

**Missouri River Basin 100th Meridian Team Meeting Minutes
Holiday Inn
Bozeman, Montana
May 18, 2009**

Introductions:

Many thanks to Eileen Ryce of the Montana Department of Fish, Wildlife & Parks for hosting this year's Missouri Basin 100th Meridian Team meeting in Bozeman, Montana in conjunction with the Aquatic Nuisance Species Task Force meeting.

Attending:

Steve Schainost - Nebraska Game and Parks Commission
Eileen Ryce – Montana Department of Fish, Wildlife & Parks
Kim Bogenschutz – Iowa Department of Natural Resources
Jason Goeckler – Kansas Department of Wildlife and Parks
Lynn Scheluter – North Dakota Fish and Game
Tim Banek – Missouri Department of Conservation
Erin Williams - U.S. Fish and Wildlife Service, Denver
Rob Klumb – U.S. Fish and Wildlife Service, South Dakota
David Britton – U.S. Fish and Wildlife Service
Bill Zook – Pacific States Marine Fisheries Commission
Stephen Phillips – Pacific States Marine Fisheries Commission
Stephanie Jordan – U.S Bureau of Reclamation
Peter Stevenson – U.S. Bureau of Reclamation Montana Area Office

By Telephone:

Andy Burgess – South Dakota Department of Game, Fish and Parks
Elizabeth Brown – Colorado Division of Wildlife

Please see the meeting agenda attached at the end of these minutes

Reconciliation of 2008 Action Items:

Action Items:

1. Kim will continue to promote the idea of a 100th Meridian Law Enforcement Conference with the WRP – **No action, unsure if this is still a priority**
2. Andy will provide information on cooperative effort with the State Department of Education to develop 5 invasive species lesson plans for public schools in South Dakota - **Lesson plans are now available for those who want to see them**
3. Eileen will develop a brief handout with instructions for MRB states that will be utilizing the services of the new veliger lab detailing how the samples are to be collected, preserved, shipped, etc. - **Completed**
4. Jason G. will make a copy of the baitfish survey report available to all Team members when it has been completed - **Done**
5. Steve will continue to keep the Team apprised of progress on completing the zebra mussel eradication program proposed for Offutt Base Lake - **Done**
6. Tim will check with Brian Canaday as to the status of action items for last year and follow-up where needed - **Done**
7. Tina will consider the Teams recommendations in determining the allocation of uncommitted federal funding from her program for the Missouri Basin - **Done**
8. Dave will add Iowa boater survey data to the 100th Meridian database so it will be available to all users – **In progress**
9. Dave will add new photos and video to the image and video library section of the 100th Meridian website – **In progress**
10. Kim, Tina and Eileen will continue work with the ANS Task Force, WRP and Mississippi Panel on the issue of VHS in the region - **Continuing**
11. Bill will let everyone know where to order magnifiers and mirrors used for watercraft inspection - **Done**

12. Dave will e-mail a sample of the new plastic ID cards for the Team to see - **Done**
13. Dave will get template outreach material to Tim and rest of the Team - **Done**
14. Tim will provide Billboard templates to the Team for informational purposes - **Done**
15. Kim, Eileen, Jason and Andy will prepare a list of best management practices for baitfish transfer and sale for the Team to review by next meeting – **In progress**
16. Everyone will hone their bowling skills before next year so an overweight, 60 year-old with a near fatal case of the flu will not win the bowling competition every year - **No improvement noted**

Individual Agency Updates:

Iowa: Kim Bogenschutz

Iowa now has permanent two full-time and 20 seasonal staff working on ANS issues in the state. 13 seasonal staff which are located in the field offices, two doing vegetation surveys statewide and five water patrol officers including one assigned to the Missouri River.

The zebra mussel population in Clear Lake is expanding, but DNR staff still haven't found mussels in Lake Rathbun despite the discovery of a boat with zebra mussels attached at a marina there in 2007. Two new Positive waters were reported in 2008; the Winnebago and Cedar Rivers (Mississippi River drainage).

Kim also reported that:

- *2008 Flooding increased Asian carp distribution in the state*
- *All field offices now have heated powerwash units*
- *ANS Outreach material sent to all (266,000) registered boat owners in Iowa with 10% returning post card entering them*

into a drawing for one of five power washers. The post card was used to gauge readership of the material.

