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# COLUMBIA RIVER BASIN TEAM MEETING

May 12–13, 2015  
The Grove Hotel  
Boise, Idaho

**Attendees:** Eric Anderson, Dain Bates, Barry Bean, Rick Boatner, Steve Bollens, Lisa DeBruyckere, Robyn Draheim, Leah Elwell, Bryce Fowler, Khaylish Fraser, Dirk Helder, Matthias Herborg, Rayola Jacobsen, Bob Kibler, Lloyd Knight, Clyde Lay, Meghan Lyons, Madelyn Martinez, Ralph Myers, Christine Moffitt, Blaine Parker, David Parrish, Stephen Phillips, Chris Randolph, Jim Ruff, Linnaea Schroeder, Jesse Schultz, Mark Shumar, Marcie Steinmetz, Michael Stephenson, Mark Sytsma, Jennifer Vogel, Kate Wilson, Thomas Woolf. On the phone: Colleen Allen, Mark Anderson, Tim Counihan, Van Hare, Tom McMahon, Jordan Nielson, Gretchen Rollwagen-Bollens, Karen Vargas, and Damien Walter

## EXECUTIVE SUMMARY OF ACTION ITEMS

**ACTION ITEM:** When the Lake Tahoe Restoration Action bill is introduced, Stephen will share the names of legislators within the relevant jurisdictions so that they can be lobbied.

**ACTION ITEM:** Lisa will share the “Hello boat” template (from the state of Washington) with the states and provinces on case studies for each entity to create 2-3 case studies annually.

**ACTION ITEM:** PSMFC will post AIS regulations from each state and province on the westernais.org website (rules, regulations, and contacts) so that people understand what they need to comply.

**ACTION ITEM:** PMSFC will incorporate the USGS QZ monitoring site layer with the new online WID database. PSMFC will determine the best method to share the WID online database internally and with the public (with restrictions).

## QUAGGA/ZEBRA MUSSEL ISSUES

**Lake Powell Infestation and Management Actions (T. McMahon)**—Arizona requested QZAP monies specifically for Lake Powell to hire a technician with a mobile decontamination unit (similar to what has been done at Havasu). Arizona has decontaminated over 45 boats in the past three months. Havasu State Park will break ground on a new decontamination facility June 1. Arizona will get \$95,000 from the Bureau of Reclamation (BOR) to the US Fish and Wildlife Service (USFWS) to Arizona to continue supporting a Lake Pleasant technician with decontamination units. Please keep supporting Arizona when they request funding for state management plans and AIS activities. Boats leaving any infested water bodies in Arizona do not have to be inspected prior to leaving the water body.

**NDOW Update on Lake Mead Decontamination Program and Status of SF Res (K. Vargas)**—QZ sampling starts in June for the entire state; WID stations – Wild Horse opens May 15 (only 20% full water capacity – two feet lower than last year – all boat ramps are currently out of the water), and will be open 5 days a week starting May 15 and then 7 days a week – all small watercraft. Lahontan and Rye Patch are open, but there is limited activity because of low water levels. Mead is open 7 days/week for decontamination, and has conducted 60 decontaminations so far this year. The National Park Service (NPS) just hired AIS outreach staff, and they have a new AIS coordinator. NDOW is not certain of where their funding will come from in the future. NDOW is considering using an electronic notification system for decontamination, and want to submit a proposal to Dave Britton to develop it (this would replace the email notification system), however, there was discussion that this process is already underway for the region through the Colorado efforts (E. Brown). The group needs to determine if it wants the email notification system versus a complete switchover to the database. Robert Walker has been developing the application in Colorado while Elizabeth Brown has been out of the office. It has not been determined who would manage the system once it is completed. The goal is to have everything figured out by the WRP meeting this fall. NDOW has approval for roadside inspections, but does not have the funding and does not have the match.

Secretary Jewell and Governor Sandoval visited the NDOW office to discuss sage grouse, and a quagga display was set up in the conference room. Nevada's governor viewed and took an interest in the display, and the NDOW director and governor discussed the concern by the Pacific Northwest relative to hydropower facilities and dreissenids.

**Lake Powell update**—All boats leaving a quagga-infested water must decontaminate (Deer Creek, Lake Powell, out of state) – clean, drain, dry, and provide hot water decontamination. The self-certification program remains in effect - they fill it out before launching, and there is an online mussel awareness program. Jordan is working on trying to intercept everyone coming off infested water bodies to decontaminate and put a seal on the boat – at least this notifies others that these boats have been inspected and decontaminated. The infestation on the lower end of Lake Powell is ramping up. At Lake Powell, Utah is working with the NPS to ensure each boater is greeted by an NPS or Utah staff person to provide the boater with the appropriate action they need to take to comply with the law. In 2014, the Utah legislature made it a Class B misdemeanor to not stop at these inspection stations. Inspected boats will have a receipt (seal through bow ring as well as paperwork with seal # and date the boat was inspected). At Lake Powell, decontamination availability will be limited – agreement pending with NPS – boaters will be able to make appointments and schedule decontaminations, planning ahead so they can comply with the law. Utah is attempting to set up roadside inspection stations at Kanab, Hanksville, and Blanding, but staffing is difficult because there is little infrastructure near these places (e.g., housing). Roadside inspection stations will be intermittent, run by law enforcement (currently), and used for traffic overflow. Boats are required to stop regardless of whether or not they have been inspected.

