

Member Update Reports for the Western Regional Panel Meeting

Annual Meeting October 24-26, 2018 Tacoma, Washington

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Northern pike suppression and eradication in Southcentral, AK continues to be the highest priority AIS work for the department. AK DF&G completed two invasive northern pike eradication projects, continued two existing pike suppression projects, and initiated a new pike suppression program with funding from NOAA and BIA as well as a local municipality.

A significant milestone was achieved during this past year with the eradication of pike from the last of infested lakes on the Kenai Peninsula. In the fall of 2017, pike were removed from Loon Lake, in the Soldotna Creek drainage, and the final water body treated in a drainage-wide project that took four years to complete. The final eight lakes with pike populations were treated with rotenone during October 2018. Currently, we are considering the Kenai Peninsula to be pike-free for the first time in ~40 years. During the project an introduced population of muskellunge were detected and eradicated.

Since 2011, The Sport Fish Division has had a suppression project in Alexander Creek in the Susitna River, a system where pike have had severe impacts to native fish. Field crews are deployed to Alexander Creek to gillnet pike in May when pike are actively spawning and easier to recruit to gillnets. Since this project's inception, over 20,000 pike have been removed from the drainage. This past spring, 1,095 pike were removed between May 14th and May 26th. A similar suppression project occurs at the outlet of Chelatna lake in the Yentna River Drainage. During the second year of the project 467 pike were removed between June 4th and July 23rd.

This past June, AK DF&G partnered with the Tyonek Tribal Conservation District and the Cook Inlet Aquaculture Association to begin a new pike suppression program in Threemile Lake on the West Side of Cook Inlet. This area is thought to be on the invasion front of pike in this region. A mark-recapture project was conducted to estimate the pike population size in the lake; 1,246 pike were tagged and removed. Diet analysis, aging and microchemistry to determine origin was completed on 1,000 fish. This benchmark will allow for assessments of the effectiveness of pike suppression in the lake over time.

2. *Didemnum vexillum* control options continue to be a research focus for AK DF&G in partnership with the Smithsonian Environmental Research Center (SERC). With only one known location of the notoriously invasive colonial tunicate in Whiting Harbor, Southeast Alaska, there is interest in removing *D. vexillum* from Alaska waters. During the past year, permits were issued to test the efficacy of chlorine to remove *D. vexillum* from the seabed. Granulated chlorine was administered into marine waters within containment areas comprised of heavy-duty turbidity curtains. Using previous research (2015) to guide methodology, a team of divers and top-side support delivered chlorine into enclosures at targeted and random locations. Chlorine concentration sampling occurred throughout the four-hour treatment period. If chlorine was still measurable after four-hours, granulated sodium thiosulfate was distributed into the enclosures to neutralize the chlorine. A total of ten sites were treated with chlorine, five sites were located over flat seafloor and five sites were located on sloping, rugose seabed. Data analysis is in progress.

The project includes an element of outreach. Two public meetings were held in Sitka to inform the locals about the project, the status of *D. vexillum* in the nearby harbor, and to host a question and answer session. Outreach to Alaska shellfish growers will occur in Dec. 2018 to share information about the project and provide BMPs for preventing the introduction and spread of marine invasive species.

3. The Alaska Aquatic Nuisance Species Management Plan was approved in 2002, more than 15 years ago. To make intentional, strategic and proactive steps toward prevention, detection, management and control of aquatic invasive species, the AK DF&G invasive species program prepared a 5-year strategic framework and initiated a draft update to the northern pike management plan. The plan identifies key partners, and measurable actions and desired outcomes for outreach, early detection, response and control or management actions.
4. Review state authorities pertaining to invasive species to investigate gaps. AK DF&G facilitated a multi-agency work group to review statutes and regulations related to invasive species and compiled a list of vectors and threats. We are currently working with the National Sea Grant Law Center to move this initial review forward to develop model provisions for the State of Alaska.
5. Coordination continues to be a large part of the AK DF&G invasive species program's role in Alaska. Key efforts include a board seat on the statewide invasive species working group the Committee for Noxious and Invasive Pest Management, a marine invasive species committee, and most recently a small group effort to host a workshop for development of a statewide all taxa invasive species strategic plan. This statewide plan would be a component of the Arctic Council approved Arctic Region Invasive and Alien Species Strategy and Action Plan. A work session will occur in Feb. 2019.