- *A follow-up survey was sent to 5,000 registered boaters with a 20% return rate.*
- *Results of the post card survey revealed that most people get their information about ANS from signs, followed by the regulation pamphlet, information provided at marine retail outlets, billboards and from watercraft inspector.*
- *80% of those returning surveys clean, drain and dry their watercraft between uses (A summary report is attached – Attachment #1)*
- *Iowa has employed the services of 40 volunteer boat inspectors*
- *Wildlife Forever is helping get discounts for some billboards*
- *Iowa is cooperating with Minnesota Sea Grant to distribute zebra mussel tattoos and information at kids fishing day in July at all Mills Fleet Farm stores*

South Dakota: Andy Burgess

South Dakota has developed new internal agency equipment handling policy to prevent the inadvertent spread of ANS. Heated pressure washers are now available at all regional offices to decontaminate equipment.

Veliger sampling below Gavin's Point and Randall dams continues, but no positive samples have been found since the initial reports in 2003. They will hire three seasonal interns this summer and do more Veliger sampling, including adding Lake Francis Case to the list of state waters being monitored.

Andy organized a two-day intensive training workshop for agency staff, marina operators and representatives from several other state and federal agencies in Pierre. Day one included a Level 1 Watercraft Inspection and Decontamination training by Bill Zook and day two focused on several educational sessions instructed by Andy and others covering all ANS species, identification, equipment handling, monitoring, etc... The training was attended by more than 50 individuals.

- *South Dakota has received financial support from Izaak Walton, Wildlife Forever and the National Park Service to continue to operate their two highway billboards.*

Montana: Eileen Ryce

Montana has a new comprehensive AIS bill before this session of the Legislature that is receiving near unanimous support. It establishes an invasive species account which can receive donations that can be used for ANS work in the state. It established “management area waters” for those areas with existing AIS or those considered to be at high risk. In these areas the state would have expanded rulemaking authority to limit access; stop, inspect and decontaminate watercraft; and establish stricter penalties for violations.

- *The Department of Fish, Wildlife & Parks has conducted several trainings for many agencies including the Montana DOT, Montana Department of Ag, FWP, counties and others*
- *The agency website now allows the public to report AIS sightings, following the Kansas model*
- *Access signs are being updated at all access areas and is expected to be completed by this fall*
- *A pilot project to control Eurasian water milfoil and curly leaf pondweed using aquatic herbicides on 20 acres on the lower Clark Fork will be implemented this summer*
- *The FWP and the CSKT is being pressured to allow the importation of grass carp (triploid) to control aquatic vegetation on private ponds*
- *Working to get more boater survey data into the 100th Meridian database*

Kansas: Jason Goeckler

There are now six zebra mussel positive waters in Kansas; El Dorado, Perry, Marion, Cheney, Afton and Winfield City Lake. El Dorado has shown a boom/bust cycle in the past couple of years; 2008 was a bust year. Marion is a walleye brood stock lake and Perry is in the Missouri Basin.

Jason presented the results of a survey of 5,000 Kansas boaters that received a 27% return. Some the key findings from this survey included:

- *72% of boaters get their infested lake information from signs*
- *92% think it is very important to take precautions to prevent spread (53% in 2000)*
- *The top 5 sources for ANS information: regulation handbook, newspaper, signs at launch, TV, magazines.*
- *60% take some precautions to avoid transporting ANS on their boats*

New recommendations have been made to improve management and control of the live baitfish industry in the state. Not adopted.

Recommendations include:

- Restrict transport of wild-caught bait*
- Explicitly prohibit the disposal of baitfish into the waters of the state*
- Mandatory drain of water*
- Prohibit the transport of plants*

62% of Kansas anglers use live bait

71% purchase from commercial dealer

68% release live bait into the wild

Majority of anglers surveyed approve of restrictions on baitfish collection

Kansas reported expanding its arsenal of outreach materials to include:

- *Tailgate signs for agency vehicles based on Utah model (see attached proof photo)*
- *Video links on agency website*
- *Mailing of ANS packets to marinas*
- *Direct mailing to boat owners*
- *New (\$2) paperweights*

A case of VHS has been found at local fish grower (this was a false positive) and Hydrilla has been found in a Kansas City lake where Sonar will be used in a multi-year eradication effort-underway.