**2015 AIS legislation** – Senator Scott Jenkins introduced SB089, which adds an additional \$10 to boat registrations to fund AIS efforts – expecting between \$650,000 and \$750,000 annually to manage AIS. Utah is seeking ways to work with neighboring states on reciprocity so that tags do not have to be purchased in each state.

Jordan secured funding for 4 permanent decontamination units –they currently have 55 mobile decontamination units. 2015 – Deer Creek and Jordanelle, 2016 – Utah Lake and Willard Bay, and 2017 – likely Bear Lake and Sand Hollow. Utah is seeking ways to privatize decontamination in Utah. Boaters are willing to pay to have their boat decontaminated by a private company so they are not delayed in returning to the water. This will require a statutory change.

All watercraft are required to stop at intermittent roadside inspection stations, which are administered by law enforcement.

Deer Creek – veliger tows on April 13 – PCR negative. A second set of samples was pulled last Thursday by Denver BOR, and results will be forthcoming in a few weeks. Scuba dive surveys revealed no mussels. Last year, BOR had positive veliger results.

**Quagga Mussel Containment at Glen Canyon (Colleen Allen, Mark Anderson)**—At full pool, Lake Powell is 186 miles long, has hundreds of miles of shoreline, and welcomes three million visitors/year (see slide show). The first quagga infestation was discovered in 2007, and veligers spread from 2012 through 2014. Monitoring is underway for early larvae and settling mussel detections. Guidance for control and containment occurred beginning in 2007. A science panel and problem analysis team analyzed vectors to and from Glen Canyon, which resulted in a review of authorities (NPS has no jurisdiction to enforce at the state level). NPS rangers will continue to target education efforts at “come and go” boaters (Clean, Drain, Dry). The seven launch sites on the lake are functional; if the lake drops, the number of launch sites will drop to six and potentially five.

**Status of FY1025 Federal QZ funding (USFWS ZQAP grants) (Robyn Draheim)**—For FY2015, the USFWS received about \$2 million for dreissenids. Half of that money has been turned into state plan funding (\$900,000). In the past, the USFWS divides the money equally between the applicants unless a state has asked for less funding. The remaining half of the \$2 million is available for competitive RFP for QZ priorities focused on SW United States (lower Colorado River basin). Priorities for this funding include: limiting the spread through containment from infested to mussel free, limiting spread through containment by increasing compliance through state and tribal laws, and increasing the effectiveness of education and outreach. The grant closes June 1, and proposals will be evaluated by June 5. USFWS gives between \$1,000 and \$650,000.

**Federal legislation/issues**—

- **Mussel listing under the Lacey Act** – 2015 – There will not be a standalone bill, however, the Lake Tahoe Restoration Action (LTRA) will exempt just QZ mussels so that it doesn't affect other species on the Lacey Act list. Lake Tahoe staff

hopes that by the end of May, the bill will be introduced. **ACTION ITEM:** When the bill is introduced, Stephen will share the names of legislators within the relevant jurisdictions so that they can be lobbied.