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Name: Nicole Kimmel & Cindy Sawchuk

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Alberta remains mussel free after extensive veliger, substrate and K9 monitoring in over 90 lakes and reservoirs. The watercraft inspections decontamination and K9 program inspected 31, 500 boats by early October and will close for the season at the end of October. The program currently operates for eight months per year and has intercepted 13 mussel fouled boats thus far.
2. The Government of Alberta collaborated on invasive species with academia and non-governmental organizations to strengthen monitoring capacity for invasive mussels and spiny water flea. DNA work has tried to incorporate native mussels species to ensure any future work with primers does differentiate native from invasive mussels.
3. Invasive aquatic plants (Flowering rush, Invasive Phragmites and Pale Yellow Iris) sites continue to be detected throughout Alberta with increasing awareness of the public. Response activates are under way for most locations. Plants have taken a huge portion of response effort to explore control options and approvals to initiate work.
4. Goldfish and Koi removal projects received an extended period of exposure in media when a child caught a 16lb Koi fish with a hotdog. The Don't Let It Loose campaign has been leveraged to curb this pronounced behavior of aquarium dumping. Most are contained to storm water management ponds in urban areas but these ponds are designed to flow into natural waterways in flood events.
<https://www.cbc.ca/news/canada/edmonton/holy-carp-11-year-old-nets-giant-koi-in-st-albert-lake-1.4805178>
5. Whirling Disease program is leading decontamination protocol adoption with industry as well as working to make conditions as part of conducting activities in water. Applies to construction projects, oil & gas operations and forestry partners. Delineation of presence is utilizing fish, sediment and invertebrate samples. Established stream temperature monitoring network (350 loggers deployed). Oligochaete(Worm) Surveillance is under way as well to establish what is present in Alberta. Impacts beginning to be understood through Bow River Angler Survey, last done in 2006.

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. In 2017, the AIS Administrative Code §12-4-901 & 902 went through 5 year rule-making review. It was determined that overall the rule was effective at accomplishing what it set out to do, however, there were revisions to verbiage to make the rule easier for boaters to understand and follow as well as law enforcement to enforce upon (e.g. addition of the words, “ensure plugs remain removed or open during transport.”). Law enforcement had difficulty issuing citations with the previous rule because boaters claimed to have removed plugs at the ramp, drained, and put them back in before departing the area. The revisions were finalized and went into effect in February 2018. The AIS rules also require owner/operators of watercraft, conveyances, equipment, etc. to follow mandatory protocols set forth in Director’s Orders when leaving a waterbody suspected or infested with AIS.

Update and changes were also made to Director’s Orders in fall of 2018. Highlights of changes are as follows:

Director’s Order 1 is the State of Arizona’s list of prohibited aquatic invasive species. Changes to this order include the addition of Golden mussel (*Limnoperna fortunei*), Golden alga (*Prymnesium parvum*), Fishhook waterflea (*Cercopagis pengoi*), Spiny waterflea (*Bythotrephes longimanus*), Hydrilla (*Hydrilla verticillata*) and Water hyacinth (*Eichhornia crassipes*). Largemouth bass virus and Whirling disease were removed from Director’s Orders due to the adoption of fish health rules since they were initially listed.

Director’s Order 2 added waters due to the addition of new AIS in Director’s Order one. This order was reorganized by county and waterbody, making it easier for someone looking to visit a specific waterbody to see all AIS that may be present and follow Director’s Order 3.

