

**100<sup>th</sup> Meridian Initiative**  
**Missouri River Team Meeting**  
**May 8, 2006**  
**Marina Inn Hotel**  
**South Sioux City, Nebraska**

**1. Team Members Attending - Introductions**

**Tina Proctor – USFWS, Region 4 (*Minutes*)**  
**Bill Zook – PSMFC, Portland (*Chair*)**  
**Eileen Ryce – Montana DFWP, ANS Coordinator**  
**Lynn Schlueter – North Dakota DFW, ANS Coordinator**  
**Steve Schainost – Nebraska DWP, ANS Coordinator**  
**Jason Goeckler – Kansas DFW, ANS Coordinator**  
**Kim Bogenschutz – Iowa DNR, ANS Coordinator**  
**Brian Canaday – Missouri DC, ANS Coordinator**  
**Stephen Wilson, National Park Service, ????????**  
**David Britton – USFWS, Arlington Texas**  
**?????????? – USCOE, Omaha District Office**  
**South Dakota has just hired a new ANS Coordinator who will start in June**

***SEE ATTACHMENT FOR REVIEW OF 2005 “TO DO” LIST***

**2. 100<sup>th</sup> Meridian Website and Database Programs**  
**David Britton**

David reviewed the data available on boater surveys on the 100<sup>th</sup> Meridian Initiative web site.

There has been a decline in the amount of data collected for and submitted to the boater survey database over the last couple of years. Boater surveys have been useful in determining a pattern of movement by recreational boaters moving from one water to another. David reminded the team to get data in to him for database entry as soon as possible. He demonstrated how the database is now linked to the Google Earth mapping program by focusing on Sooner Lake in Oklahoma.

David briefed the Team on the recent Bioscience article (Drake & Bossenbroek, 2004) which includes a map based on a model that predicts the probability of zebra mussel colonization. This map, based on a look at conditions in areas with zebra mussel populations and comparing those to conditions in as of yet uncontaminated waters, showed the upper Missouri Basin as having a low probability for zebra mussel infestation. The majority of the spread to date has

come through water currents and downstream drift, but moving west or upstream will most likely be through boater movement. New red dots show reservoirs in Kansas and Oklahoma have been added to the database map. Also, he noted that the new infestation in Offutt Air Force Base in a lake adjacent to the Missouri River falls beyond the predicted distribution from the D&B model.

David has also put the ZM monitoring Sites on to the 100<sup>th</sup> Meridian website, linking it with the Google Earth software. He is using data from Portland State University, also from USFWS Region 2 in Oklahoma. He will set it up so it can be queried regarding when data was entered, status of zm populations, etc. You can zoom all the way in to see where the sampler is. It uses GPS measurements. The database includes the following information;

Where?

- latitude, longitude
- HUC
- Waterbody name
- Specific site name

Who?

- Who monitors the site
- Who is it reported to

How Often?

- Daily, monthly, bi-monthly, sporadically

Sampling Method

- plankton tows, Portland sampler

Life Stage

- Adults, larvae or both

Status

- Zebra mussels found or not
- Date of last report

***David will check with PSU and make sure the data he gets from them is updated.***

ND and KS both indicated that they ask questions regarding boat movement during their creel surveys, i.e. what was the last water you have had your boat and where are you going next, as part of their risk management programs. David indicated that he may be able to add those reports in to the database.

A template for “this boat already checked” stickers is on the web site. When a boater is interviewed at positive waters, the sticker will be put on the handle side of the winch post on the trailer. These stickers are vinyl and guaranteed for 3-5 years. Other researchers can tell when they see one of these stickers that the boat has been in infested waters. Kansas will be using specific stickers for people who are interviewed at El Dorado. The Power Squadron will be interviewing boaters at the Missouri/Mississippi confluence area and will be handing out stickers there

also. Kim mentioned that MN and IA also hand out stickers but not necessarily from positive waters. MN sticker appears similar.

