

# MINUTES

## 100th Meridian Initiative - Columbia River Basin Team Meeting

October 20, 2010  
Heathman Lodge  
Vancouver, Washington

### Attendees

Noah Adams	USGS, Western Fisheries Research Center
Kevin Aitkin	US Fish & Wildlife Service
Eric Anderson	Washington Department of Fish and Wildlife
Rick Boatner	Oregon Department of Fish & Wildlife
Stephen Bollens	Washington State University
Wendy Brown	Washington Invasive Species Council
Joan Cabreza	PSMFC
Sam Chan	OSU, Sea Grant Extension
Bill Christman	Chelan PUD
Tim Counihan	USGS, Columbia River Research Lab
Steve Crown	Washington Department of Fish and Wildlife
Glenn Dolphin	Oregon State Marine Board
Amy Ferriter	Idaho State Department of Agriculture
Jill Hardiman	USGS, Western Fisheries Research Center
Paul Heimowitz	US Fish and Wildlife Service
Matthias Herborg	Ministry of Environment - Fisheries Science
Rian Hooff	Oregon Department of Environmental Quality
Scott Lund	US Bureau of Reclamation
James Naramore	Clark County Sheriff's Office
Paul Ocker	US Army Corp of Engineers
Blaine Parker	Columbia River Inter-Tribal Fish Commission
Stephen Phillips	PSMFC
Allen Pleus	Washington Dept of Fish and Wildlife
Jim Ruff	NW Power & Conservation Council
Eileen Ryce	Montana Fish, Wildlife and Parks
Scott Smith	USGS, Western Fisheries Research Center
Albert Sutlick	US Army Corps of Engineers
Mark Sytsma	PSU, Center for Lakes and Reservoirs
Corey Turner	Washington State Patrol
Gretchen Volker	USACE - Environmental Planning Section
Bill Zook	PSMFC

Stephen Phillips called the meeting to order at 8:30 am.

The minutes from the February meeting were adopted.

Stephen reviewed the rapid response exercise (#4) held in Spokane Washington September 21-22. It was attended by 24 participants from state, federal and tribal agencies. We exercised an eradication of dreissenid adults (no veligers found) at Two Rivers Marina at Lake Roosevelt. The morning of September 21 consisted of training, including a review of the CRB Plan, and an overview of the ICS Planning Process. After the training, the participants divided into two groups, the Incident Management Team (IMT), and the CRB MAC Group Coordination and Support Staff (C&S). The IMT's objective was to develop the Incident Action Plan for the first Operational Period of response to the infestation. The Coordination and Support Staff focused on the treatment options. These activities carried through into the next day, and concluded with the presentation to the MAC Group, hot-wash, and closeout. The after action report is in preparation and will be posted at [http://www.100thmeridian.org/Columbia\\_RBT.asp](http://www.100thmeridian.org/Columbia_RBT.asp)

Discussion then focused on permitting for mussel eradication under Clean Water Act and Endangered Species Act. Paul said that USFWS intends to use the emergency consultation provision under ESA if the response plan is activated. NOAA would prefer to conduct an "early consultation" process where they would likely engage response agencies to proactively develop best management practices consistent with the conservation and recovery of ESA-listed species prior to invasive mussels being detected in the Columbia River Basin and response actions being required. Therefore, it's still important for the CRB Team to develop advance documentation on treatment alternatives that would be the base for environmental compliance documents that would be a part any permitting process.

Stephen said maybe an intern could be found to undertake this task.

As defined in the current 5-year exercise strategy, the next exercise is tentatively scheduled for Montana in Fall 2011, maybe Lake Koocanusa. Matthias said BC would have interest in participating in this and this would be a good location for a cross border scenario. Stephen/Paul will follow-up with Eileen and Matthias and by January have a better idea of location and times.

Paul Heimowitz led the discussion on draft proposed changes to the Columbia River Basin Rapid Response Plan. The signatories are in the process of reviewing three documents: a set of proposed amendments (NOAA edits to ESA verbiage in Appendix E, and a new provision addressing how to stand down an incident), an amendment approval form (intended to relieve repeated signatures at the top executive level), and an amendment log. . A draft cooperator form was also discussed, and will be distributed in the near future as a secondary mechanism for additional agencies to endorse the plan.

Jim Ruff offered to help get NOAA to sign onto the Plan. Paul explained that NOAA has indicated readiness to sign the plan as soon as the proposed amendments that were just discussed have been approved by the current signatories.

Paul Ocker wanted to know if there was a schedule for updating the Plan.

Paul said we would look into building in periodic update language.