Director’s Order 3 are the specific mandatory requirements for a watercraft or conveyance leaving an AIS infested water.

Changes and updates for short-term users (less than 6 consecutive days on water):

- Plugs must remain out during transport and
- Removal of reference and recommendation to use vinegar in areas that cannot be drained.

- Dry times of 7 days for summer and 18 days for winter were added as recommendations for day-users and to call AZGFD to schedule inspection and decontamination if necessary for boats launching in other in-state waters in less than recommended dry times.

Changes for long-term users (6 or more consecutive days):

- Requirement to schedule inspection and decontamination with authorized AZGFD personnel or agent (where available) prior to transporting from AIS waters.
- Following inspection by authorized agent, boater will be given seal and receipt/decontamination paperwork and information is entered into ANS watercraft database.
- Any conveyance regardless of short or long-term use will require inspection and, if necessary, decontamination prior to transport.

Other users/equipment must clean, drain, dry and follow one of the following protocols:

- Submerge in quaternary ammonia based cleaner (6 oz per gallon of water) for 20 minutes.
- Soak in 140F water for 10 minutes
- Freeze overnight
- Completely dry for at least 7 consecutive days May-October and 18 consecutive days Nov-April.

*Authorized agents performing inspection and decontamination in Arizona must meet AZGFD training certification and quality control requirements to maintain certification and be authorized by the Department. AZGFD has developed a training for authorized agents performing inspection and decontamination in AZ that meets standards set forth in UMPS III

2. AZGFD has discontinued use of the Arizona Invasive Species Boat Inspection Report. This form was cumbersome and information sent in by owner/operator/transport was often incomplete and lacking information and AIS removal/decontamination efforts were insufficient. This reporting requirement now falls to authorized agents of the department who input inspection and decontamination into the regional ANS watercraft database. Authorized inspectors will issue a seal and a receipt or full page decontamination report (in the event of a full decontamination) to the boater.
3. In 2018, through 10/17/18 AZGFD and partners have performed 155 decontaminations. The priority continues to be on moored and infested boats, therefore a majority of these decontaminations are infested/encrusted watercraft. In comparison, 142 decontaminations were performed in 2017, 68 in 2016 and 42 in 2015, so we continue to make improvements and decontaminate more boats. The jump from 2016 to 2017 can largely be attributed to hiring a contractor to perform decontaminations. These numbers do not include inspections and standing water decontaminations performed in partnership with Utah Division of Wildlife Resource and NPS at Glen Canyon NRA (Lake Powell).
4. For the first half of 2018, the AIS Program was understaffed and was operating with only the Coordinator and the AIS Specialist in Lake Havasu City. As of June, we have filled our AIS Specialist II position based in Phoenix, re-classified and promoted our AIS Specialist based out of Lake Havasu to an AIS Specialist II. Additionally, we have new technicians based in Phoenix and one in Page, Arizona to support operations at Glen Canyon NRA. The program also had two summer interns helping with AIS outreach, creel/AIS surveys, applesnail and crayfish removals.
5. In October the AIS Program released a request for proposals to expand our professional inspection and decontamination services provided by contractors. High priority areas identified include: Page, Flagstaff, greater Phoenix, Bullhead City, Lake Havasu City/Parker, Mead/Mohave areas. Contracts should be awarded and in place in the winter in time for the exodus of boaters leaving to return home in the spring.

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Please fill out this form to provide a **brief** written report that highlights your top five priority program activities or accomplishments since September of 2017. Please include any legislative updates or the link to your website where more information can be found. Reports will be distributed at the 2018 WPR Annual Meeting in Tacoma, WA and added to the meeting minutes. **Please limit your entry to 2 pages total. Your report will not be edited. There will not be verbal reports at the 2018 meeting.** Non-Member participants are also welcome to submit an activity report.

Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. CPW has been working with the State Legislature and a broad stakeholder group to establish a secure source of **funding** for the ANS Program to operate in the future. The Colorado General Assembly passed the Mussel Free Colorado Act (HB18-1008) which created a long term stable source of funding for the ANS Program through the creation of an ANS Stamp for resident (\$25) and non-resident (\$50) motorboats and sailboats to fund a portion (50%) of the ANS Program long term. This bill also allows CPW to recoup costs expended performing decontamination of infested vessels and increases the fines for violations. The bill is expected to provide approximately \$2M. The CO General Assembly also provided general fund dollars to CPW for the 2018 and 2019 boating seasons through separate legislation to fund the Program until the new fee is collected. CPW continues to work with federal partners, and the Congressional delegation, to match state dollars and complete the financial need to continue implementing the ANS program at current levels. The USFS, BOR, BLM and FWS are currently contributing financially to the ANS Program in Colorado.
2. CPW is operating a Watercraft Inspection and Decontamination (WID) **Containment Program at Green Mountain Reservoir**, which is SUSPECT for quagga mussels following

an August 2017 detection of QM veligers by the Bureau of Reclamation (BOR). Subsequent bi-weekly sampling has revealed no further detection or confirmation of quagga mussels and there has been no evidence of adults in the samples. BOR provided funding to U.S. Forest Service (USFS), the recreational manager, for infrastructure improvements to the WID station in order to implement containment protocols this year. CPW contracts the WID services to a private industry vendor. The reservoir is now closed for the year due to low water. The WID station will open again in May 2019. No adult zebra or quagga mussels have ever been found in the state of Colorado.

3. Colorado has intercepted a record number of **mussel boats** this year – 50 in total! The previous annual record was 26 interceptions in 2017. Of the 50 infested boats intercepted this year, 39 were coming from Lake Powell.
4. CPW continues to manage the **Regional WID Data Collection System**. A QZAP grant from FWS providing funding in 2017 and 2018. A BOR grant from the Lower Colorado Region is set up to provide funding for 2019. The workflow is based on Uniform Minimum Protocols and Standards (UMPS) and the Watercraft Inspection Training (WIT) Procedures. The system continues to be improved each year by the users. CPW encourages all entities performing WID to explore adoption of this system. There is no charge to use the system, but agencies must provide their own hardware and internet connection. Agencies currently using the Regional WID Data Collection System include CO, AZ, MT, NM, NV, MT, UT, WA, WY, Lake Tahoe, the National Park Service, numerous private industry locations, and various local waters in California.
5. CPW has been testing **decontamination units** as part of the American Boating and Yachting Councils (ABYC) Project Technical Committee's work on ANS. The majority of decontamination units in use at WID stations today are power/pressure washers. The temperature on power washers fluctuate ~30 degrees per second which is not effective for decontamination, which requires a 10-second constant exposure to 140 or 120 degrees Fahrenheit.

CPW helped to improve the standard specifications for decontamination units through the WRP Decon Think Tank Committee and subsequently purchased new units in summer 2018, according to the WRP draft specifications. Unfortunately, these units did not perform and despite new technology designed to specifically hold temps, the new units failed.

CPW took feedback from the ABYC industry participants and designed a completely new model of decontamination units using hot water heaters which are powered by propane and connected directly to water. The new units perform wonderfully! They are silent, clean, easy to use, easy to maintain, and much less expensive. They are able to hold the temperature consistently at 120 or 140 with only 1-2 degrees' fluctuation. The limitation for decon is that they do not have an option for high pressure. CPW is currently trying to solve that problem and is hoping to have an improved model in 2019.

