

# MINUTES

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

October 14, 2009  
Heathman Lodge  
7801 NE Greenwood Drive  
Vancouver, Washington 98662

**Introductions and announcements:** Stephen Phillips welcomed the group. Attendees were:

Stephen Phillips, Chair, PSMFC	Brian Adair, PSU
Noah Adams, USGS	Kevin Aitkin, USFWS
Eric Anderson, WDFW	Jim Athearn, Secretary, PSMFC
Rick Boatner, ODFW	Steve Bollens, WSU
Carl Burger, Smith-Root, Inc.	Joan Cabreza, PSMFC
Sam Chan, OSU	Tim Counihan, USGS
Tim Darland, USCOE	Glenn Dolphin, OMB
Scott Lund, BOR	Amy Ferriter, IDA
Marla Harrison, Port of Portland	Keith Hatch, BIA
Paul Heimowitz, USFWS	Rian Hooff, ORDEQ
Jim Irish, BPA	Phil Johnson, WDFW
Deborah Konnoff, USDA - FS	Alix Laferriere, South Slough NERR
Scott Lund, USBR	Allen Pleus, WDFW
James Naramore, Clark Co. Sherriff's Office	Jim Ruff, NPCC
Marshall Pike, Quagga Inspection Services, LLC	Eileen Ryce, MDFWP
Fred Neiman, Clark Co. Sherriff's Office	Scott Smith, USGS
Al Sutlick, USCOE	Mark Sytsma, PSU
Andy Thoms, BPA	Steve Waste, USGS
Steve Wells, PSU	Erin Williams, USFWS (phone)
Bill Zook, PSMFC	Carol Chandler, USFS
Leif-Matthias Herborg, BC Ministry of Environment (Phone)	

**Comments and Approval of June 2009 minutes:** There were no additional comments on the June minutes. They have been posted on the 100th Meridian web site:  
<http://www.100thmeridian.org/ColumbiaRT.asp>

### Coordination:

1. **Quagga Zebra Mussel Action Plan:** A copy of the Quagga/Zebra Mussel Action Plan (QZAP) was provided. Eileen Ryce said the plan was requested by the Aquatic Nuisance Species Task Force (ANSTF) to cover the 19 member states in the Western Regional Panel (WRP). The first draft presented to the Task Force received a lot of comments and this version was sent back to them, with revisions, on 5 October. The new plan will be discussed at the November Task Force meeting. Eileen noted that the priority items can be seen in the executive

summary on page 2. The highest priority action item is for state and interstate ANS management plan funding and implementation (estimated annual funding need is \$31,140,000). There is still some disagreement on how to finalize the plan and the WRP is looking to the Task Force for direction. The goal is to have the document coordinated and some implementation by the spring, 2010.

Paul Heimowitz said USFWS has already been using this plan for guidance, including developing budget strategies. The USFWS has a \$2 million add-on in its FY 2010 Senate Interior appropriations budget bill that could be used to help fund QZAP implementation if adopted in the final budget.

Stephen Phillips stressed the importance of getting the \$31 million and support from the ANSTF should help. Paul agreed, indicating that chances are better if more organizations use the plan as a framework and reference it to show general consensus and agreement. Kevin Aitkin said the states could also use this plan to lobby for their appropriations funding.

Sam Chan asked if NOAA is on board and Eileen said that nobody is fully on board. She is hoping to get their support at the Task Force meeting since they are one of the co-chairs. It was noted that NOAA is represented on the WRP.

**2. Western Regional Panel:** Erin Williams reported on the September WRP meeting. The new executive committee includes Eileen Ryce, Karen McDowell, Bob McMahan, Lynn Schlueter, John Wullschleger, Diane Cooper, Kevin Anderson, Elizabeth Brown and Stephen Phillips. They now have a list server for people to share ideas: [WRP@water.ca.gov](mailto:WRP@water.ca.gov).

Erin described the project approved for funding (\$25,000): "A risk assessment of recreational boating traffic and aquatic nuisance species (dreissenid mussel) invasion to lakes, rivers and reservoirs of the Western United States" PI: Marion Wittmann, Ph.D., Post-doctoral researcher, University of California Davis, co-PI: Sudeep Chandra, Ph.D., University of Nevada-Reno; co-PI: Sarah Clements, M.S., Environmental Scientist." Erin said they are not planning to do any requests for proposals next year. Instead all the WRP funds will be used for expenses. The \$25,000 isn't enough to cover projects plus travel expenses for members. Erin also mentioned that the panel membership was changed as a result of going through a four-year review. A new membership list can be found at the web site, <http://www.fws.gov/answest>

Idaho will host the next WRP meeting some time in early October, 2010.