- **Water Resources Reform Development Act (WRRDA)** – WRRDA was signed 6/10/14, and included authorization of \$20 million for CRB for FY16. PNWER and NWPC worked to incorporate the correct language into the appropriation. There is currently an earmark ban in Congress. The \$20 million is under the Aquatic Plant Control Program, which is “under construction.” Jeff Allen, from the Idaho office, has been working with staff in Washington, DC. Bill Booth (NWPC) and Jeff Allen met with Mike Simpson’s staff in April. Everything is in order on the House side; on May 1, they met with the Senate side and lobbied Idaho’s senators (Crapo and Risch), and both committed to go to Lamar Alexander’s office to make his staff aware of how firmly the NW delegation supports this. The Senate side will not put matching language in. The next steps:
  - If any funding is put into US Army Corps of Engineers (USACE) budgets, the Corps will work with the states to fund the program. Implementation guidance will be needed for the Corps to implement the program.
  - Late 2016 and early 2017 would be the earliest we would receive these funds.
- **HR1485 (Federal Lands Invasive Species Control, Prevention, and Management Act)** – This bill is not getting much traction. It was introduced in the House on 3/19/2015 by Representative Amodei from Nevada. It requires the Department of Interior to develop a strategic plan for the implementation of an invasive species program that would achieve an annual 5% net reduction of invasive species populations on lands managed by Interior.
- **FY2016 House Interior Appropriations Bill – USFWS/Park Service** – There is some hope for raising the current appropriation for \$1 million for state AIS grant programs to obtain full authorization of \$4 million. Communication from the Midwest is indicating there is a chance this is being increased to \$4 million. Stay tuned.
- **S373 – Vessel Incidental Discharge Act – Marine ballast water bill** – This bill provides for the establishment of nationally uniform and environmentally sound standards governing discharges incidental to the normal operation of a vessel.” It was voted out of committee with two amendments. The California State Lands Commission, Oregon, and Washington oppose the bill because they stated it would preempt states’ authority to address incidental vessel discharges, including ballast water, eliminating the long-standing ability of the states’ to protect their waters from invasive species.
- **DOI invasive species strategy (from 2012)** – The strategy would outline what the federal government’s responsibilities are and where the gaps exist. An internal review of the federal lands document and assessment will occur June 10. The purpose is to address actions related to trailered boats or conveyances moving on and off federal lands. The goal for completion of the strategy is now the fall of 2016.
- **National Invasive Species Act (NISA)** – NISA was reauthorized 20 years ago; a small effort to promote reauthorization occurred during early 2015. There was discussion about proposing reauthorization, however, no action was taken.
- **Lacey Act** – We have not seen any Lacey Act bills like we saw in the previous Congress.

## AIS PROGRAM INFORMATIONAL REPORTS

**Oregon** (Rick Boatner)—In 2015, 2 stations are now open (I-82 and I-5), and Oregon has intercepted five contaminated vessels (1 Lake Mead, 2 Lake Havasu, one from Ohio, one from Oklahoma) after conducting 1,100 inspections. Starting this week, all five stations will be open except for Basque (cannot find employees). Last year, Oregon completed 11,500 inspections, intercepted fouled 285 vessels—17 for QZ mussels, two for blue mussels, one for Conrad mussels, and the rest for other aquatic invasive plants. Mark Sytsma, Rick Boatner, Glenn Dolphin, and Lisa DeBruyckere presented to the House Agriculture and Natural Resources Committee last week on the regional framework, state ANS plan, and state aquatic invasive species permit program – it was well received, with much discussion.

**Montana** (Linnaea Schroerer)—No Montana stations are open yet, training will occur beginning next week, and then the stations will open after Memorial Day. A total of 41% of licensed anglers are non-residents. New Zealand mudsnails don’t seem to be causing too much of a problem. No evidence of ZQ mussels in Montana. In 2009, Montana passed the Aquatic AIS Act, which:

- made boat inspections mandatory and provided rulemaking authority; and

- established management areas, which provided special authorities in those places.

In 2013, Montana made the entire state a management area, and included quarantine provisions (has to pass a 2<sup>nd</sup> inspection before the boat is allowed to proceed – could be hours, days, and weeks). Montana has pushed back on a mandatory 30-day quarantine because they don't feel like it serves the public well, and lessens flexibility. The 2013 legislation also provided for equipment, so that dredges, piers, etc. would fall under mandatory rules.

In 2013, the Montana Governor issued an AIS Blueprint, which added the Department of Transportation to the program; moved AIS to Fish, Wildlife and Parks (FWP), and left terrestrial plants to Department of Agriculture.

HB 553 granted authority to outside entities to operate inspection stations with FWP oversight and with a guiding agreement. The shortfalls of this legislation is that it did not include a boat plug rule (if you are traveling between water bodies, you have to remove your boat plug) and did not make it illegal to transport live fish across the state (currently in 2/3 of the state, you cannot transport live fish, but in the eastern 1/3 of the state, you can). There remains a disconnect between the level of public awareness and education and actual behavior, i.e., people know about Inspect, Clean, Dry, however, they are not doing it.

Early detection and monitoring has been ongoing since 2004; Montana had 460 monitoring sites at 187 waterbodies in 2014. Montana runs its own AIS veliger lab, and processes samples for all Missouri River and downstream states (and some upstream states) (funded through USFWS). They average 2-week turnaround on sample processing. In 2014, Montana hired an aquatic weed survey team to sample several water bodies throughout the state.

Montana sites watercraft inspection stations based on direction of travel, where people are coming from, where they are headed to, the risk of establishment, and staffing resources. A problem in eastern Montana is competing with salaries at fast food restaurants (\$18-\$19/hour). Montana has five roving stations and 11 permanent stations. They are not running a station at Sweetgrass because Alberta has a station, and are not running a station at Noxon because of Idaho's station. The Blackfoot Tribe managing a boat inspection station, although they do not decontaminate at this station; contaminated boats are sent to MTFWP. The Blackfoot Tribe is mandating that every boat that launches on tribal waters has to have an inspection. Since 2009, the number of boat inspections has increased to almost 35,000/year. In 2014, over 30,000 boats were inspected—there were 454 cases of fouled boats (most of the violations were for standing water), including three QZ mussel boats; 12 cases of illegal live fish, and one full decontamination of a suspected mussel boat from Lake Erie.