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Implementation of Biofouling Management Program

On October 1, 2017, the California State Lands Commission (Commission) was the first agency globally to implement biofouling management regulations. The Commission now has a biofouling management program and is better able to holistically manage vessels to minimize the risk of aquatic NIS introductions. During the ensuing year, Commission staff has worked to provide a smooth implementation of the new regulations, including efforts to provide outreach, prioritize vessel inspections based on pre-arrival risk assessments, develop a biofouling vessel inspection process, and analyze vessel-reported data. The regulations include requirements for vessels to have a biofouling management plan and record book, conduct biofouling management on wetted vessel surfaces (hull and niche areas), address biofouling on vessels with extended residency periods (i.e., sitting in one location for more than 45 days), and to submit an Annual Vessel Reporting Form 24 hours in advance of the first arrival at a California port each calendar year. Our next steps will involve the implementation of a weighted risk assessment to better capture the nuances in risk between the biofouling and ballast water vectors for each vessel arrival.

2. Implementation of an Enhanced Compliance Program and Reduction in Vessel Non-Compliance

On July 1, 2017, the Commission implemented new regulations that establish a process for administering enforcement actions under the Marine Invasive Species Act. Violations of the Act and associated regulations are broken into classes based on level of risk, and penalties are assigned for each type of violation. Since that time, the Commission has pursued enforcement actions on approximately 20 vessel arrivals for non-compliant ballast water discharges. The shipping industry is taking notice of the enhanced enforcement program and is working hard to reduce incidences of non-compliance. Between July 1, 2017 and June 30, 2018, only 1.95% of ballast water discharged (by volume) was non-compliant with management requirements. This is the lowest level of non-compliance ever seen by the Commission's Marine Invasive Species Program.

3. Shore-Based Ballast Water Treatment Feasibility Report

In 2013, the Commission approved funding to the Delta Stewardship Council to manage a study assessing the feasibility of shore-based ballast water reception and treatment facilities to help vessels comply with California's ballast water discharge performance standards. The Delta Stewardship Council contracted with the Glosten Associates to conduct the study. The final report was presented to the Commission in April 2018 and is available at <http://deltacouncil.ca.gov/events/feasibility-study-shore-based-ballast-water-reception-and-treatment-facilities-california-1>.

4. Development of Report to the California Legislature Assessing the Efficacy, Availability, and Environmental Impacts of Ballast Water Treatment Technologies

The Commission is in the process of finalizing a report for the California Legislature that assesses the efficacy, availability, and environmental impacts of ballast water treatment technologies that could enable vessels to comply with California's ballast water discharge performance standards. The report reviews shipboard ballast water management systems and includes key findings from the Commission-funded study on shore-based ballast water reception and treatment facilities (see above). The report will include recommendations to the California Legislature addressing next steps in the implementation of the California performance standards. The report will go before the Commission at its December 3, 2018 meeting in San Diego. If approved, the report will then be provided to the legislature.

5. Opposition to the Proposed, Federal Vessel Incidental Discharge Act

The proposed, federal Vessel Incidental Discharge Act (VIDA) would preempt state regulation of vessel discharges, including ballast water. Commission staff has been supporting and advising our congressional delegation as they have discussed the development of VIDA. Commission staff is also working closely with state partners and the shipping industry to draft language that will address industry concerns about conflicting regulation of vessel discharges while maintaining state authority to regulate unique state waters. At stake is California's (and all states') ability to set state-specific vessel discharge management requirements, collect vessel-reported information and fees, and conduct vessel inspections and enforcement. The Commission will continue to track this bill and work collaboratively with our partners.