**3. Northwest Power and Conservation Council (NPCC):** Jim Ruff said that the Power and Conservation Council has become more active on invasive mussel issue since his last visit. The Bureau of Reclamation (BOR) discussed their experiences with zebra/quagga mussels in the Southwest at Lake Mead and Hoover Dam with the Council in July. Then Jim and Eric Anderson, State Representative, Priest Lake, Idaho, spoke at the August meeting in Spokane. As a result, the Council has sent three letters calling for action. One, to Secretary of the Interior Salazar, asks for Department of Interior agencies to institute a mandatory inspection and decontamination requirement for all watercraft leaving mussel-infested waters in the Southwest, such as the Lake Mead National Recreation Area on the Colorado River.

The three points in the letter to Brigadier General William Rapp of the Northwestern Division of the Corps of Engineers include: 1) to alert the Corps of Engineers to an impending threat to the multipurpose federal dams in the Columbia River basin and to the ecosystem posed by invasive mussels; 2) to request the Corps to take immediate action to initiate early detection monitoring for the presence of these invasive mussels at each of its dams in the Columbia basin,

and 3) to ask the Corps to initiate and complete risk assessments and mitigation planning related to these mussels at every Corps project.

The letter to Barry Thom, NOAA Fisheries, covers: 1) to alert the agency to an impending threat posed by invasive mussels to the multipurpose federal dams in the Columbia River basin and to the ecosystem; 2) to request the agency take immediate action to sign onto the *Columbia River Basin Interagency Response Plan for Zebra Mussels and Other Dreissenid Species*; 3) to encourage it to actively participate and coordinate all mussel monitoring, prevention and mitigation efforts in the two primary existing regional coordination forums: the 100th Meridian Initiative-Columbia River Basin Team and the Western Regional Panel on Aquatic Nuisance Species; and 4) to encourage it to use the recently developed Quagga/Zebra Mussel Action Plan (QZAP) as the region's common plan for invasive mussel actions. The letters can be seen at their web site, <http://www.nwcouncil.org/news/2009/09/f3.pdf>. So far, no responses have been received.

Jim also said during a recent tour at Flathead Lake in Montana Eileen Ryce helped to inform Northwest Congressional delegation staffers and Council members and staff about invasive mussels.

Bill Zook asked if the Council's Fish and Wildlife Program included language regarding mussels and Jim said there is now a whole section on non-native species, including specifically zebra/quagga mussels.

Bill also asked about any implications from the plan for funding because of their interest and involvement. Jim said that will be more difficult. Because of the 2008 NMFS biological opinion and all of the accords that BPA has signed with states and tribes, there is not much additional money available. Jim also said the Council has an upcoming RM&E categorical review at the end of 2009 (or beginning of 2010) that might provide another opportunity to provide input for their consideration.

Paul H. said that the letter to Salazar would be responded to at the Department of Interior level in coordination with all Interior agencies.

Jim added that one topic at a recent conference on the central Arizona project concerned how many boats were leaving mussel-infested areas without being inspected. Eileen mentioned that we shouldn't forget boat traffic from the east since, for example, the Red River is now infested and it is closer to them than the Colorado River.

## **Monitoring:**

**1. Database(s):** Steve Wells demonstrated the various components of the monitoring database and Dreissenid Interactive Map (<http://www.clr.pdx.edu>). Their objectives right now are to identify gaps in regional zebra/quagga monitoring and increase regional coordination. Steve said they have switched to a new database so the data is not current (Mark Sytsma clarified that it is complete for the PSU monitoring but not for the states and other agencies) and there are a few glitches to fix, as well, as finalizing the map. Currently Steve is getting information directly from people doing monitoring and he noted that most states don't have their information in GIS data base format. Data can be provided online at <http://www.mussels.geos.pdx.edu> and Steve verifies the information before it is added to the data base. There is a "date last checked" feature to help identify how current information is, what has been entered and by whom.

Joan Cabreza asked if the Pacific Northwest Aquatic Monitoring Partnership (PNAMP)

has done anything like this and Steve Waste said they haven't pursued this yet.

Alix Laferriere asked what format they need for the data and Steve said he would check and get back on that.

Bill Z. asked who controls the data base for veliger sampling and Steve said that info is also in their site but not updated yet. Mark said the data base was originally developed with California funding but they had set it up for the whole US and focused on the west. He recommended that people go on line, try it, and give them comments.