Nebraska: Steve Schainost

The eradication of zebra mussels from Offutt Base Lake will be covered in a separate, project specific section of the minutes.

Nebraska Game and Parks and the University of Nebraska (NU) have been working cooperatively through the new state Invasive Species Council (formed as a result of a 2007 conference on invasive species held at NU) on a legislative bill that would give the Council official standing and clear the way for the state to develop a state ANS Management Plan. The bill did not pass in the recent legislative session but will be re-introduced next year.

The discovery of zebra and quagga mussels in Colorado has generated a lot of interest in doing more monitoring and watercraft inspections in western Nebraska where a number of large waters receive heavy Colorado boater use. This has spurred more interest in general about the ANS issue with the public and within the agency.

Missouri: Tim Banek

Missouri has established new regulations closing four small state hatchery supply lakes to outside watercraft and live bait. A few small boats are maintained for public use at these sites. All lakes are agency owned.

Tim organized two Watercraft Inspection and Decontamination training sessions in the state this past spring. Bill Zook and Tim conducted the Level One trainings at Lake of the Ozarks and in Northern Missouri for about 90 individuals from several state and federal agencies and the private sector.

There were two new zebra mussel observations in the state in 2008, both on the Missouri River; at the Isle of Capri's (riverboat) Casino in Kansas City and at the Central Electric Power Cooperative at Chamois, MO.

Tim also reported the following:

- *Missouri now requires that all bait dealers to register and identify the source of their bait supply*
- *The Department of Conservation has updated internal fish production and equipment handling protocols to prevent the spread of ANS resulting from their activities (HAACP plans have been implemented for several activities)*
- *They installed highway billboards in 2008 based on "Don't Move a Mussel" theme, however, these will not be funded in 2009*

- *All field staff have been instructed to replace felt-soled waders with the new “sticky” rubber-soled boots*
- *Printed new Zap the Zebra brochures with Missouri logo in 2008*
- *Hired an intern for 6 months*
- *Conducted veliger sampling at seven reservoirs in the state; all 2008 samples collected were negative*

North Dakota: Lynn Schlueter

- *The first appearance of curly-leaf pondweed was reported in Lake Sakakawea in early 1980; it is now found in Lake Ashtabula and Sheyenne River near Valley City, ND*
- *Boater survey’s completed in 2008 indicated that less than 50% of non-resident boaters have any knowledge of the dreissenid mussel issue or ANS precautions*
- *North Dakota is giving a grant to Friends of Lake Sakakawea for educational messages in newspapers and on radio stations, development and printing of ID booklet, and other ANS prevention efforts*
- *Devils Lake Chamber of Commerce’s Fishing Tournament Committee required participants in tournament they sponsored to have their boats/motors/trailers and equipment inspected and decontamination, if needed, to participate in their tournaments*
- *North Dakota intends to increase veliger sampling and substrate monitoring in the state in 2009.*
- *New regulations on importation of live aquatic bait into the state are in effect*

U.S. Bureau of Reclamation Update – Stephanie Jordan

Stephanie is working on development of an agency invasive mussel management plan for USBR’s Plains Region and will be reviewing area plans in the region for compatibility in developing comprehensive plans. She is also helping to coordinate prevention and managements plans between US Army Corps of Engineers and USBR in the region.

100th Meridian Database/Website Update – Dave Britton

Dave reported that he expects to complete data entry of a large backlog of boater survey data by the end of July. The amount of boater survey data

has increased dramatically in the past two years and it's been difficult to keep up. He will also be expanding the database to include floatplane checks.

The 100th Meridian database is being upgraded with the addition of several new features and items, including the inclusion of the new notification database. He is always looking at ways to become more efficient in the management of the database as it continues to grow. Any suggestions on improvements or new features needed should be forwarded to Dave.

Funding Priorities and Forecast – Erin Williams, Stephen Phillips

Erin reported that the Region 6 budget for this year includes funding for 100th Meridian support, HAACP training, Asian carp research and work on New Zealand mudsnails. She reported having about \$45K available for projects supported by the MRB Team.