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

- 1. Kāneʻohe Bay reef restoration.** Ongoing biocontrol through the outplanting of the native collector sea urchin (*Tripneustes gratilla*) has continued to show declines in the invasive algae (*Kappaphycus alvarezii*, *Eucheuma denticulatum*, *Gracilaria salicornia*, and *Acanthophora spicifera*). Additionally, upstream restoration is being planned for the Heʻeia watershed, a recently designated National Estuarine Research Reserve, in conjunction with ongoing invasive mangrove removal in order to minimize sedimentation onto nearby coral reefs. The U.S. Forest Service restoration group will assist with the hydraulic modeling, design, cost estimates, and any contracting package needed for the constructed wetland restoration area. <https://dlnr.hawaii.gov/ais/>
- 2. Kauaʻi *Salvinia molesta* eDNA Project.** The Aquatic Invasive Species (AIS) Team successfully designed and implemented an island wide survey of the invasive aquatic fern, *Salvinia molesta*, using a new environmental DNA sampling technique. Water samples were taken and analyzed for the presence or absence of *Salvinia* at stream mouths, enabling the team to determine distributions and eliminating the need to manually survey every stream.

3. **Secured funding from the U.S. Fish and Wildlife Service Aquatic Nuisance Species grant for developing regionally consistent in-water cleaning regulatory model framework for managing aquatic non-indigenous species introductions from commercial merchant and passenger vessels, as well as, creating regionally consistent user-friendly outreach material on best management practices for managing biofouling of 1) fishing vessels, 2) recreational vessels, and 3) mobile marine infrastructures** (reference “Biofouling in the U.S. Pacific States and British Columbia” White Paper prepared for the Coastal Committee of the Western Regional Panel on Aquatic published 2017)
4. **Hawai’i Harbor Monitoring Project.** The AIS Team successfully deployed autonomous reef monitoring structures in O’ahu and Kaua’i commercial harbors and harbor mouths. The project objectives are to monitor for new alien species introductions in harbors and surveil alien species recruiting onto nearby coral reefs outside of harbors.
5. **A resolution for addressing the overlapping jurisdiction on in-water vessel biofouling management was adopted by the Hawai’i State Legislature ([HCR 130](#)) and Hawai’i Invasive Species Council ([HISC 18-1](#)).** In summary, no in-water cleaning was allowed in commercial harbors due to overlapping water quality and biosecurity concerns. This Resolution stipulates the need for all government agencies involved to collaborate on a solution for allowing in-water biofouling management as this operation is important for maintaining ship safety and minimizing invasive species transport to neighboring islands in Hawai’i.

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Watercraft Inspection Station Operation.

20 watercraft inspection stations located throughout Idaho on major travel corridors into the state. YTD Data (10/15/2018): Total watercraft Inspections: 110,285. Hotwashes (140F) performed: 6,884. Weeds on boat: 352. Q/Z Fouled watercraft: 49. 24Hour operations at Cotterell (I-84W) inspection station. 18-hour operation at Cedars I-90 W, Jackpot Hwy 93-N and Malad I-15 N. "All daylight hours" operations at remaining stations. Idaho State Police support, increased lighting around station, electronic message board and great cooperators make night operations a success.

ISDA completed several site improvement projects this season. Projects include updating shed/shelter units, installing electrical utility services, lighting, surface ground work, footprint expansion, electronic message boards and station signage. These projects will continue through fall/winter 2018 in preparation for the upcoming 2019 season.

ISDA partners with local entities for inspection station operations through 14 cooperative agreements including an agreement with the Bear Lake Regional Commission to support two Utah stations, replacing the Idaho Bear Lake check station. Three roving AIS inspection crews based in Boise, Couer d'alene and Idaho Falls. 10 cooperative law enforcement support agreements for nearly all watercraft inspection station locations representing at 20 hours per week of support for each station. FY 2019 Budget included increased law enforcement from Idaho State Police Trooper to support nighttime operations at Cottrell I-84 W, Cedars I-90 W, Hwy 93 N and Malad I-15 N.

Pacific States Marine Fisheries WRDA Funding agreement (\$1 million) to support watercraft inspection and monitoring efforts. USFWS ANS Task Force Grant for \$47,000 in federal funds install new regulatory signage at border entrances. BLM grant for \$20,000 to purchase additional watercraft decontamination units.