Eileen R. said that Montana won't ever have a web site for data but that they can supply data if someone sends them format information.

**2. Dive Monitoring:** Paul H. began by saying that the USFWS provided funding to increase capacity for dive monitoring for rapid response. Noah Adams discussed the training he is doing to get dive teams to validate mussel inspections and written procedures he is preparing for conducting SCUBA surveys to identify, enumerate and sample quagga and zebra mussels. He plans to have a preliminary draft by February 28, a revised draft by April 30 and a final by June 30. Topics to be covered in the procedures include what are divers looking for, how did the mussels get here, how and where to look for mussels, defining a search area, methods of searching, seeding the search area and collecting samples. "Good dive practices" will be included.

Bill Z. suggested they could also use dive teams to verify sighting reports and possibly for monitoring. Noah said it might be possible but maybe not practical because of safety concerns and the likelihood of success in early detection. Divers can't effectively cover large areas. Scott Smith added that there are also funding and resource issues but that possibly a little could be done with volunteers. Noah was concerned about liability issues with volunteers. Paul said that at least they will have a product from this effort so, if a volunteer group emerges, they will have something to start with.

Alan Pleus suggested getting input from the Washington divers who have experience with tunicates. For that and any other input, Noah's email is: noah\_adams@usgs.gov.

**3. Double Blind Veliger Monitoring Study:** Paul H. said that this is the second phase of a study begun last January. The original study provided samples to various laboratories to compare veliger identification methods (flowCAM, microscopy, and PCR/genetic). Performance was generally good but led to questions about what would happen using "real" water samples so this second phase was initiated to check that. Funding is being provided by the USFWS plus some in-kind resources from Bureau of Reclamation and other partners. BOR will lead the study – Paul has the investigators' contact information for anyone interested.

Erin W. asked which laboratories would be used this time and Paul said it would be the original 10 plus possibly a few others. There aren't that many others that do this regularly. Paul will provide a link to the report which has names of the original labs (*completed*).

Sam C. asked if the second phase would include "contaminant" plankton (non-dreissenid) and Paul said yes, but they are still sorting the details.

## Pathways:

**1. Watercraft Interception Uniform Minimum Protocols and Standards (UMPS):** Bill Z. provided an update on the “Recommended Protocols and Standards for Watercraft Interception Programs for Dreissenid Mussels in the Western United States”. It is available on the web at: <http://www.aquaticnuisance.org/wordpress/wp-content/uploads/2009/01/Recommended-Protocols-and-Standards-for-Watercraft-Interception-Programs-for-Dreissenid-Mussels-in-the-Western-United-States-September-8.pdf>. Bill said the UMPS are based on the results on an on-line survey of all watercraft interception programs in the western US (the report is now complete and available), extensive literature review and personal communication, the inspection and decontamination protocol/procedure manuals of more than a dozen western agency programs and the WIT training program. The report attempts to provide consistency among/across agency lines. The protocols were adopted by the WRP as a living document “best practices manual” at its September, 2009, meeting in Seattle. A draft was sent to all programs in the western US and it received a very favorable response. Major changes have been made based on comments at the June CRB meeting and from others, including:

- New sections on ballast and other hard-to-access raw water storage areas
- Bait fish
- “Hidden” mussels
- Added emphasis on the importance of outreach and education to implementation of a successful interception program
- More emphasis on drying time in conjunction with removal (Morse)
- Further elaboration on program levels as they relate to certification
- Some clarification on balancing resource protection and boater access
- Intervention to interception
- Alphabetized list of agencies/organizations
- Definition changes/clarifications
- Safety advisory

**2. Watercraft Decontamination Research:** Stephen P. said that the QZAP has watercraft decontamination research as a high priority action but it is difficult to get agreement on consistency/standards. With USFWS funding (including some made available specifically for QZAP), PSMFC has a request for proposals out (see: [http://www.psmfc.org/files/September%202009/rfp\\_decon\\_study09\\_072309\\_vi.pdf](http://www.psmfc.org/files/September%202009/rfp_decon_study09_072309_vi.pdf)) for additional scientific investigation of watercraft decontamination practices (e.g., pressurized hot water wash) to help set minimal thresholds for associated decontamination and inspection parameters. About \$66,000 is available for this study. Proposal requirements include:

- Employ an experimental design applicable to typical watercraft decontamination methods and conditions common in western states
- Include safeguards to ensure the project does not inadvertently spread test organisms to uninfested waters (for zebra mussels a FWS injurious wildlife permit may be required and would need to be obtained by the researcher; information can be found at <http://www.fws.gov/permits/>)
- Provide a standardized methodology that can be replicated and applies to a variety of

conditions

- Contribute to the overall improvement of watercraft decontamination in the West
- Directly build off existing scientific literature, including the Morse study
- Investigate combinations of heat, pressurized water, desiccation, common chemicals, and/or other treatments relative to the mortality of veligers and settled mussels (such as pressure washing external surfaces, chemical treatment of engine cooling systems, veliger viability in ballast water systems of wake board boats, etc.)
- Develop methods to effectively evaluate whether a decontamination treatment was successful
- Provide a draft report detailing methods, results, and recommendations as soon as possible, but no later than September 30, 2010
- Provide a final report detailing methods, results, and recommendations no later than December 31, 2010

Stephen also noted that he thinks that a four-state memorandum of understanding is possible and some thought should go into in this winter.

### **3. State Inspection Efforts and Interjurisdictional Coordination:**

**Montana:** Eileen R. said that new legislation from the recent session provided increased funding and increased rulemaking authority (this fall it will become mandatory for all watercraft to stop at inspection stations). From May to October they operated inspection stations, including some on major highways although she believes they get more benefit at busy boat ramps. They have 5 additional portable boat washers (6 total now).

Scott Smith asked about challenges using existing cleaning methods and Eileen said containment and treatment of contaminated recovery water is a challenge. Some stations have collection mats and they are using gravel lots. They are also working on how to deal with the public in an efficient manner. She said the biggest problem they have found during inspections is with standing water in the watercraft - they are treating with bleach and hot water. Because they don't have 24/7 coverage, Eileen said this is more of an educational tool.

Eric Anderson asked how many decontaminations were done because of mussel-contaminated boats. Eileen said they didn't find any mussels but several had potentially contaminated standing water in bilges and live wells.

**Idaho:** Amy Ferriter reported that the 2008 Idaho legislature established a fund (no money received) and the Department of Agriculture as the state lead agency. In 2009 they adopted a boat sticker program to provide funds and they project it would bring in \$1,500,000. So far this year \$770,000 has been received but they are to get \$900,000 up front next year. They operated 17 inspection stations (10 by private contractor) at highway border crossings and conducted about 14,000 inspections between July 4 and September 14. The data is still being analyzed (they used paper forms) but they did find two boats with confirmed mussels (one zebra and one quagga). The zebra mussel boat was from Wisconsin. They use orange seals in Idaho and have agreed to accept seals from Colorado. They have an online data base at: <http://gis.idaho.gov/quaggamap/>. A report to the legislature is due out in mid-November and it will include their plan for 2010. Amy's recommendations included not using paper forms, combining the boat sticker fee with boat registration to make it more transparent and beginning the inspection season earlier (March).

Alan P. asked if they are using a separate boat sticker for the ANS part and Amy said it is separate for non-resident boats but included in the boat registration fee for residents to avoid/minimize complaints.

Jim R. asked how many boats they think they are missing. Amy said they inspect 7 days a week from 7 am to 7 pm and she has heard that they might only be inspecting one in five boats. Eileen R. said, in Montana, they get about 50 percent on the highways but, if they inspect closer to the water, it goes up to about 90 percent.

**Oregon:** Rick Boatner reported that Oregon passed new legislation modeled after Idaho's, including boat permits. The fee is included in the boat registration fee and, for non-motorized boats; tags can be picked up at license outlets (about 400 points of sales in Oregon) and marinas. All fees go to the Oregon State Marine Board and they will provide some funding to ODFW. There are no mandatory stops in Oregon but they hope to have five roving inspection teams in place by January. They are staffing up and coordinating with their public relations staff to develop a public message. Oregon has 180,000 registered boaters.

Glenn Dolphin mentioned their border signs and noted their outreach is different for motorized and non-motorized boaters (> 10') because the latter group has raised some controversy since they are not used to paying fees. Their permits are paper, resembling hunting tags, and are issued to the operator so they can be transferred to any boats the individual owns. The new boat ramp signs are patterned after those in Idaho and Washington so the message is similar throughout the region.

**Washington:** Allen P. said they conducted 11,000 inspections in 2008 and less in 2009. This year they focused on early detection monitoring because the stations were too labor intensive. Washington has 280,000 registered boaters.