**3. 100<sup>th</sup> Meridian Lewis and Clark Evaluation**  
**Bill Zook, PSMFC**

At the annual meeting in Las Vegas in 2006, the group heard from Don Maclean that a 5-year accomplishment report had been requested. A committee was formed to develop a list of questions to send to members, headed by Robyn Draheim from PSU. They have met by conference call and had a blog to discuss issues of what to report. Issues included reporting the projects that are actually funded and projects that are in the spirit of 100<sup>th</sup> meridian. There was a final questionnaire approved. *Bill agreed to contact Robyn and get the committee together again to decide who to mail to, when to mail it, what the deadline is and who should receive the questionnaire Don MacLean from the FWS Washington Office has agreed to put the information together and write the report.*

Bill presented a Powerpoint on the legacy of the ANS prevention work accomplished as a result Lewis and Clark Bicentennial Project funding.

**4. Report on Offutt Air Force Base**  
**Steve Schainost, NE Wildlife and Parks**

Steve presented a slide show explaining the history, location, actions to date and tentative response plans for recent discovery of zm's in Base Lake located on Offutt Air Force Base adjacent to the Missouri River in the state of Nebraska. That slide show is available from Steve.

The Team had many questions and suggestions for a course of action for Nebraska and there was a very productive exchange of ideas and offers of assistance. *Team members will provide Steve with written comments and information about treatment options as soon as possible and Steve will keep the team apprised of actions taken.*

The group consensus was that the first option should be treatment for eradication while the lake level is well below the outlet culvert and lake levels are low. Steve will continue to work with base personnel to restrict use of the lake and evaluate treatment options.

**5. Burma Shave Sign Campaign**  
**Bill Zook, PSMFC**

Bill presented a Powerpoint introducing the Team on the plan to install two sets of Burma Shave-type signs on US 2 and I-94 just east of the place where Montana

will conduct an evaluation of the effectiveness of two existing TIS systems this summer. He had hoped to get them in this spring in time to be evaluated along with the TIS systems, and if proven effective install many more sign-sets as a way to increase public education on the ANS hitchhiking issue in a new and fresh way.

The advantage of this type of highway sign campaign is the relatively low cost and the fact that they can be placed at or beyond highway right-of-way without government approval and little restriction. They are a proven attention grabber and are just as viable for small but important rural highways. They can also be installed without need for expensive contractors.

However, Bill determined that Montana has a specific prohibition against Burma Shave type signs and some other states, including North Dakota, are objecting because uncertainty about compliance with the Federal Highways Beautification Act. ***Bill will address this with the Federal Highway Administration next winter to get a clarification that can be used by states to assure they are not in violation of provisions of that law and risk losing Federal funding.***

A number of states now approve Burma Shave type signs on US and Interstate highways and some state DOT's use them to advertise seat-belt and safety regulations, so it should be relatively easy to get a favorable clarification when time permits.

Tina mentioned invoking the provisions of the Invasive Species Act, calling for cooperation from all Federal agencies in ANS prevention. Jason pointed-out that Florida DOT now uses them and others have seen them recently on US highways in Oregon and Washington.

After considerable discussion the Team agreed that we should move ahead with putting some sign-sets up in the MRB, but that the 1-800 number and \$500.00 prize used as an incentive to get calls and preliminary information about their effectiveness should be dropped. The group also agreed to amend the signs to read as follows:

You brush your teeth  
You brush your hair

You wash your Clothes  
To show you care

You're squeaky Clean  
But, how "bout your boat?

Does it get washed  
Before you float?

Please help protect our waters  
For your sons and daughters

Wash your Boat  
Before you float!

Stop Aquatic Hitchhikers sign (w/logo)

**6. TIS Evaluation**  
**Eileen Ryce**

Montana has 5 installed and operating TIS systems broadcasting ANS information. Two of these are located on US 2 near the ND border and on I-94 near the North Dakota border. One at three forks at headwaters Missouri River and one on highway 2 at Idaho border. Another is in south going into Yellowstone National park. In 2004 and 2005, MT did thousands (7-8,000) of angler surveys. In 2004, 4 responses mentioned TIS, in 2005, 2 responses mentioned TIS. All of the costs combined of TIS means cost per interaction in Montana = \$60,000. Interviews were targeting people who were launching boats in MT. The TIS at Three Forks is on one of the busiest Interstates in the State.