2. Monitoring Operations:

ISDA performs annual early detection monitoring at 80 waterbodies throughout Idaho utilizing 1,615 plankton tow samples for microscopy analysis. Monitoring occurs during multiple sampling events, bi-monthly for each waterbody throughout the summer season. Samples are shipped overnight same day with a two-week turnaround for lab analysis. Early detection monitoring also includes visual inspection of artificial substrate performed by Idaho Department of Environmental Quality and shoreline walks

survey during reservoir low pool. Idaho Rapid Response Plan defines decision making, response, and communication in cases of suspect or positive results.

3. Education/outreach:

ISDA continues to provide education and outreach on Invasive Species throughout various avenues including media new releases, watercraft inspection station staff, brochure material, interactive website and facebook page. Messages used to promote the Idaho invasive species program include “Clean, Drain, Dry” “Know what you grow”, “Don’t let it loose”, and “Knock it off”. Please visit our webpages at:

www.invasivespecies.idaho.gov

www.invasivespecies.idaho.gov/watercraft-inspection-station/

www.invasivespecies.idaho.gov/edrr-monitoring/

www.invasivespecies.idaho.gov/maps/

4. 2018 Legislation:

Idaho legislature provided \$3,143,300 from the General Fund to continue enhanced operations of the state's watercraft inspection stations for FY 2019. This funding has made it possible to extend inspection station season duration and hours of operation. Funding also includes \$1,000,000 from federal funds to enhance operations or equip watercraft inspection stations. The watercraft inspection budget for FY 2019 is \$1.4 million from the dedicated Watercraft Inspection Fund, \$3.14 million from the General Fund, and \$1.0 million from federal funds for a total of \$5.54 million.

Intent Language: Encourage the use of roving stations where appropriate, the addition of staff on busy weekends, the collection of data regarding the number of watercraft bypassing inspection stations, and procurement of federal funds. Requires the department to report to JFAC, the House Agricultural Affairs Committee, and the Senate Agricultural Affairs Committee, during the legislative session, the results of the data gathering, securement of federal funds, and provide an operational review of the boat inspection stations.

5. Idaho Invasive Species Council

Executive Order 2017-05 outlines the purpose of the Council to foster coordinated approaches that support local initiatives for the prevention and control of invasive species. The Council shall meet at least twice annually. Membership shall include: Governor’s office, nine state agencies, member of the Idaho Senate, member of the Idaho House, representative of the Idaho Outfitters and Guides. Chaired by the ISDA Director or her designee. Other invitations by the Director. Provide policy level recommendations and planning assistance for combating harmful invasive species infestations throughout the state and preventing the introduction of others that may be potentially harmful. Serve as a nonpartisan forum for identifying and understanding invasive species issues. Identify opportunities for cooperating and coordination between departments, tribal governments, stakeholders, Idaho universities, private and not-for-profit organizations, other states, and the federal government. Recommend steps for implementing actions proposed in the Strategic Action Plan for Invasive Species. Take measures that will encourage control and prevention of harmful non-native species. Organize and streamline the process for identifying and controlling invasive species among all stakeholders. Consider ways to halt the spread of invasive species as well as finding possible ways to bring existing problems under control.

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Annual Meeting October 24-26, 2018 Tacoma, Washington