Eric A. described the three layers of their enforcement program: 1) all inspectors trained at check stations at five ports of entry, 2) general patrolling by state fish and wildlife officers, integrated with vessel safety inspections (1367 inspections this year) and 3) mandatory check stations. They operated 16 mandatory inspection stations at boat ramps and major highways (I-90, I-82 and I-5) and hope to do 32-40 in 2010. They made three mussel interdictions: a boat coming from Lake Mead on I-5, a boat coming from Lake Mead on I-90 in Spokane and a boat at Everett from New York headed to Lake Washington. They may operate some joint stations with Oregon in 2010. Eric introduced Phil Johnson who has joined the law enforcement staff. Eric said another change this year is that they are issuing citations (\$375) to people who don't stop at check stations (until now they gave warnings). They will be using mobile reader signs to more clearly identify check stations.

Sam C. asked what the most common aquatic organisms were that they found on boats. Eric said it was Eurasian watermilfoil and other aquatic vegetation.

**4. CRB/WRP911:** Stephen P. said a list server is being developed as a result of the "Hello" boat incident this year, including Oregon, Washington, Idaho, Montana, USFWS, tribes, and others. This will provide a way to notify all agencies and law enforcement if a boat is "on the move" in the region. At the September meeting, the WRP decided to expand the list serve to all of the western states. Thus, it is now the WEST911 list serve. All contact information will be on a web site (password protected) so failsafe numbers are needed for each state. The goal is to have the list serve active in about a week.

Paul H. added that the 100<sup>th</sup> Meridian mail system could be set up to automatically receive alerts and a second mailbox could be set up for updates. He thinks the USFWS can accomplish this within their existing budget.

**5. Water Bags:** Paul H. discussed his collaboration with BOR and the crane certification industry to improve water bag weight decontamination and research. Periodic crane testing is required by federal and state regulation. Water weight bags that are filled and emptied at each crane test site are becoming the testing standard. However, they are a possible pathway for ANS spread and that raises special inspection and decontamination issues. Crane testing companies provide the service nationally so cooperation is critical. When raw water is used to fill weight bags, veliger contamination is possible and inspection and decontamination are difficult. Some options for decontamination include chemical (wastewater and quantity issues); heat (no hot surface exposure and hot water wash inside bags is difficult); desiccation (most common current method); hang, drain and dry (time consuming), and freezing (possible workable alternative). BOR has already directed industry contacts to the 100<sup>th</sup> Meridian Initiative quarantine estimator (<http://www.100thmeridian.org/Emersion.asp>). More research on control options is needed.

Paul discussed opportunities to coordinate with the crane testing industry - IMES Water Weights (they manufacture most of the water weights) and the rest of the industry through the Crane Certification Association of America (fall meeting in October).

Paul said the next steps include a presentation to the ANSTF in November, establishment of a partnership to evaluate freezing and other controls and possible formation of a WRP work group.

***Assiminea parasitologica* (AP) in the South Slough NERR:** Alix Laferriere presented her study on a new invasive Japanese snail first detected in Coos Bay, Oregon, in 2007. In 2008 they were also found in the Umpqua/Smith and Newport estuaries. One concern about this small snail, native to several estuaries in Japan, is that it is the first intermediate host to the lung fluke (*Paragonimus ohirai*) (mitten crabs are primary hosts). It is found in the sublittoral zone in mixed habitats under and on flotsam and feeds on diatoms and superficial matter. The snail is thought to have been introduced via ballast water.

Alix's study objectives were 1) to determine the spatial distribution and abundance of each species of the snail guild (other species include *Littorina subrotunata* (native), *Angustassiminea californica* (native) and *Myosotella myosotis* (introduced in 1967)) within the estuarine environment of Coos Bay, OR, 2) correlate the species-specific distributions and densities with environmental parameters, 3) investigate the life history strategy of AP and 4) Survey the Umpqua, Siuslaw, Smith and other estuaries for the presence of AP. She used a two-tiered approach - rapid assessment method and detailed assessment method. Although the detailed assessment replicated the rapid method, the results were varied. This was attributed to a patchy distribution of AP within the estuary.

Alix concluded that AP are on the move, spreading within and across estuaries, probably as the result of human activities - contaminated fishing gear, sampling gear and boots. Other results: AP are present in large numbers in Coos Bay (1,000s per square meter), abundance varies by region in the estuary, mechanisms affecting distribution are unclear, AP have a wide salinity tolerance, reproduce in a summer cycle, spread to two other estuaries in the last year (Alea and Bandon) and have the potential to displace native snails. No parasites have been found on the snails.