Eileen is planning to do a scientific evaluation of the effectiveness of two of these TIS systems this summer, using weigh stations on I-94 and Highway 2. They moved the TIS signs closer to ND border to give people a chance to tune in and listen. A highway sign will tell all anglers and boaters have to pull in at a check station. Questions will ask if they saw the TIS sign, did they hear the message, will they change their actions because of the message. If the Burma Shave signs get put in, there will be questions about those as well. They will still be doing boater surveys in summer 2006.

In Montana, there is a big difference in the attitude and level of understanding about ANS between motorboat users and bank anglers. There is also a difference in how they are getting information. Motorboat – government – fishing guide one of best sources. Fly fishers are readers – signs, web sites, newspapers.

Lynn put Lewis and Clark messages on TIS at west end of Devils Lake. In doing creel surveys of anglers, no one mentioned radio, TIS, etc.

TIS may have its place in a captive audience, such as within a park, lake, etc. Studies in literature have been on captive audiences needing information specific to their travel/activity plans

**7. Watercraft Inspection Training**  
**Bill Zook**

Watercraft Inspection Training (WIT) is a new project funded by the USFWS to provide training on boat inspection for zebra mussels for boating law enforcement personnel in the far western US (so far). A training curriculum has been developed and three live training events have been held in the past year, resulting in the certification of boating law enforcement professionals from Oregon, California, Idaho, Nevada and Arizona, approximately 250 in total. Live training costs \$3-4,000 per event when scheduled in conjunction with existing conferences or meetings of boating law enforcement personnel.

A video and instruction manual based on the live training is being developed with funds from EPA Grant for \$15,000. To take the training beyond the first five states, there will need to be more funding or ANS coordinators can use the new video to train local boating law enforcers. ***Video will be available in DVD, CD and VHS format and will be available at no cost to all ANS Coordinators in North America in July of 06.*** It will be approximately 50 minutes long, professional quality and will include animation, live footage, slides, voice over, skits, etc. It isn't just three people talking over Powerpoints.

The live training includes an exam, certificate and course evaluation. They overall rating has been about 4.2 out of a possible 5 – between very good and excellent. Everybody likes the jumping carp video!

## **8. Montana ANS report** **Eileen Ryce**

A new group is being formed for Greater Yellowstone Ecosystem – to work together on ANS. Especially interested in fly fishing and shops, guides, etc. Outreach has been successful. Lots of federal agency participation, 5 forests, the NPS, 5 states and the USFWS. Montana has concerns over duplication of efforts and is concerned that this is not the most efficient way to coordinate efforts, since they already coordinate with most of the same agencies in the region. To make the group work, states need to be involved; the outreach partnership will go ahead.

Montana has received a federal aid grant to purchase two boat washing systems for \$100K. They are planning on purchasing a Pre-fix system (300 boats per tank) for Ft. Peck that will be kept at Hell Creek Campground. The price is quoted at \$50K. They are also buying a system that is on a 16-foot trailer where water is also re-circulated. They hope to have it in use by the end of the summer. USFS has also purchased a portable boat wash station for use by both the Forest Service and the state; however, it is not a recirculation type so it has to be used in a place where water drainage is not an issue. These facilities will be staffed. Operation costs are unknown.

Last week a bucket transfer was prevented. A duck hunter was intercepted who was about to plant rice grass in a Wildlife Management Area to help the ducks.

Some rumors have been circulating that Ft. Peck is positive for ZMs. There is a potential that there are ZMs because of the peanut butter jar incident, but it is not considered positive at this time. Shoreline investigations this spring have not turned –up any sign of zebras mussels in the reservoir. MFWP just opened up a \$19M hatchery that uses Ft. Peck Water.

**9. North Dakota ANS Report  
Lynn Schlueter**

ND proposed ANS/prohibited species list is being reviewed by the Director. It can be reviewed each year and updated. Next task is to come up with ANS proposed regulations – Lynn is using ideas from other states. Rapid response plan was very helpful when there was an infestation of Eurasian watermilfoil. The area was immediately dewatered, lake level dropped by 12 feet. However, this past winter was very mild, so it will be interesting to see if there is any survival. Lynn will have a summer assistant this year.

North Dakota considers Podcasts as a viable new mass media outreach opportunity – free at this point. They will be doing angler surveys this year on the Missouri River and Lake Oahe.