In 2015, MT will continue focus on illegal movement of live fish, crack down on WID drive-bys, reach out to non-motorized boat owners, conduct a raffle, and work with the outfitter pilot program at Clearwater, and other entities running stations.

**Washington** (Jesse Schultz)—In 2014, WDFW did 510 tows, 247 substrate samples, and shoreline surveys at several locations, and there were no detections for QZ. In 2014, Washington conducted 14,968 watercraft inspections (mandatory inspections (633), Washington State Patrol, Integrated and General). 2014 patrols emphasized airport, pet stores, restaurants, and market inspections. 2015 nighttime watercraft inspections – BPA and PSMFC sponsored nighttime inspections at three major port of entries in Spokane, at highway 395 and I-5 near Portland. At least five stations will be open from 5-6pm to 5-6am the next day (heavily staffed with enforcement officers).

Washington consolidated all invasive species regulations:

- Invasive Species RCW 77.135
- Certificate of Inspection RCW 77.135.100
- Clean and Drain Requirements RCW 77.135.110
- Department Authorized Representatives RCW 77.135.160

2015 Outreach and Education – There is now a Washington State passport. Washington is erecting STOP signs at over 500 sites that makes it illegal to transport AIS. The 2014 annual report is completed.

Washington purchased about 250 feet of floatation boom with 15-deep vertical skirt to potentially minimize runoff.

New Zealand mudsnails exist at Ringold Hatchery near Hanford Reach. Staff is dissecting rainbows, tiger muskies, and steelhead, and has not yet detected New Zealand mudsnails in any of them.

Washington continues to receive debris from the Japanese tsunami several years ago.

**Idaho** (Tom Woolf)—2014 Watercraft inspection review – 15 stations, 49,380 inspections, over 500 hot washes, 245 with weeds, 15 mussel-fouled vessels, and 788 recently from mussel-infested waters. The destination of many watercraft that visited QZ infested waters is the Pacific Northwest. In 2015 (7<sup>th</sup> year of operations), there will be 17 stations, operating from February through September. New stations will occur in Clark Fork and Weston - 2-way traffic inspections, and boat ramp inspections. Opening the station at Clark Fork will alleviate Montana's burden across the border. None of the stations are operated at night. 2015 inspections to date – 4,000 inspections, 180 hot washes, 13 with weeds, 25 vessels that visited mussel waters in the previous 30 days -eight mussel-fouled vessels. Of the 8 mussel-fouled vessels, seven were intercepted due in part to notification from NV, AZ or CA; six were previously washed, six were out of the water for three weeks or less, five were recently purchased, four were commercially transported; four were from Lake Mead, two were from Lake Havasu, one was from Lake Pleasant, and one was from Tennessee; six were destined for Idaho, and two were destined for Montana.

High risk vessels (in mussel waters in the previous 30 days) – Lake Havasu, Colorado River below Havasu, Lake Mead, Lake Powell, Lake Mohave, and then Lake Pleasant. This time of year, high risk boats are coming from Havasu, then boat movement shifts to more boats coming from Lake Mead and Lake Powell to the PNW later in the season.

2015 High risk boat statistics – 250 vessels, 99% from Lower Colorado River area, 16% previously inspected, 20% of vessels had been in the water more than 30 days, 78% out of water less than 30 days, and 21% are destined for Canada.

New for 2015: Data template revision (ARC-based format in the cloud), boat ramp stencils, outreach materials (key chains, towels, sponges, boot brushes, drink holders, pocket guides)

Idaho Invasive Species Council Update – Invasive species and noxious weed strategic plan review; update rapid response plan; increased statewide efforts supporting training and survey.

The plan for 2015 sampling and surveys: 700 samples from 70 waterbodies; multi-taxa, new detects from 2014: yellow floating heart, Asian clams, Calico crayfish (Clearwater drainage), Siberian prawns – from barges (Columbia River and lower Snake River); Calico crayfish and Siberian prawns are not on Idaho's invasive species list.

Thoughts on regional framework

- No effective program exists to contain mussels at source waters
- State programs in impacted areas have taken the initiative to promote notification and decontamination
- Use existing inspection data to identify risk and allocate resources accordingly
- Support states engaged in prevention efforts at source waters (include states on major travel corridors to eastern source waters)
- A program is needed to address moored vessels at source waters

**CRITFC** (Blaine Parker)—Wildhorse Reservoir Quagga Mussel Survey, October 22, 2014 – surveyed the eastern shoreline, examining rocks and other objects, from State Parks to Dams; Owyhee River flows in to the reservoir; no check station around Elko.