Stephen led discussion on what is the definition for a positive water body for dreissenids (See **Attachment 1** for latest draft, this draft takes into account comments named during the meeting) With the definition we now have, including the caveats, it appears we are at agreement for the Columbia River Basin for what is a positive water body. The next step will be to insert this into the plan through the amendment process discussed earlier (along with what appears to be final consensus on edits to the provisions on MAC chairmanship).

Scott Lund mentioned that in instances where we are not quite sure whether that a find is truly positive, that agencies need to keep suspect information confidential. Paul explained that the new amendment addressing criteria for positive waterbodies also includes provisions for dealing with unconfirmed reports, including confidentiality verbiage.

Stephen discussed the survey of dreissenid detection laboratories undertaken in cooperation with the WRP. For issues on water quality, diseases, agricultural pests, etc., there are state and federal agencies that have authority and a process for certifying laboratories to insure that the quality of analytical data received is in compliance for decision making purposes. However, no such process exists for certification of laboratories that analyze quagga and zebra mussel samples. Many natural resource agencies believe there is an immediate need to test the performance of individual laboratories and validate the reliability of their analytical results, as well establishing an accreditation program for certifying a lab. To address these issues, the Dreissenid Detection Standards and Protocol Coordination Working Group was formed in winter 2010 and “adopted” by WRP Spring 2010. The group’s first task was to conduct a survey of laboratories capable of conducting quagga/zebra veliger identification in order to obtain information on each laboratory’s capabilities and protocols. Seventeen labs responded to the survey (out of 28). Fourteen labs did microscopy, 10 PCR, and 6 FlowCAM and 1 electron microscope. Most respondents favored some sort of certification/validation program for dreissenid detection labs. It is hoped that the upcoming BOR project (Kevin Kelly, lead) on lab testing program and quality assurance will help in the certification effort. The BOR project has tentatively scheduled a meeting/workshop the week of February 7, most likely in Denver. Stephen also said that the national Invasive Species Advisory Council is in the early stages of working on the PCR certification issue.

Bill Zook gave a presentation on the hauler outreach survey and report:

- It was based on previous commercial hauler outreach work done in 2003 and 2007 and on-line survey completed between April 1 and June 15, 2010
- The survey was national in scope and included 500 watercraft transport providers thought to be actively hauling in the western US during the preceding 24 months
- Only 31 completed surveys – Slightly more than 6% return

- Results, analyses and recommendations are presented in a draft report that was mailed to most of the CRB Team on September 30 – (See Stephen or I for an electronic copy if you didn't get one and want to review the draft)
- Comments due back by the end of October – Final report expected by Thanksgiving

Some of the findings from the survey included:

- Nearly half surveyed reported transporting 50+ watercraft/yr.
- Transport within an average of 2.8 regions (20+ states) per year
- 1 in 5 reported operating in zebra/quagga mussel waters
- 87% very or somewhat aware of the quagga/zebra mussel issue
- 48% very aware of all state, federal and local regs where they haul
- 58% (18 of 31) had been subjected to an inspection
- 5 reported it as Positive and 5 reported it as a negative experience
- 53% require all watercraft to be power washed or steam cleaned
- 40% require all water be drained
- 10% require some prescribed drying time
- 63% said they would favor development of industry standards
- 41% said they would support a “green hauler” program
- 26% willing to participate in collaborative effort to set standards

Recommendations in the draft report include:

- Develop BMP's for industry w/ or w/o industry involvement
- Produce an industry specific brochure, booklet or manual
- Establish and advertise a “tab” on 100<sup>th</sup> Meridian website for information
- Produce a video segment based on BMP's
- Develop on-line training program using video
- Develop, maintain and make readily available a list of agency contacts by state for commercial haulers
- Consider project to create a “green hauler” program
- Develop and maintain on-going annual education and outreach effort with the industry: newsletter, mailing, etc.

Discussion followed on best methods for outreach to haulers.

Bill then showed footage on the PSMFC led project to develop a Sea Plane decontamination video which should be *ready for release in November/December. The project was undertaken in conjunction with the National Seaplane Pilots Association.*

Allen mentioned we need to follow-up with commercial float plane carriers on this issue. Allen also said it would be good to include in the video the important role that weeds play in transporting attached aquatic organisms. Allen will provide Bill some still photos.

Bill then discussed the remake of *Don't Move a Mussel*. An RFP for a contractor will be out in the coming month and the hopes to start filming in late February.

Bill then updated the group on the UMPS II document. Funded through the Quagga Zebra Action Plan RFP (PSMFC recipient), the purpose of UMPS II will be to update the current document <http://www.aquaticnuisance.org/wordpress/wp-content/uploads/2010/01/Recommended-Protocols-and-Standards-for-Watercraft-Interception-Programs-for-Dreissenid-Mussels-in-the-Western-United-States-September-8.pdf> with information gathered from researchers and watercraft decontamination program from throughout the west.