**10. Iowa ANS Report  
Kim Bogenschutz**

Kim got a budget increase of \$450K – ½ of the boat registration increase implemented this year in Iowa has been designated for ANS prevention and the other ½ is for water safety. As a result, she will hire a full-time assistant in her program. Working with law enforcement people on this legislation has really helped their relationship. Kim did training at one of their meetings last spring.

Iowa found zm's in Clear Lake in late August – 100 miles from the nearest infestation in the Mississippi River or from the nearest infestation in Minnesota. They had to get there on boats. A local high school student found them on two rocks. No additional zebra mussels have been found since, despite some investigation by agency personnel. Kim expects that in 2-3 years, based on input from other zebra mussel positive states, there will be a full blown population. The Lake is being watched – has not yet been posted as infested. A boat at Lake Okoboji was being repaired and two dead mussels were found two weeks ago. This boat came from the Black River in Wisconsin.

Iowa Great Lakes Safety Commission is funding 3 additional positions this summer. All 11 of the water patrol officers working in northwest Iowa will rotate through and do inspections at boat ramps. Eventually there will be 3 people in each of the other districts in the state.

Kim is working with Minnesota and Wisconsin utilizing Sea Grant for outreach, including the use of bill boards, TIS, newspaper ads, visitor center displays, gas pump toppers, banners, PSA's, etc. They will also have an evaluation component for these outreach tools. Project funded through 2008.

Iowa now has a fisheries biologist stationed on the Missouri River funded through USCOE. This person's office will be located in Ottawa, IA. Kim is producing an Asian carp video this summer.

There will be an International Asian Carp symposium in Peoria, IL, August 22-23 in conjunction with MRBP meeting.

**11. Nebraska ANS Report  
Steve Schainost**

Clean Your Boat videos were distributed to boating safety instructors (100<sup>th</sup> Meridian funds). The Power Company in Omaha is now including an ANS message with their Utility bills. Two power companies did veliger sampling last summer. Steve has put out PVC substrates for the past two years, but this year, will check docks when they are pulled out of the water in the fall. Chinese Mystery Snails have been found, but they don't seem to be having too much impact. Steve thinks people may be using them for bait. ANS budget in NE Game and Parks is \$0K.

**12. Kansas ANS Report  
Jason Goeckler**

El Dorado Reservoir - Jason does plankton tows April - November and presented the information he has collected to date in a graph. The City of El Dorado has not addressed the threat to their water supply yet. Jason worked with the city to dewater the wet wells and found very dense zm populations. Now USCOE is checking into doing some kind of treatment in the wet wells.

Jason will be doing boater surveys this summer to add to 100<sup>th</sup> Meridian database. He will have a student taking water samples from live wells and bilges to check if veligers are being transported. They will use a sticker for boats leaving El Dorado (as soon as they get them from USFWS) and a student is conducting surveys this year to evaluate Kansas's education and outreach efforts on the lake.

In August 2004 biologists from Northeastern State U. in Oklahoma found zm Veligers at 1.7 per liter in Cheney Lake. Jason has done plankton tows every month in 2005 and didn't find anything. Neither did the biologists from NSU. Jason will sample through June this year also. No adults seen.

Chinese Mystery Snails and also Japanese Mystery Snails have been found. They produce a lot of fecal material. May have been used for food or bait or in aquarium tanks.

Jason has been working on new bait fish regulations, will be categorizing specific species. They will be presenting the plan for public review this winter.

Kansas allows stocking of grass carp and has gone to the use triploids only. They will eventually extend this mandate to the growers also. *He will be training Law Enforcement on ANS ID beginning next year and would like examples of rusty crayfish, larval Asian carp to use for this course.*

### **13. Missouri ANS Report Brian Canaday**

Brian briefly explained his new full-time Invasive Coordinator position in Missouri and the fact that he will be working with terrestrial as well as aquatic invasive species.

Black Carp triploids are being produced in Missouri. The State has given growers one year to phase out this production. They have also been working with bait dealers to stop the importation and sale of rusty crawfish. They are also tracking potentially invasive frogs and may take action soon. Missouri has completed a draft ANS plan.

Some of this year's accomplishments in Missouri include; signing all boat ramps, direct mailings to 3,500 7-12<sup>th</sup> grade science teachers, creation of an Asian carp working group. They are working with the St Louis Zoo on a project that would render Asian carp into gelatin form for use to feed zoo animals. The product would be marketed as Zoo Food. They are looking for funding to expand this project to include market research to see if canned carp can be produced for Chinese market.