**Canada Update:** Matthias Herborg, Aquatic Invasive Species Coordinator for BC Ministry of Environment, described his activities via a phone link. His contact address is: [Matthias.Herborg@gov.bc.ca](mailto:Matthias.Herborg@gov.bc.ca). His position was established just over a year ago so their program is still in its early stages. Much of their work is externally funded which makes it difficult to establish a long-term program. The provincial government is interested in participating in international agreements - they have signed on to the Columbia River Rapid Response Plan for Zebra and Quagga Mussels. Other Provincial initiatives include: a compliance focus on prevention of illegal sport fish introduction in BC (yellow perch, large and smallmouth bass), Spartina eradication by local stakeholder groups under the leadership of Ducks Unlimited, consideration of including Spartina eradication in the Pacific Coastal Collaborative, and ongoing eradication of yellow perch and smallmouth bass infesting lakes in interior BC.

Matthias said BC's participation in the CRB rapid response plan includes identifying funding sources for basic monitoring and outreach, development of an effective monitoring plan in collaboration with the power companies, targeting a few high use reservoirs with a lot of cross border traffic for sampling and starting a basic outreach initiative based on existing work of the 100<sup>th</sup> Meridian Initiative.

**2010 Rapid Response Exercise:** Paul H. said USFWS and PSMFC are considering a notification-based exercise this fall to go through the procedures currently in place to notify everyone (MAC members) and get them together. He envisions a short exercise and evaluation prior to a more detailed spring field exercise. There is a question about whether it should be announced in advance or be a surprise (possibly a window of time). Several people indicated that a surprise announcement would probably not be acceptable.

The spring field exercise will be held at either Flathead Lake or Lake Roosevelt and is intended to raise U.S.-Canadian cross-boundary issues. Eileen R. spoke in favor of Flathead Lake: it is the largest natural lake, half of the adjacent land is tribally-owned and half is managed by the state, the lake is managed for endangered bull trout with all of the associated issues and it is one of the headwaters for the Columbia River.

Alan P. suggested that Lake Roosevelt was a higher priority because it includes British Columbia, Upper Columbia tribes, the International Joint Commission (IJC), it is the most important reservoir for water management in the Columbia River and it is connected (pump/storage) to Banks Lake, another heavily-used lake. Jim Ruff and others echoed Alan's recommendation.

**Pet Store Outreach:** Rick Boatner started by saying that, if we could guarantee that all experimental animals and pets would never escape or be released from confinement, we wouldn't be as concerned. However, pets can quickly come from anywhere in the world and pet dumping is an ever increasing problem. Non-native wildlife out compete native wildlife and the risk of disease introduction increases. Of the huge numbers of animals imported into the U.S. (38,000 mammals, 36,000 birds, 2 million reptiles, 49 million amphibians, 216 million fish) 92% are sold as pets. There are also large numbers of illegal imports as well as all of the animals raised in the US.

Rick said we are up against a variety of problems, including the internet which is a huge source of illegal animals (e.g., Craig's List, Turtlesale.com, Faunaclassifieds.com). Pond shops, flea markets and trade shows are starting to become pet retailers and what they sell usually can

survive in Oregon. The illegal wildlife trade is 3<sup>rd</sup> only to illegal drug and arms trade.

The Oregon Wildlife Integrity Rules contains a list of approximately 16,000 species grouped into: animals exempt from the rule, prohibited species, non-controlled species, and controlled species. Animals are ranked based on the degree of risk/probability (high, medium, low). Many species are listed however; if one is not listed then it is automatically prohibited. A weakness is that all are listed using scientific names.

Rick stressed that consumer education is critical. People need to know what is legal and what is not. The Oregon State Patrol is conducting pet and pond show checks with the USFWS. They have also informed and requested that the internet sites not sell prohibited wildlife in Oregon. They are monitoring Craig's List and other internet sites for sales, trends and other possible issues. Typical problems can be grouped into three areas: 1) lack of knowledge (impulse buyers; schools; cool, macho or fad wildlife; people moving from another state; empty nesters and family breakups), 2) knowledgeable pet owners who may either "have an attitude" or own dangerous animals and 3) collectors (rescue operations, pet stores, breeders and underground zoos). Education also needs to extend to law enforcement and the judicial system and it would help if there were similar rules among the states.

Brian Adair mentioned the religious aspect where there are certain ceremonies when people intentionally release animals.

