River states have pulled together on this project. Purple loosestrife and hydrilla are the two aquatic species of concern.

MRBP recommended the ANS Task Force request more single species and multi-state collaborative plans. This may be an opportunity for such a plan in the future as multiple CWMAs are pulling together. However, substantive revisions would need to occur before full MRBP support could be granted.

Do the CWMAs support Early Detection for these two species? Is Kentucky one of the four states? No; Illinois, Indiana, Ohio, and West Virginia. Kentucky is a key piece to hydrilla management in the Ohio River. Kentucky does not recognize hydrilla as an invasive species. Largemouth bass fishermen have lobbied for the plant to be protected in Kentucky.

Is there action planned beyond detection? There is limited value to detection without action to address detected populations.

Prevention and Control Committee FY2009 Workplan:

Activity	Description	Deliverables	Funding Needed
Finalize Statement of Need Letter to ANSTF	Work with MRBP and Great Lakes Panel Executive Committees to gain support of all Regional Panels and finalize as an all Panels letter to the ANSTF	All Panels letter sent to ANSTF as a statement of need for accomplishing Panel mandates	None
Completion of ICS Rapid Response Exercise	Finalize plans and host a Mock Rapid Response exercise in the Upper Mississippi River	1-1/2 day workshop facilitated by Tetra Tech EM Inc. and completion of an After Action Report	None in FY2009
Develop RFP for Triploid Grass Carp Inspection Program External Review	Organize an MRBP led committee of grass carp stakeholders to develop a Request for Proposal and select a Scope of Work for funding. Seek to broaden support for review to a national scale (e.g., other Regional Panels, AFWA)	Independent scientific review of USFWS national Triploid Grass Carp Inspection and Certification Program resulting in final report with recommendations to reduce the introduction of diploid grass carp.	\$10,000
Develop a ranking system for prioritizing species needing detailed risk assessment	The MRBP previously developed a risk assessment screening tool to determine which species warrant a detailed risk assessment. As a next step in the process, a systematic approach is needed to prioritize species for which detailed risk assessments are needed.	Model tool to prioritize species needing detailed risk assessment.	None
Support early detection monitoring for Asian carps near the dispersal barrier in the upper Illinois Waterway	Support multi-agency surveillance efforts of Asian carps near the dispersal barrier in the upper Illinois Waterway by providing sonic transmitters.	Increased numbers of bighead and silver carps monitored for movements near the barrier resulting in more effective early detection monitoring to prevent the spread of Asian carps into the Great Lakes.	None in FY2009 (USACE currently has full funding)

Research and Risk Assessment Committee – Chair: Duane Chapman

Experts Database: In June, I had several action items related to making this more current and accessible. I sent out an update email to all the Tier 1 contacts to make sure that they were still the current person, and requesting additional Tier 2 contacts. I also contacted several web sites asking that they link to the experts database

Little new activity to report since fall report, except we added several more Tier 2 members. At the committee meeting we discussed the low visibility of the search facility to the public. The database is functional now, but no one in the public knows it is there, and it would not be easily found. At this time, it provides a service as a searchable database that can be accessed by Tier 1 or 2 members, but little public use.

Action Item: Request that the MRBP Executive Committee representative bring up the low visibility of the database at the next ANSTF meeting. Also, request attendees add links from appropriate web sites to the experts site on the ANS Task Force experts list. Should post both flyers and verbally request this be done.

Update, DCC – Requests made.

Risk Assessment Framework/Screening Tool – Mike Hoff (FWS) has been leading the development of a Risk Assessment framework for non-native introductions. At the June meeting, a joint GLP MRBP subcommittee for development of the Risk Assessment Framework was formed. Mike Hoff, Lindsay Chadderton (TNC), Christina Donnelly (GLP, Great Lake Commission) are subcommittee members. The subcommittee will direct the development of the Gold standard RA, not be in charge of developing the RA rules. Mike Hoff to send out updated working version of the Risk Assessment screening protocol to the panel members. The next version of the RA is to contain more decision support information (models, publications, websites). RA screening tool is to be continually updated when additional support information becomes available. A climate change component will be added to the screening process.

Action Item: Mike Hoff (FWS) asked that information on new screening tools or parameters be forwarded to him.

River Barges as Vectors. In June, the committee identified a data gap in regard to barge traffic (including tows) bilge and ballast water on the Mississippi River. It is unknown whether commercial traffic on the Mississippi River and between the Mississippi River and the Great Lakes are a potential vector for aquatic nuisance species or not. There is a need for an understanding of types of tows, where different types of tows are used, and how bilge and ballast water (if any) are managed. Possible need for a symposium at the AFS meeting in Nashville (2009) or Pittsburg (2010). Need for coordination with GLP on this issue was noted. Action Item: Invite member(s) of barge association (American Waterways Operators) and other knowledgeable individuals such as knowledgeable Coast Guard personnel to talk at next MRBP meeting about barges and tows and the potential for transport of ANS. Coast Guard (Cmdr Timothy Cummins) and Lynn Muench (American Waterways Operators) were contacted. Cmdr Robert Keister is at this meeting, and attended committee meeting. He gave the committee a short version of the talk that was to be offered to MRBP on following day.