Stephen mentioned that the second objective of the project is to work with CRB states/BC to develop a reciprocity agreement and tracking system for watercraft inspections in the Columbia River Basin. Stephen will follow up with CRB State ANS coordinators on this.

Scott Smith discussed the Columbia River Basin AIS database (<http://crbais.psmfc.org/>) and discussed the different features of the site. This project is a partnership of USGS/PSU. PSMFC hosts the website. There were discussions on how best to utilize the site including data standardization, how to involve field personnel, the importance of risk assessments and crossover species and commonalities from different states. Scott would like input on the database/website, as input from the CRB Team will be seen as critical to its success.

Noah Adams gave a presentation on Procedures for Conducting Underwater Searches for Invasive Mussels (*Dreissena sp.*). With additional funding from the U.S. Fish and Wildlife Service, an associated dive training program is also being planned for 2011, with as many as three events throughout the region. The procedural manual will be released shortly in print and on the web, and distributed to the CRB Team, as well as further information on the upcoming dive trainings.

Sam Chan and Rick Boatner updated the group on the invasive tunicate issue on the Oregon coast. *Didemnum vexillum* was discovered in Winchester Bay, OR (Feb 2010), Charleston, OR (April 2010), and Sitka, AK (June 2010). Rick said the Winchester Bay find has been complicated by the fact that the infested area includes an oyster farm (and the farm is for sale). Agency staff has been working with the Oyster farm on options. Further complicating the infestation is that there is no precedent for controlling tunicates on turbulent rock jetties. Sam also discussed the hull infested barge that was discovered in Yaquina Bay (including *Molgula sp.*). The barge was wrapped in plastic and while there was a high kill rate, not everything was killed. Sam listed the following as lessons learned from the tunicate and Yaquina hull fouling incidents:

- Early detection credited to a strong citizen science effort
- Oregon can implement adaptive management control and education program
- Someone has to take leadership

- Need a statewide marine AIS invertebrate management plan
- Know less than we should about invasion biology, fate and impacts from tunicates
- If EDRR is to succeed, look well beyond urge to claim “it is here, the sky is falling, we can’t do much ”
- Led to action for monitoring and treatment of ship hulls for construction of new NOAA Pacific Fleet HQ in Newport, Oregon

Allen Pleus discussed proposed AIS legislation for Washington in 2011. The bill leaves current AIS boater fee flat funded, but does remove the current sunset date (2012). The bill also extends the Washington Invasive Species Council until 2017. The current draft bill is 55 pages long. Contact Allen for further information.

Sam gave a presentation on the new Oregon Sea Grant project “A Predictive Approach to Risk Analysis and the Economics of Early Detection and Rapid Response for Aquatic Invasive Species” Lead researchers: Munisamy Gopinath, AREC, CAS, Michael Harte, COAS, and Samuel Chan, OSG. The objectives of the project are to:

- Predict aquatic invasive species introduction and establishment
- Assess costs and benefits of early detection and rapid response, and alternative management strategies

Sam said the investigators will be contacting members of the CRB Team in the near future on involvement in this project.

Amy Ferriter discussed Idaho 2010 inspection station activities. Idaho inspected more than 44,000 boats this year and intercepted eight with dreissenid mussels. All stations are now closed for the season. Idaho also collected 570 water samples for dreissenid mussels (in addition to substrate samplers).

Allen Pleus and said that Washington has intercepted five dreissenid infested watercraft to date in 2010. Most of them were commercially hauled. WDFW is looking at more budget cuts because of current fiscal woes. So WDFW is looking to coordinate on monitoring and other ANS program with other agencies. Eric Anderson mentioned that when the Idaho inspections are closed (Fall –Spring), that Washington gets more infested boats (because they were not stopped in Idaho at their inspection stations)

Rick Boater and Glenn Dolphin discussed the 2010 Oregon inspection program. The program estimated it had a 32% compliance rate for boaters stopping at inspections sites. Boats are not required to stop in Oregon. Five decontaminations were conducted. No dreissenids were found. Compliance with the new 2010 permit was least amongst non-motorized watercraft.

Eileen reported that Montana has three separate programs conducted by MTFWP and MTDA that have the ability to inspect boat. 3,000 boat inspections were conducted in 2010. No dreissenid mussels were found. 600 sites were monitored for mussels in 2010 (substrate and plankton).