**Alberta** (Kate Wilson)—Canada has 60% of the world's lakes. Lakes in Saskatchewan and east are the most vulnerable to QZ. There are three full-time staff in Alberta's AIS program. Alberta will be posting billboards targeted at snowbirds returning with boats.

Mussel monitoring; 2013 – 55 waterbodies, 2014 – 73 waterbodies, 2015 – 66 waterbodies; the future is multi-taxa monitoring. A new veliger lab is coming on line in Alberta.

Alberta is engaging with fire management to clean equipment.

Alberta has purchased eight wash units. A total of 12 WID stations will open this week (targeting eastern and southern border); Coutts opened in March. There have been no fouled boats, but lots of high risk boats. Alberta has 50% compliance for boats passing inspection stations. Alberta will be using tablets now to input data. The canine mussel detection pilot project went well. Alberta attempted night inspection stations, but could not see boats at night.

Alberta amended the Fisheries Act, which created a prohibited species list, mandated stopping at designated inspection stations, provided for enhanced authority (re: vectors and conveyances – regulations) and quarantine provisions; and gave authority to watercraft inspectors (to inspect, solicit information, take samples, clean or hot water wash). Federal regulations will be implemented in June – Asian carp and QZ mussels will be illegal to import.

**British Columbia** (Matthias Herborg)—British Columbia has produced three new invasive species strategic and planning documents: The BC Government Invasive Species Strategic Plan, the Invasive Species Early Detection and Rapid Response Plan for British Columbia, and the Zebra and Quagga Mussel Early Detection and Rapid Response Plan for British Columbia. They conducted a cross-jurisdictional review of EDRR plans. Their prevention program includes highway signage, WID stations, and education and outreach (Clean, Drain, Dry, RAPP hotline, and web page). In 2015, there will be three roving WID crews in the Invermere, Nelson, and Penticton areas. Research outlook – develop boater movement models for BC for this summer, with further enhancement on annual data; boater movement models for southern Ontario, for example, have been able to predict with great accuracy spiny water flea invasions (Make Lewis’ Mathematical Biology Lab of University of Alberta). Lewis could potentially help the PNW determine were to strategically invest in WID stations based on boater movement data.

## DREISSENIID REGIONAL FRAMEWORK, OPERATIONS DISCUSSION

Lisa DeBruyckere, on contract with PNWER and PSMFC, presented elements of the draft PNW regional framework for dreissenids, including a co-presentation with Van Hare of PSMFC to present the new WID online mapping tool, and received the following feedback from the attendees:

### Goals of a Regional Framework

Comments:

- Emphasize partnerships and coordination, building on partner specialties/skills/strengths, build corporate partnerships, and engage local entities
- Develop flexibility for moving funds between jurisdictions
- Establish enforcement consistency (regulations, rules, statues)
- Encourage U.S. and Canadian federal governments to become more involved in western AIS issues
- Engage other agencies even if they don’t have explicit authorities for invasive species
- Describe the framework in the context of drought, water rights, climate change
- Frame the conversation with federal agencies with regard to preventing increased threats to T&E (salmonid) species
- Increase awareness beyond end user, long way to go to raise awareness of policy makers

### Regional Framework Prerequisites (slide with 4 buckets, highlighting allocation of resources)

Comment: Add to the bucket: utilization of resources and framework

### WID Station Mapping

Comments:

- Couple amount of boat traffic with fouled interceptions – challenge is that boat traffic data is coming from inspection stations (MT has camera footage, OR stations have some compliance data, BC has traffic cameras with 24hr video)
- Public portal discussion; what will public be able to access? Reasons for no or limited access – makes it easy to avoid WID vs. work needed to go state by state to find out where and when stations are open and located vs availability of

data for analysis. Potential benefit to people looking for inspections. **ACTION ITEM:** Put info on each state and province AIS regulations on WESTERN AIS website (rules, regulations and contacts) so that people understand what they need to comply

- Could this system for mapping be tied in to regional watercraft movement database being developed by Colorado and auto generate email alerts, etc? Van: Yes
- Station locations aren't just optimized for Q/Z movement, also looking at interception of AQ weeds, etc.
  - How do we capture roving station data?
  - Lake Winnipeg stations should be represented by orange source triangles
  - Questions about priority stations, if they aren't located on borders and aren't intercepting lots of boats, are they priorities?
  - Have we captured all the border inspection stations?
  - "Boundary Wall" is a misconception, redundancy doesn't even capture all the boat traffic, can we locate more WID stations near/at source waters?