There has been an emphasis placed on outreach in the White River/Table Rock Lake area this year, including mailings to marines, bait shops, boat owners, boat dealers, TIS/PSA's, signs at public/private ramps and fishing tournaments.

There is also an on-going effort to educate bait shops, bait dealers, pet store owners. Bass Pro Shops is considering adding ANS info for new boat owner packets, stickers for boat and trailers.

### **Extra-curricular Activities**

The South Defeats the North 2-0 in the evening bowling competition. However, Bill Zook of the North Team wins the trophy for high series. Uniform shirts next year.

Next meeting: March in Kansas City (co-host MO and KS) No Monday, one full day.

## **ACTION ITEMS**

1. Tina will send Zap the Zebra brochures to Steve, Jason and Brian.
2. David will check with PSU and make sure the data he gets from them is updated.
3. Bill will contact Robyn and get the 100<sup>th</sup> Meridian Accomplishment Report Evaluation Committee together again to decide who from the MRB Team should be on the mailing /input list, when to mail comments, what the deadline is and who should receive the information.
4. Burma Shave signs. Just put SAH on last sign. Get rid of 800 numbers. Keep first three signs. Bill needs 2-3 ideas by end of this week. Bill will send the current wording to everyone at the meeting. Lynn will check at ND DOT. Lynn will get names of biologists to Bill.
5. Everyone will get information to Steve about possible treatment ideas for the Base Lake at Offutt AFB. Steve will make a list of possible actions for the AF.
6. Bill will send out DVD and training manual for the Watercraft Inspection Training he developed for west coast states.
7. MO and KS will co-host and set up the next meeting.
8. All ANS Coordinators should sent info about ZM monitoring to David.
9. Send information on cost to process veliger samples to Tina.
10. David will check with everyone about how many copies of new Zap the zebra brochure they will need
11. Lynn can provide DVD on ND Clean Your Boat video.
12. Veliger Sampling – how many samples need to be processed. Eileen will compile the information. And work out how much Montana could do for a set amount of money. Tina will follow up with information.
13. Jason will send out draft protocol out for review.

## **AGENDA**

**Missouri River Basin ANS Work Group  
May 8, 2006  
Nebraska Room  
Marina Inn Hotel  
South Sioux City, Nebraska**

- 9:00 – 9:10**                    *Introductions and Agenda Modifications ..... Group*
- 9:10 – 9:30**                    *US Fish and Wildlife Service FY 06 Budget Update ... Tina*
- 9:30 – 10:00**                  *100<sup>th</sup> Meridian Website and Database Programs ..... Dave Britton*
- 10:00 – 10:30**                 *100<sup>th</sup> Meridian L/C Evaluation and Future Planning .Tina/Bill*
- 10:30 – 10:45**                *Break*
- 10:45 – 11:15**                *Watercraft Inspection Training ..... Bill*
- 11:15 – 11:30**                *Burma Shave (BS) Sign Campaign ..... Bill*
- 11:30 – Noon**                 *TIS Evaluation Study ..... Eileen*
- Noon - 1:00**                    *Lunch*
- 1:00 – 1:20**                    *Montana ANS Report ..... Eileen*
- 1:22 – 1:40**                    *North Dakota ANS Report ..... Lynn*
- 1:40 – 2:00**                    *South Dakota ANS Report .....TBA*
- 2:00 – 2:20**                    *Iowa ANS Report ..... Kim*
- 2:20 – 2:40**                    *Break*
- 2:40 – 3:00**                    *Nebraska ANS Report .....Steve*
- 3:00 – 3:20**                    *Kansas ANS Report ..... Jason*
- 3:20 – 3:40**                    *Missouri ANS Report ..... Brian*
- 3:40 – 4:00**                    *Team Planning ..... Group*  
*Newsletter*  
*Review and New Activities*  
*Next Meeting*
- 7:00 – 9:00**                    *2<sup>nd</sup> Annual Bowl-a-Rama @ Harmony Lanes Bowling Center*