Team discussion resulted in the following recommendations for funding priorities:

- *27-28K for the Montana veliger lab*
- *11K for Nebraska???*
- *5-8K for outreach material production*

Offutt Base Lake Eradication Project – Steve Schainost

Steve summarized the results of the Offutt Base Lake zebra mussel eradication project completed in two phases; in the fall of 2008 and spring of 2009. The cost of this project was paid by the Department of Defense.

A contractor was hired to do the work. The first treatment (fall 08) involved the application of 640 tons of potash and 32,000 pounds of Cap Sol at a cost of \$383,360 to attain a concentration of 1 ppm. Follow-up monitoring showed the concentration declined to .7 ppm after one day and to .25 ppm after three days. Six live colonies of mussels were monitored and all were dead after 7 days. Veliger monitoring showed no veligers present following the treatment.

A major fish kill was observed the day following the treatment consisting of primarily carp and other non-game fish species.

Phase two of the project was completed in April 2009 and monitoring will continue for the next several years. All indications are that the project was a complete success. Boating restrictions remain in place.

Western Regional Panel (WRP) Quagga/Zebra Mussel Action Plan (OZAP) – Erin Williams, Eileen Ryce

Eileen and Erin gave a brief overview of the Quagga-Zebra Mussel Action Plan that will be presented in more detail later in the week to the Aquatic Nuisance Species Task Force. The plan is in direct response to a request by federal legislators for an integrated regional plan to prevent and control the expansion of quagga-zebra mussels in the western US. The Q-Zap Plan lists the highest priority action items and attaches an estimated cost to each. Total estimated cost to implement all projects is about 150 million dollars.

WRP Recommended Protocols and Standards for Watercraft Intervention Programs in the Western United States – Bill Zook

At the request of the Western Regional Panel, PSMFC designed and distributed an on-line survey of all agencies and organizations in the western United States who employed some form of watercraft intervention program to prevent the spread of quagga/zebra mussels on trailered watercraft and equipment. PSMFC received a 96% return of completed surveys and the results will be published shortly.

The results of this survey can be viewed by accessing the following link and using the password “reviewer”

http://www.surveymonkey.com/sr.aspx?sm=hA3ezeAgMIXRyi4JIvBa2suHxd8cmun2JbYS_2fnrSUGe_3d

The results of this survey will be used to develop a set of recommendations for uniform minimum protocols and standards for watercraft intervention programs in the western US. A review draft of that report is expected to be available in early summer.

Asian Carp Update – Rob Klumb

- *Rob and others are conducting large-scale standardized fish sampling efforts in the lower Missouri Basin with relatively low*

capture rates for Asian Carps This multi-agency monitoring program is funded by the US Army Corps of Engineers and partners include; USFWS (Pierre and Columbia MO), South Dakota Game, Fish and Parks, Nebraska Game and Parks Commission and Missouri Department of Conservation. The population is hard to sample and appears to be declining. The USFWS office has completed a report on Asian carp captures as part of this program which is available for viewing and download at the following site

<http://www.fws.gov/greatplainsfishandwildlife/>

- *USFWS is cooperating with South Dakota State University looking at tributary streams in the Missouri Basin; James, Vermillion and Big Sioux rivers. This four-year study will look at impacts of Asian carp on native fishes and includes a doctoral student and one master's student.*

Denver Monitoring Workshop Update – Dave Britton

A dreissenid mussel monitoring workshop was held this winter in Denver to come-up with a set of recommendations for a comprehensive monitoring policy and more consistent protocols and standards for early detection programs in the western US. Discussions revolved around an assessment of alternative sample analysis and collection methods, other types of early detection sampling programs and standardizing terminology.

A number of presentations and much of the discussion focused on the pros and cons of the current state of both microscopy and PCR for detecting quagga/zebra mussel veligers in samples. The consensus of the workshop was to continue to use and further develop both technologies unless a clear choice becomes evident.

The workshop also tackled the issue of terminology as it relates to identifying waters that may be impacted by quagga/zebra mussels. The term “Positive” should be used to indicate waters where mussels have been confirmed and “Suspect” for those waters where veligers have been identified in at least one sample, but are not confirmed.

A report summarizing workshop results will be published sometime this summer under Bob Pitman's direction. Dave asked the MRB group for more input on the report when it becomes available.