### Coordinated Communications and Monitoring

Comments:

- Couple monitoring layers with other database layers on WID stations on PSMFC online WID site
- Can we use WRRDA \$ to expand monitoring?
- ACE is getting monitoring location requests from multiple sources (e.g., Steve Wells and USGS); can we better coordinate monitoring requests?
- Update high risk water bodies and use that information to update/identify monitoring needs

### Comparison to Model Law

Comments:

- We need to make a recommendation in the framework about the ability to quarantine waterbodies – this was not captured in model law development; template legislation could be provided for states that currently do not have quarantine authority
- National Sea Grant exercise on state deficiencies relative to model law oversimplified some of the states' laws

**ACTION ITEM:** Lisa will share the "Hello boat" template (from the state of Washington) with the states and provinces on case studies for each entity to create 2-3 case studies annually

- How do we stop Midwest/Great Lakes and other areas from sending us infested boats?

### Dreissenid framework recommendations

- Source waters: NV, AZ ex. need \$ and then time, this need has to be factored in to efforts to shore up source water prevention/inspection efforts; in addition, states like Wyoming and Oregon currently cannot subcontract WID services – statutory/infrastructure changes may be needed for this to occur
- Vulnerability studies for hydropower facilities are being conducted, but what about the other water users?
- Vulnerability assessments need to be identified as federal and non-federal to ensure progress can be tracked in both arenas

## PROGRESS WITH FEDERAL AGENCY INFORMAL CONSULTATION

Lisa DeBruyckere presented the results of the federal agency information consultation to date:

- Preventing an Invasion – May 2013
- Rapid Response Working Group accomplishments
- VAT accomplishments
- Informal consultation with NOAA and the USFWS
  - Decision framework
  - Best management practices
  - May 18 convening
    - NOAA, USFWS, USFS, BLM, USACE, BOR, BPA, CRITFC
    - Bring everyone up to speed on progress to date
    - KCL (potash) effects analysis
    - [FIFRA Section 18 emergency exemption](#) (short-term) – modify Minnesota’s document for PNW states
    - Programmatic consultation (would provide for take) – (long-term)

## REPORT ON BUILDING CONSENSUS

Leah Elwell gave an update on the most recent Building Consensus meeting and ABYC meeting with the boating industry:

- Process to build policy consensus through AIS coordinators, law enforcement and assistant attorneys general during the past several years
  - Phase 1 – Model legislation was created and adopted by the Association of Fish and Wildlife Agencies (AFWA)
    - National Sea Grant Law Center and AFWA
    - 62% of states have legal provisions addressing the trailered recreational watercraft vector
    - Recent activity:
      - Nebraska passed legislation creating an AIS program
      - South Dakota finalized several new rules to address AIS
      - Legislation pending in Maryland (HB860) that would impose launching restrictions and make recommendations on additional actions
      - 16 states have WID programs
  - Phase 2 (current phase) – Model regulations- working on developing model regulations to guide implementation of consensus building policies for waterbody classifications, inspector training, protocols and certification of inspection and decontamination
    - Process to query the AIS coordinators, Summer and Fall 2015 events to work through implementation, work session, and goal to have draft regulations by Spring of 2016

## AMERICAN BOATING AND YACHTING COUNCIL (ABYC)

Leah Elwell discussed the meeting that occurred in January of 2015. The ABYC met with AIS professionals in Las Vegas to discuss boat design, trailer design, and engine design to minimize AIS retention by implementing AIS protocols while not damaging boating equipment. They ABYC posted the meeting minutes to the meeting [here](#).

ABYC wants to develop a steering committee that includes natural resource professionals, develop best management practices for new boat design, and create a technical report (potentially requesting QZAP funding to complete that). National Marine Manufacturers Association has also been a part of this dialogue. The Sportfishing and Boating Council may be another group that becomes part of this discussion.

## CORBICULA RESPONSE – LAKE PEND OREILLE

Bob Kibler (USFWS) and Christine Moffitt (USGS/UI) described the corbicula response in Lake Pend Oreille (LPO). An infestation was discovered in 2012 in Ellisport Bay. Asian clams are tolerant and much more difficult to kill than quagga



mussels. LPO was the first oligotrophic lake in the Columbia River watershed that had corbicula. The infestation was contained, the public was concerned, and the economy in that area is driven by the health of the ecosystem. Corbicula causes significant ecological changes, they are mobile, live 2-5 years, are hermaphroditic, and reproduction is triggered by warm temperatures. The constraints at LPO:

- Copper not acceptable due to persistence
- KCl did not appear to be effective
- Barriers used in other locations not completely effective

Treatment: Add sodium hydroxide (caustic soda, lye) – numerous lab trials showed it was effective in the lab as well as field trials with ballast water in Washington. It is a familiar product that is easily neutralized with no bioaccumulation.

Timeline: Discovered in 2012, and experimental treatment to eradicate begins.

Community engagement was a key factor in the success of project implementation and support.

In a normal year, they draw down LPO – planted to treat during winter months at lake elevation, using students and volunteers, and treat and monitor throughout winter until April.

Permits: EPA experimental pesticide application exemption from EA; NPDES, FWS ESA Section 7 BA, COE permit for barrier placement (considered fill), Environmental Health and Safety.