## Missouri Basin ANS Work Group Meeting (4/27-28/05)

### Follow-up - To Do List

As Reviewed 5/8/06

1. Jason will continue researching the “image pro” software (by media cybernetics) to determine if it can be “tuned” to detect Veligers (Cost: \$5,000).  
***Jason purchased the software and is currently working with it to count Veligers***
2. If above is feasible, a veliger ID lab may be established at the Montana Department of Fish, Game and Parks fish health lab in Great Falls (they already have the camera). Additional funding would be necessary to hire a temporary tech to run samples for all Missouri Basin states during the summer (cost \$8,000 - \$10,000).  
***Montana has scopes and a lab, but they still need software and money for staff. Tina and Stephen will talk about the possibility of using 100<sup>th</sup> Meridian funds for this project. Montana would process samples at no cost for all Missouri Basin states. They would need two part-time staff from May-Sept.***
3. Lynn and Steve S. will find out if their agencies are interested in veliger sampling for this coming summer, if so, funding will be available through USFWS (\$10,000-\$20,000).  
***No veliger sampling in ND in 2005. USFWS will consider providing \$10K-\$20K in 06 to set-up lab in Montana as proposed***
4. Steve S. will contact power companies in the Nebraska reach about supporting some or all of the cost of veliger sampling.  
***Power companies, NE Public Power and Omaha Public Power, did their own veliger sampling in the summer of 05 but have not yet processed samples***
5. Stephen will look into veliger sampling coordination database (is anyone doing it?). He will contact PSU and David Britton.  
***Veliger sampling data will be recorded and be available in the monitoring database on the 100<sup>th</sup> Meridian website***
6. Eileen will work with MDOT to move TIS signs at Wibaux and Culbertson further east to increase the accuracy of the TIS evaluation study to be conducted this summer. Funding is available through USFWS (\$2000).  
***A contract to move the signs for \$5,000 each was awarded by PSMFC in 05, but the contractor failed to move them and the contract has been voided. They will remain in the old location for the TIS evaluation study***
7. Stephen will send electronic copies of his economic impacts of a zebra mussel introduction to hydropower projects on the Columbia Basin document to all Work Group members.  
***The impact study was completed and mailed to each MRB Team member in 05***

8. Eileen, Lynn and Jeff will submit articles for a June 1 publication of a Missouri River Watch newsletter to Bill by May 6.  
***Articles were submitted and Newsletter was published and distributed in June of 05***
9. Bill will edit the articles and Columbia Basin newsletter and submit to Karen McGill (PSMFC) so that a Missouri Basin newsletter can be printed by June 1, if possible.  
***Completed on time***
10. 500-700 copies of the newsletter will be printed and mailed to all marina and portage operators in the basin and 50 copies will be distributed to each state ANS Coordinator for distribution within the state.  
***Completed on time***
11. Each of the Missouri Basin states will make their list of approved fishing tournaments for this year available to the entire Work Group as soon as possible.  
***Completed and will be repeated this year to also include regattas and sailing club events where permits are required and reports are available***
12. Kim will send the Work Group a copy of the Iowa veliger sampling protocol.  
***Completed in 05***
13. USFWS (Tina) will provide \$10,000 for boater surveys at El Dorado Reservoir in Kansas.  
***\$9,000 in Funding was not received until October 05 and boater surveys were not completed on El Dorado Reservoir in 05, but the money will carry over and surveys will be completed in 06***
14. USFWS (Tina) will provide \$2,000 to fund the printing and distribution of the Missouri Basin Watch newsletter in 2005 and 2006.  
***Completed and 05 and 06 Newsletters have been printed and distributed through State ANS coordinators***
15. USFWS funding may also be made available, depending on other projects above, for printing of ANS public outreach and education publications (Zap the Zebra, Mussel Watch, etc.).  
***Completed in 05***
16. USFWS funding may also be made available, depending on other projects above, for development, printing, and postage of an ANS educational curriculum for schools. Tina will contact aquatic education people about education on aquatic invasive species. The Work Group will discuss better use of any current curriculum or the need for development of new curriculum at the next meeting. (Mark Sytsma at Portland State University is creating a web address which will

have all ANS educational materials available. It should be completed by the end of May 2005).

*Was not completed, but Mark Sytsma from PSU is still working on development of an educational website that will list all ANS educational material available, which is still in the development stage today*