Veliger Lab Update – Eileen Ryce

Montana Fish, Wildlife & Parks continues to process veliger samples from South Dakota, North Dakota, Nebraska, Kansas and Missouri as well as their own. The goal is to process samples within four weeks of being received.

Eileen reminded all states to get their samples in as they are collected and not stockpile them to the end of the season for best results and fastest turn-around. All samples are split with a back-up sample maintained. Eileen committed to processing up to 50 samples per state in 2009 and will re-send protocols for collection, preservation and shipping.

The group later decided that funding the veliger lab was the basin's highest priority for USFWS funds used to support Missouri Basin mussel prevention work.

Colorado River – South Platte River Connection – Elizabeth Brown, Bill Zook

Elizabeth Brown described the transfer of water from mussel positive reservoirs operated by the Bureau of Reclamation as part of the Colorado-Big Thompson Project on the west slope of the Rocky Mountains to reservoirs on the west slope and South Platte River drainage. So far there have been no confirmed populations in any of the east slope reservoirs or project works, but we should expect that these waterways in the upper reaches of the South Platte River (Missouri Basin) to become positive in the near future based on this current situation.

To Do List

- 1. Tim Will provide a template to team members for billboards being used in Missouri*
- 2. Eileen will send Montana boater survey data to Dave for inclusion in the 100th Meridian database*
- 3. Eileen will resend protocols for preparing and shipping plankton (veliger) samples to those states using the Montana Lab*

- 4. Lynn will send copies of new billboard and signs being used in North Dakota*
- 5. Dave will provide the group with copies of the mussel monitoring report, the result of the Denver workshop when completed*
- 6. Dave will finish updating boater survey data by the end of July*
- 7. Team members will provide Dave with any new photos or other outreach information so it can be used to expand the “outreach resources” information provided at the 100th Meridian website*
- 8. Dave will check on the availability of additional or redistributed PDA’s for boater surveys*
- 9. Group will provide Dave with suggestions for 100th Meridian website enhancements*

Next Meeting

The next meeting of the Missouri Basin Team will be in the Kansas City area sometime in March, 2010.

After Hours Update

Once again the SOUTH takes team honors in the 5th Annual World ANS Open Bowling Championship. However, a member of the NORTH team once again takes individual honors. Since perennial champ Bill Zook was injured, Paul Heimowitz, an interloper from the Columbia Basin Team, bowled out of his mind to take the title of Best ANS Bowler in the world. Unfortunately, the best ANS bowlers from Missouri, Kansas, Nebraska, North Dakota, Montana and Iowa, once again could not contend. Wait until next year!!

Attachments

Attachment # 1 – Iowa DNR

Boat Owner Awareness and Behaviors Regarding Invasive Aquatic Species Summary of 2008 Mail Survey

In June 2008, the Iowa Department of Natural Resources (DNR) sent a mailer concerning information about zebra mussels to all (over 266,000) registered boat owners in Iowa. During the fall of 2008, the DNR sent a mail survey to a random sample of 5,000 boat owners throughout the state. The 1,017 respondents provided information on the use of their boats, awareness of aquatic AIS (AIS) issues, compliance with the AIS law, and use of a variety of methods designed to reduce the transport of AIS. A secondary purpose of the survey was to determine if the emphasis in outreach in the Northeast and Northwest regions of Iowa could be detected.

The most common types of boats owned were rowboats and fishing boats followed by speed boats. Pontoon and cruising boats were the most frequently used by boat owners during 2008. Twenty percent or more of the row/fishing boat, canoe/kayak, and sailboat owners did not use their boats in 2008. All boating frequency groups were equally likely to take steps to prevent the spread of AIS.

The boaters that recalled receiving the mailer had greater awareness of AIS and the law prohibiting the transport of AIS and were more likely to take steps to reduce the spread of AIS. The mailer moderately or significantly raised the awareness of AIS for about 60% of all boaters. The mailer stimulated about one-third of those that recalled receiving it to clean and dry their boats. Slightly more than half of the boaters recalling the mailer indicated they already followed the recommended steps to clean their boats.