They will delay evaluation until November 2015 drawdown.

Lessons learned: Weather unknowns, start permitting early, purchase materials in advance, volunteers are great (but come at a cost), place the barriers and then deploy chemicals, and consider this type of application for other target species.

<http://webpages.uidaho.edu/LPOAsianclams/>

## REGIONAL APPROACHES TO FLOWERING RUSH

Mark Sytsma (PSU), Madelyn Martinez (USACE) and Tom Woolf (Idaho FG) discussed the regional approach to addressing flowering rush infestations.

Flowering rush was brought in as an ornamental water plant. It is very hardy, and spreads rapidly through bulbs – they spread quickly via waterfowl consumption and boats. Flowering rush outcompetes everything, including watermilfoil. It is currently found in Montana, Idaho, and Washington. The plant likes clean, clear water and oligotrophic systems. It has expanded rapidly through the Pond Oreille system. It grows in excess of 20-foot deep (as long as it has light, it can grow), and it extends into the riparian zone. It's a pioneering species, and becomes established in places where there is no vegetation (rocks/boulders). It's great habitat for pike. Much of the flowering rush detected is actually underwater – it doesn't have to emerge from the water or seed to thrive. Treatments have included mechanical, hand removal, barriers, and herbicides. Biocontrols (aquatic weevil) are being developed in Europe.

A Columbia River survey (visual with rake tosses) was conducted, and flowering rush was found downstream from the Yakima River. All Oregon detections were above the McNary Dam, 5 of 6 sites were in wind/current protected areas, no flowers were observed, and most of the patches were fully submersed. Jennifer Parson found two sites west of McNary dam; eight sites were on the Washington side of the river. In 2015, Portland State University will be conducting surveys downstream.

Response to finds:

- Damian Walter – Wallowa District (USACE) – has been working on permitting issues, and encourages everyone to understand the permitting structure, understanding when we can work and when we cannot work
- Madelyn Martinez (USACE) – because of cultural resources, the first six inches of the surface cannot be disturbed

### **Two other species:**

Ravenna grass (*Saccharum ravennae*) (native to North Africa). It was detected in Benton County, Washington in 2012. It's proposed as a Class A noxious weed in Washington. There's a few locations in the McNary Wildlife Area.

*Bacopa* (waterhyssop) – nobody knows if it is native or introduced. It is a weed in rice fields in California. In Oregon, we're not sure if it is a natural expansion of a native species or a weed. A risk assessment for this species will be conducted.

## **IDAHO COUNTY AND CWMA NOXIOUS WEED AND INVASIVE SPECIES UPDATE**

Bryce Fowler, Fremont County Weed Control Supervisor and President of the Idaho Noxious Weed Superintendents Association, provided an update on invasive species efforts in Fremont County, Idaho. Senate Bill 1073 (noxious weed research) was proposed, but it had shortfalls. The actual bill opens the Noxious Weed Law and has some stipulations that has stronger checks and balances associated with noxious weed research.

New invaders in Idaho include purple and Iberian star thistle (not in Idaho yet, but on Idaho border), sticky nightshade/leachy tomato, *Arundo donax*, and *Phragmites* (common reed).

Terrestrial and aquatic cost share were combined; the state now rolls over all Eurasian watermilfoil program money into cost share at the end of the year. Bryce also provided updates on outreach and education activities, WID stations, treatment trials for invasive species, etc.

## **LAKE ROOSEVELT NATIONAL RECREATION AREA AIS PLANNING**

Meghan Lyons, Biologist with the Lake Roosevelt National Recreation Area, discussed Lake Roosevelt National Recreation Area AIS planning. Lake Roosevelt is 130 miles long, is managed by the NPS, Spokane Tribe of Indians, and Confederated Colville Tribes – this is all upstream of the Columbia River, so any infestation has the potential to move downstream. The goal of the program is to prevent new introductions, limit the spread of existing populations, and manage the invasive species currently in the lake. Lake Roosevelt managers are most concerned about QZ, northern pike, aquatic plants, northern crayfish, Asian clams, flowering rush and NZ mudsnail. Key program components:

- Public awareness
- Prevention of new introductions
- Create a management plan for AIS populations that currently exist in the lake

Prevention, monitoring, control and inventory and monitoring are key elements of the program. Meghan is currently the only staff person for the program, but she is hiring two additional staff this summer to assist with boat inspections. There is no clear entry and exit points for the lake – there are numerous access points.

## **GREATER YELLOWSTONE COORDINATING COMMITTEE**

Leah Elwell (ISAN), provided an update on the Greater Yellowstone Coordinating Committee (GYCC) and UMPS III manual.