Eileen R. said the Montana rules are similar to Oregon plus they have a "dangerous animal" part. Their problem with rare animals is that most owners are rich and can afford fines/fees to keep them.

Rick said they also have problems with the court system being insensitive to the issues and unwilling to prosecute. He thinks we should push harder for euthanization of unwanted pets.

Paul added that although initial top-down efforts to implement the national Habitattitude campaign have not gone far, this might be a good opportunity for collaboration among regional entities to develop a coordinated campaign including possibly a regional pilot program with funding support by the USFWS.

**Watercraft Tracking Systems:** Marshal Pike, Quagga Inspection Services (QIS), described his company's tracking system to deal with boat operators who fail inspections on one lake and then try to go somewhere else (or leave and return later). They use a banding system so boats can leave and return without having additional inspection. They have developed a quagga inspection system database (QID) to allow real time vessel tracking through the use of any web enabled phone, PDA or laptop with an internet or cellular connection. QIS also provides inspection services and training using protocols provided by the PSMFC and approved by the Department of Fish and Game.

Marshal provided a copy of the user manual for the QID and demonstrated its features including the following:

- Agency log in provides details of use levels of the inspection program
- Quarantine periods are automatically tracked
- Eliminates "lake jumping" to void a turn away or quarantine
- Provides regional statistics on users (where are users coming from)
- Field users access by hand held, web enabled Smart Phone, iPhone, Blackberry, Verizon Touch, or laptop with WiFi connection

- System User Manual - admin login, username determines level of access, password logs user into system
- Agent types -back office user, administrator, lake agency, inspector, multi lake inspector
- Once identified, individual has permissions by level
- All agents are listed for reference and contact - inspectors, supervisors, agency
- Participating districts are maintained by administrator
- Lakes that are participating are recorded by administrator with agency
- Participating lakes are available in list form
- Inspectors record actions taken as a result of inspections including Ok to launch and failure plus quarantine
- Failure codes track the reason for the vessel failure for future reference on re-inspection.
- Vessel owner information is secured on a voluntary basis.
- Only the CF or registration of vessel is required information.
- Vessel CF and actions taken are recorded to the vessel registration.
- Commentary can include link to owner information plus all quarantine and failure information
- Region tracking allows district to determine resident versus non resident use.

To get more information, contact Marshal Pike, Project Manager, at 530-949-9451, email: [mp@calparksco.com](mailto:mp@calparksco.com) or Sean Senti, Training Specialist, at 925-997-2403 email: [ssenti@calparksco.com](mailto:ssenti@calparksco.com).

Glenn D. asked what their inspectors do when it is raining and boats are wet. Marshal said that only banded boats are allowed to launch and the rest must wait until they can show up clean/drained/dry.

### **Member Issue Updates:**

**1. Washington Ballast Water Rulemaking:** Allen P. reported that the rules were passed unanimously and they are working to implement them. The ballast water discharge standards section was reserved for future rulemaking. The Coast Guard has issued a notice of proposed rules for a two phase system (1 - use the international maritime standard and 2 - practicability review in 2013). Washington's primary concern is whether they will get to phase 2 (require a modification to major reduction in organisms). The three things the Coast Guard requires is 1) does it kill the organisms, 2) is it environmentally sound and 3) is it safe on a boat's integrity.

**2. USGS/PSU Risk Study:** Steve Wells said that the data collection is finished, the first round of calcium collection is done and they are analyzing data to prepare the final report.

**3. PSU Coatings Study:** Steve Wells said their review has been limited by a lack of information. There have been long-term studies but the data is tied up by proprietary agreements. Stephen P. said the BOR has also put out a couple reports on anti-fouling.

Steve said the use of coatings to negate macro fouling is limited to a 5-6 year duration and by what biocides are released. He thinks they may not be needed in the Columbia River depending on the level of fouling experienced. It may be possible to rely on physical removal.

**4. PSU Quagga Survival Study:** Brian A. described their survival study conducted at the Lake Mead hatchery. Mark S. added that this first year was a “shakedown”. Quagga mussels were held in Columbia River water (taken at Cascade locks), supplemented with various levels of calcium, and compared with mussels held in Lake Mead water. Although the growth data is still being analyzed, Brian said they didn’t see any growth because the study was done during the hot time of the year when mussels generally don’t grow. Survival rates were best in Lake Mead water and they noted some survival improvement if calcium was added but no differences among various calcium levels. They plan to go back this January/February to repeat the study when growth rates should be better. Brian also said that the city of Portland will probably be testing Bull Run water.