Most problematic point is related to CSSC. Some ballast water is taken on during high water, in barges or in tows, to get under bridges. They must discharge the water on the other side of the bridge. Some water will remain however, which would be moved to the next bridge. Also,

damaged barges will have a special permit to move to their offload site, while pumping continuously.

Action Item: Create letter to the ANS Task Force that would request that the CG/ Captain of the port of Chicago not permit upstream travel of damaged barges through the CSSC, and that the Coast Guard investigate ways to minimize or eliminate the potential for upstream transport of exotic species (such as, but not limited to, Asian carp eggs and larvae) through the canal. (We decided that it was best not to tell the Coast Guard how to do this, but we want to elevate the issue and let them determine the best way to eliminate the problem). The letter will be drafted by committee chair, circulated to attendees at the committee meeting, and then submitted to EXCOM.

Update, DCC – draft letter completed and circulated to committee members and Coast Guard MRBP representative. After review and discussion, the Coast Guard replied that as a member of MRBP, it would be better served to have the recommendations and/or requests for action rolled into the MRBP Meeting Summary and let the Coast Guard take action as best they could. The Coast Guard has already committed to attend the next MRBP meeting in Pittsburgh this fall to discuss the steps taken. It was thus determined that no further action on the letter is necessary at this time.

We also discussed how to address the movement of AIS within the basin by barges, and had few good ideas. However, one item of “low hanging fruit” was to provide information to AWO on apple snails and their egg masses. The egg masses are pink, easily identifiable, and would be above the water line on barges. They are a threat to rice farmers, a major client of barges. It would be a good idea for barge workers leaving Louisiana to walk around and knock off any egg masses they see. Committee decided to ask EXCOM about best procedure, but suggest that ANSTF be contacted about providing educational information to AWO which they could distribute to barge personnel regarding AIS transport, including apple snail egg masses.

Action Item: Ask the ANSTF to send a letter to the inland waterway organization (AWO?) informing them of possible concerns related to barges as vectors of transfer for various species such as zebra mussels and apple snails, educating them on the issue, describing how to spot at least egg masses of apple snails and requesting, if spotted, that they be destroyed.

Pay Lakes. Chair researched number and business models of paylakes and gave shortened version of presentation that was given next day to full MRBP attendees.

Action Item: Chair request to give paylake presentation to ANSTF.

Update, DCC – Chair cannot attend ANSTF meeting, but the presentation materials will be provided to MRBP Chair to present at the ANSTF meeting.

Research and Risk Assessment Committee FY2009 Workplan:

Activity	Description	Deliverables	Funding Request
Proceedings of International Symposium on Asian Carp Management and Control	Final revisions and publication of Proceedings document.	Peer-reviewed Proceedings document available for purchase from AFS.	\$9000

Plan Risk Framework / Screening Tool	Joint project with Great Lakes Regional Panel to develop a "gold standard" risk assessment screening tool.	Model risk assessment framework and screening tool for use by states	None in FY2009
Experts Database	Recruit new Tier 2 contacts, regularly update Tier 1 contacts, and increase accessibility to the public.	Database support	None in FY2009
Assess Risk of River Barges for Transporting ANS in Barge Ballast or Bilge Water	Experts with the U.S. Coast Guard and the American Waterways Operators will be invited to address the MRBP to elevate the understanding of barge operations, so that the risk of transport of ANS in barge ballast or bilge water can be addressed	Increased understanding by MRBP members and identification of unaddressed risks requiring action	\$1,500 - May need to provide travel support for speakers to attend MRBP 2009 annual meeting
Assess Risk of Pay / Fee-Fishing Lakes for spreading ANS as the result of live fish transport	MRBP will contact other Regional ANS Panels to seek collaboration on a risk assessment.	Increased understanding of risks associated with Pay / Fee-Fishing Lakes, identify other Panels' interest in a collaborative risk assessment, and identify next steps to address risks	None in FY2009
Developing a Decision Support System for Control of AIS	Support PhD student project to develop a decision-support tool for assessing, in a transparent manner, when and how to best control an invasive species on a case by case basis.	Web accessible decision support tool for natural resources managers.	None in FY2009 (\$5,000 support provided in FY2009, project scheduled for completion in FY2010)
International Symposium on Genetic Biocontrol of Invasive Fish	Provide financial support to help ensure the symposium is held in June 2010.	Symposium held in 2010 to provide an increased level of understanding among MRBP and other AIS managers regarding emerging technologies and their potential use to control AIS	\$10,000