A majority of boat owners indicated they drain the water from and inspect their boats, while less than half wait five days between boating excursions or clean everything that touched the water. All boat owners indicated there were few barriers to preventing the spread of AIS. About 71% indicated they were very likely to take steps to prevent the spread of AIS, while about 23% said they took some steps every time they went boating.

Most boaters believe AIS are a problem and were aware that transporting AIS was illegal. Awareness of the fact that transporting AIS in Iowa is illegal increased with frequency of boat use. Boaters aware of the law were much more likely to take steps to reduce the spread of AIS and comply with the law than

those not aware of the law. Three-fourths of the boaters aware of the law reported they comply with the regulations. Boat owners in the Northeast and Northwest were more likely to report that they were aware of the law prohibiting the transporting of AIS than boaters in other regions. One third of the boaters were concerned about the \$500 fine for transporting AIS.

There was a large difference in the number of waterbodies used by owners of different types of boats. About two-thirds of the row/fishing boats and canoe/kayaks used several different waterbodies, while one-third or less of the owners of the other four boat types used multiple waterbodies during 2008. Boaters using several waterbodies drained water from their boats, inspected their boats and waited five days between uses of their boat more often than single waterbody users.

Signs at water access points, mailings to home or business, displays at various venues, and regulation books were reported as the most frequent sources of AIS information. As boating frequency increased, the recall of the different types of AIS information also increased. Boaters using several waterbodies recalled seeing several sources of AIS information with greater regularity than single users. When asked how they would like to receive information about AIS, boaters overwhelmingly selected to see reminders near waterbodies they use. One-third of the boaters indicated that information at retailers, such as bait shops, marinas, and other boating-related establishments and facilities would be helpful.

Boat owners in the Northwest recalled a variety of AIS information, including billboards and watercraft inspectors, at higher rates than boaters in other regions. Signs near waterbodies and AIS information in regulation books were recalled less frequently in the Southwest and Interior River regions than in other regions.

Attachment #2 – Tailgate sign proof developed by Utah Division of Wildlife and adopted by Kansas Department of Wildlife and Parks



Agenda

*Missouri River Basin ANS (100th Meridian) Work Group Meeting
Holiday Inn, Bozeman, Montana
May 18, 2009*

<i>8:30 – 8:45</i>	<i>Introductions</i>	<i>Group</i>
<i>8:45 – 9:00</i>	<i>Approval 2008 Minutes and 2009 Agenda</i>	<i>Group</i>
<i>9:00 – 9:15</i>	<i>Reconciliation of 2008 “To-Do List”</i>	<i>Group</i>
<i>9:15 – 10:15</i>	<i>Agency Updates</i>	<i>Group</i>
<i>10:15 – 10:30</i>	<i>Break</i>	
<i>10:30 – 11:00</i>	<i>Agency Updates, Cont’d</i>	<i>Group</i>
<i>11:00 – 11:30</i>	<i>Offutt Base Lake Eradication</i>	<i>Steve</i>
<i>11:30 – Noon</i>	<i>Funding Priorities and Forecast</i>	<i>Erin/Group</i>
<i>Noon – 1:00</i>	<i>Lunch Break</i>	
<i>1:00 – 1:30</i>	<i>100th Meridian Database/Website Update</i>	<i>Dave</i>
<i>1:30 – 2:00</i>	<i>National Z/Q Mussel Action Plan</i>	<i>Erin</i>
<i>2:00 – 2:30</i>	<i>WRP Watercraft Intervention Program.....</i>	<i>Bill</i>
<i>2:30 – 2:45</i>	<i>Asian Carp Update</i>	<i>Rob</i>
<i>2:45 – 3:00</i>	<i>Break</i>	
<i>3:00 – 3:30</i>	<i>Denver Monitoring Workshop</i>	<i>Dave</i>
<i>3:30 – 4:00</i>	<i>Veliger Lab Update/Information</i>	<i>Eileen</i>
<i>4:00 – 4:30</i>	<i>Colorado and S. Platte River Connection ... Elizabeth, Erin, Bill, Jason</i>	
<i>4:30 – 5:00</i>	<i>Review “To Do List”, Set Next Meeting Unfinished Business, Etc.....</i>	<i>Group</i>
<i>5:00 – 7:00</i>	<i>Diner Break</i>	

7:00 – 9:00

2009 National ANS Open Bowling ... Bozeman Bowl