Eileen went over the Lake mead boater privacy act issue. The NPS (Mead NRA) was supposed to come the October WRP meeting in Boise to discuss the sharing of boater data from Lake Mead (other western states want this information so they can contact and decontaminate , as needed, boats coming out of Lake Mead. However the NPS has said that because of the federal Privacy Act, they may not be able to share this information). NPS staff, because of a weather emergency could not attend the WRP meeting. Therefore a webinar was recommended for NPS staff to discuss and clarify the issue. Eileen and John Wullschleger (NPS) have the lead in putting this webinar together in the next few weeks. Eileen requested that any questions that CRB Team staff would like to have asked of NPS be provided to Stephen by October 25.

Eric mentioned that greater enforcement at Mead would be welcome. Once a few people start getting tickets for contaminated watercraft, word would get around in the boating community that it's important to clean your boat.

Matthias updated the group on AIS issues in BC including coastal spartina eradication, perch rotenone projects, the BC Invasive Species Working Group. Legislation on AIS is being considered in BC. BC has an AIS freshwater database. At the Canadian federal level, there is hope to also develop an AIS database.

Paul discussed Asian carp and the establishment of a pilot sampling program (eDNA) in the CRB...maybe done in cooperation with dreissenid monitoring activities. Paul is working with Tim Counihan and the Asian carp eDNA research team at Notre Dame and The Nature Conservancy. Eileen mentioned that MT has concerns about carp hitchhiking via illegal bait entering from Kansas and this is a vector of concern for the entire CRB.

Al discussed some of the Corps AIS prevention and outreach in his jurisdiction including self certification of boaters, monitoring for veligers with PSU, and ongoing vulnerability assessments at projects (being undertaken as funding allows).

Rian talked about the 2011 Oregon State legislative proposal that will charge a fee to shippers. The funds from the fee will go towards supporting the Oregon State Ballast Water program.

Nutria work continues at Portland State. Mark said Trevor is trapping and collaring nutria at in the Tualatin valley to develop information on home range size and how it differs between urban and rural populations. He will also compare the efficiency of two types of traps on Sauvie Island. Other nutria work will include climate change modeling. The National Geographic Channel was here filming for a one hour nutria documentary that will include Oregon. Paul said there is proposed Federal legislation that includes \$1 million in funding each for Oregon and Washington nutria research and management.

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Allen reported that they are hoping for another hard freeze in the coming winter to help control Capitol Lake Washington mudsnails. The salty water flush of Capitol Lake had about a 12 % mortality rate.

The 6<sup>th</sup> New Zealand Mudsail conference will take place on March 15-17 in Moscow, Idaho.

Mark reported on the PSU quagga survival study at Lake Mead (using Columbia basin Water) led by Brian Adair is showing progress. Brian has figured out a good diet (commercial shellfish Diet) to feed test mussels. Results are showing that calcium is a good predictor of survival. More calcium = better survival. Willamette River water will be tested next.

Mark said that PSU was funded by BPA to undertake a dreissenid antifouling paint study. Paint panel will be put in the Columbia for a specified amount a time and then transported down to infested Colorado River sites to test their efficacy.

Tim reported no new goby detections in the CRB (but this may be because we know they are already there and there is less reporting going on).

There were no comments from the public.

The next meeting of the CRB Team was scheduled for **February 16** in the Portland metro area.

The meeting adjourned at 4:15 pm.

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**Attachment 1:** Proposed Confirmed Definition for dreissenid mussels in the Columbia River Basin [Note: definition includes edits through 11/1/10]. This language will be inserted into the Columbia River Basin Interagency Invasive Species Response Plan: Zebra Mussels and Other *Dreissenid* Species.

**Proposed Confirmed Definition:**

Confirmed – Monitored waters where mussel presence has been confirmed by:

A) Visual identification by a state/provincial AIS coordinator (or their designee) of a physical sample of clearly recognizable dreissenids attached to a natural substrate or a permanent structure within the associated state or province. In cases where the settled mussels are not clearly recognizable dreissenids (e.g. recently settled juveniles), confirmation also requires positive results from two independent\* positive PCR assays from the mussel sample; **OR**

B) Two independent\* microscopy-based detection of veligers from one plankton sample (with at least one detection not based on a photograph) combined with two independent\* positive PCR assays from the same plankton sample.

\*separate laboratories with demonstrated dreissenid detection expertise



Note: This definition applies to automatic activation of the Columbia River Basin Interagency Invasive Species Response Plan: Zebra Mussels and Other Dreissenid Species. If a signatory jurisdiction uses a less stringent definition to confirm dreissenid presence in a water body, they may request (through the CRB Notification Coordinator) to convene the MAC Group, who will determine if the Plan should be activated. If the jurisdiction decides to initiate response operations independently prior to confirmation using the above definition, they are encouraged to inform the CRB Notification Coordinator who will in turn notify the MAC Group members and Coordination and Support staff.