**5. Gobies:** Tim Counihan said they collected more gobies at the mouth of the Sandy River. Also, WSU has completed three rounds of plankton sampling.

**6. Sport Shows 2010:** Stephen said that PSMFC will cover five in 2010 shows: Sacramento, Seattle (Marine Expo), Portland, Spokane and Tacoma (boat show). Jim Athearn will man the booth and he said he would be calling state representatives and others prior to each show to obtain up to date ANS information specific to the show vicinity and to seek volunteers. He noted that more people tend to stop and talk if someone is already present and, thus, it is much more effective to have a second person.

Al Sutlick said the Corps of Engineers plans to become more active at shows and he is trying to obtain a contaminated boat sample to display. Brian A. said the National Park Service already has boats that they may be willing to lend.

**7. Hydrilla:** Amy F. reported on Idaho’s second year of eradication efforts. They used divers and three diquat treatments plus two organized volunteer days. Hand removal occurred on seven miles of river. Amy estimates that the hydrilla biomass has been reduced by 70% in the last two years and it will take another 5 to 10 years to complete eradication.

**8. Biosupply Houses Project:** Sam C. explained how he is trying to develop solutions to the biosupply house issue based on stakeholder input. He looked at four pathways - schools, curricula, science suppliers and folks who collect organisms to supply to others. He did an extensive survey of teachers in grades K through 12. He felt that most teachers were looking for direction. About 9,000 organisms (mostly aquatic) were reported and 34% of the animals are released. Sam also asked teachers about permits and most of them knew but they had a lot of faith that, if the organisms were shipped by a biological supply house, they had tacit governmental approval. Allen P. said Washington has a mechanism to provide permits.

Some information on survey questions:

- Indicate whether or not the following information came with your classroom plants or animals when they arrived. (N=1531)
- Types of Organisms Used and Selected Examples (N = 9152 - 50% animals, 46.7% plants and 3.3 % microbials/fungus)
- To what extent do you agree or disagree with this statement. "I would be willing to humanely

- euthanize a classroom animal if the methods were approved by the American or Canadian Veterinary Medical Association, and I was provided guidance and tools for carrying it out.” (N=1531 - 33% disagreed, 27% agreed, 15.6% somewhat agreed)
- How would you describe your current knowledge of invasive species? (majority had some to a good working knowledge)
  - Thinking about all of your classroom settings, to what degree do you teach about invasive species? (< ¼ taught often, 1/3 taught rarely, 1/3 had not taught at all)
  - Teacher thoughts or comments regarding the use of living plants and animals in the classroom or education on invasive species. (mixed thoughts)
  - How would you describe the geographic setting of your school? (majority city and suburb)
  - Indicate whether or not you currently use (or have used) live plants or animals for the following purposes in your classroom. (highest number for experiments/projects followed by show and tell and classroom pets; much less for dissections and food for other animals)
  - Please indicate whether or not you have obtained your classroom plants or animals in the following ways. (N=1599) (> 50% said yes for purchased from biological supply house, pet store, or nursery or purchased/brought from home by a student)
  - Indicate whether or not you have disposed of the live plants or animals in your classroom in each of the following ways. (greatest number were kept in the classroom followed by given away to a student or another teacher or disposed of in the trash; least were donated to a university or flushed and none were dumped down a storm drain)

Sam said there will be more data analysis to come.

**9. Nutshell News Letter:** Joan C. is continuing the Nutshell Newsletter and now has a more diverse readership, including some international readers. Because of the quarterly interval, she said some information is out of date by publishing time. Everyone seemed to agree that the terrestrial organism information she is including is desirable. Joan asked for people to continue sending her articles to [joancabreza@msn.com](mailto:joancabreza@msn.com)

#### **10. Upcoming Meetings:**

- January 12-13, 2010: Pacific Ballast Water Group - Vallejo, CA
- August 29- September 2, 2010: 17<sup>th</sup> International Conference on Aquatic Invasive Species - San Diego, CA <http://www.icaais.org/>

11. Washington Invasive Aquatic Animal Environmental Impact Statement: Kathy Hamel has finished the alternatives section and has just started writing the chemical section.

12. Member Updates: Paul H. said he has some new zebra/quagga mussel pipe displays if anyone is interested.

**Public Comment:** There were no public comments.

**Next Meeting Date:** The next CRB Team meeting will be held some time during the first two weeks in February (tentatively set for February 10), 2010, at the Heathman Lodge, Vancouver, Washington.

The meeting adjourned at 4:30 pm.