The GYCC's mission is to facilitate cooperative management of the ecosystem (NPS, USFWS, USFS, and BLM). Priorities for the committee: the project has to be GYCC-wide, timely, and something that would benefit from enhanced coordination. They have numerous committees, including a very active Aquatic Invasive Species Subcommittee, which was formed in 2006 and includes county weed departments, NGOs, and state agencies. Ongoing activities include preventing new introduction of AIS into GYA waters; surveying, reporting and responding to AIS in GYA waters. Major accomplishments include obtaining decontamination equipment, communication, coordination, and pooling resources.

## **AN UPDATE ON THE UNIFORM MINIMUM PROTOCOLS AND STANDARDS FOR WATERCRAFT INSPECTION PROGRAMS MANUAL**

Leah Elwell discussed the upcoming UMPS III revisions. Once the document is in a draft review stage, it will be distributed to individuals with jurisdictions that have a WID program. The document has never contained information about boat components and the effect of hot water treatments on those components. This latest version is more explicit in terms of specifications on decontamination units, seal usage across the West, consistent language, and brevity. UMPS is recommending hot water above all else (compared to chemicals and physical approaches). Next steps: The document is undergoing committee and stakeholder review and refinement. Dialog with the boating industry is another key next step.

## USGS/WSU DREISSENIID MUSSEL EARLY DETECTION MONITORING/ANALYSES EFFORTS

Steve Bollens (WSU) and Tim Counihan (USGS) provided information on early detection monitoring/analyses efforts. BPA must maintain their hydropower equipment in the CR Power System, and there is concern about QZ mussels. The objectives of the project are to enhance and help further coordinate existing efforts, provide a framework for prioritizing placement of boat cleaning stations, evaluate the efficacy of FlowCAM, test the efficacy of eDNA for monitoring, conduct research to assess the cause and effects of biological invasions, and to provide training.

Tim Counihan discussed accomplishments in the past year, including:

- Published “planned” 2014 zebra/quagga mussel monitoring
- Identified overlap sites - Opportunities for collaboration
- Developed comprehensive database describing 2012, 2013, and 2014 monitoring locations and risk of introduction and establishment
- Developed boat ramp database/GIS
- Completed early detection monitoring data collection
- Estimated probability of detecting rare taxa in 3 Columbia River and 1 Snake River Reservoirs

Early detection monitoring in 2014 (USGS-WSUV) – assessing the efficacy of the FlowCAM by sampling in the field, splitting the sample (one is enumerated via traditional microscopy, and that same sample is then enumerated via FlowCAM; the second sample is archived for plankton community analysis). A total of 290 samples from five reservoirs (Ice Harbor, McNary, Bonneville, John Day, and The Dalles) and 25 additional locations – no veligers have been detected. The strengths of the FlowCAM is the speed of sample processing, the volume of sample processed per collection site, and the accuracy of organism identification. The potential weakness of the FlowCAM is the accuracy of organism identification.

There will be a Spring/Summer 2015 pilot study re: eDNA. Goals will be to design and validate species-specific qPCR assays for each target species; and collect and analyze 200 water filter samples in conjunction with microscopy and FlowCAM samples.

## MEMBER, ISSUE UPDATES

### USFWS ANS PHONE NUMBER

USFWS is discontinuing the USFWS ANS number.

### SNOWBIRD MAGAZINE

Alberta placed an ad in a popular snowbird magazine – good target audience.

### WRP MARINE INVASIVE SPECIES WORKSHOP

WRP Marine Committee is discussing how to move forward with an interjurisdictional marine planning document. Started with collecting roles and responsibilities relative to federal, state, tribal and local regulations relative to fouling. They will be discussing this further at the WRP meeting in Lake Tahoe.

### NEW ZEALAND MUD SNAILS

[International Mudsnail Conference](#) is in June in Seattle, Washington, Western Fisheries Science Center, June 16-17, 2015.

## FOUL RELEASE STUDY UPDATE

Mark Sytsma talked about an ongoing project testing anti-fouling coatings in the Columbia River – testing how long the coatings last under Columbia River conditions. Mark takes the panels down to San Justo Reservoir (south of San Francisco), and pulls the panels out in September. The panels work great, although there is minor blistering. The study will conclude next year.

Mark is proposing a project to develop a water quality model for reservoirs, lakes and rivers in the Pacific Northwest, including Lake Roosevelt. The concept is to develop a mussel subcomponent to that model, which would predict where mussels would most likely be found based on hydrodynamics. San Justo Reservoir quagga biology information would then be incorporated into the model to help with predicting likely locations of introductions within reservoirs.

Steve Wells has talked to BOR, which is stating eradication efforts likely will not occur at San Justo Reservoir. The lake is currently quarantined. BOR developed an eradication plan, but the plan has not been funded.

## AMERICAN FISHERIES SOCIETY MEETING IN AUGUST IN PORTLAND, OREGON

### **NEXT CRB MEETING**

Next CRB meeting October 13-15 (placeholder), 2015 in Portland, Oregon.