Name: Bob Wiltshire

Organization: Invasive Species Action Network

Title: Director

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Non-motorized Boater Outreach – With support from USFWS we are conducting a comprehensive outreach program to educate non-motorized boaters about AIS, their role in spread and the need to stop for inspection. The effort focuses on developing partnerships with companies who take our AIS message and communicate it to their customers. In 2018 more than 300,000 purchasers of paddling gear received a special message insert in their product through this effort. We have also partnered with Google to conduct search advertising and they are providing up to \$10,000 per month in free advertising.
2. Don't Let It Loose – With funding from USFWS we continue to support and expand this program aimed at reducing the threat from intentional pet releases. In 2018 Nebraska, Kansas and Utah were added to the program with plans to add New Mexico, Arizona and Nevada in early 2019. A number of states are taking steps to advance the program and we are exploring new opportunities to increase the reach of the effort.
3. Watercraft Inspection Station Quality Assurance and Quality Control (QAQC) – ISAN provides QAQC (secret shopper) services to operators of watercraft inspection stations. Our evaluators pose as recreational boaters and perform an assessment while the inspection takes place. In 2018 we evaluated inspection stations for Wyoming, Montana, Lake Tahoe and PSMFC performing over 115 assessments.
4. Youth Education – ISAN has a robust youth education program composed of delivering classroom programs and training workshops that educate adults how to teach about invasives. In the past year we taught about 350 individual programs for students ranging from kindergarten to middle school. While these programs include a number of topics, each has a strong prevention message included. We significantly increased our ability to teach others to be invasive species education resources by developing a one day train-the-trainer workshop in which we teach adults everything they need to know to be able to confidently put on a classroom program about invasives. In addition to providing training, each participant receives a trunk full of activities that give them everything they need to be an effective educator. In 2018 approximately 60 people were trained through this effort. Ask about our upcoming training in March in Jackson, WY.

5. Professional Services – ISAN offers a variety of professional services to the AIS community that result in significant accomplishments. Technical writing, facilitation, meeting coordination and rapid response planning are examples of the types of work we perform. For example, in 2018 we conducted an AIS rapid response planning exercise, planned and conducted an International Flowering Rush Summit and are in the process of creating a Flowering Rush Management Plan, we provided ongoing organizational coordination for the WRP and for the Columbia River Basin Cooperative Weed Management Area and we continued to work on UMPS and UMPS related documents.

Member Update Reports for the Western Regional Panel Meeting

Annual Meeting October 24-26, 2018 Tacoma, Washington

Please fill out this form to provide a **brief** written report that highlights your top five priority program activities or accomplishments since September of 2017. Please include any legislative updates or the link to your website where more information can be found. Reports will be distributed at the 2018 WPR Annual Meeting in Tacoma, WA and added to the meeting minutes. **Please limit your entry to 2 pages total. Your report will not be edited. There will not be verbal reports at the 2018 meeting.** Non-Member participants are also welcome to submit an activity report.

Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Chris Steffen

Organization: Kansas Department of Wildlife, Parks and Tourism

Title: ANS Coordinator

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

- 1. Initiated an Asian Carp Research Project** - In May, we started a project with University of Nebraska – Lincoln. Jake Werner will be collecting information on Asian Carp in the Kansas River for his Master’s degree. The proposed project is focused on obtaining pertinent information to document the presence and upstream extent of invasive carps in the lower Kansas River. We are specifically interested in determining the natal origin of invasive carps and to determine spawning occurrences within the Kansas River system. Invasive carps have the ability to compete with native fishes and an effort to compare condition of native species above and below a semi-barrier to carp expansion will provide information for future management. The specific objectives of this project are to:
 1. Determine the origin and large-scale movements of invasive carps (i.e., black carp, grass carp, bighead carp, and silver carp) found throughout the lower Kansas River as water and otolith chemistry allow
 2. Attempt to identify invasive carp spawning aggregations, if and where they occur in the lower Kansas River, and relate potential recruitment events to climatic or hydrological variables
 3. Identify presence and upstream extent of black carp

4. Determine flows required for successful upstream passage of Bowersock Dam
5. Compare body condition and abundance and of native fishes (e.g., bigmouth buffalo, gizzard shad) above and below Bowersock Dam
2. **Expanded Aquatic Vegetation Survey** - Aquatic vegetation surveys were greatly expanded from the initial efforts last year. A comprehensive survey of aquatic vegetation has never been conducted in Kansas. We now have a better understanding of the locations of ANS such as Curlyleaf Pondweed, Eurasian Watermilfoil, Brittle Naiad and Phragmites. Data from this effort will be used to expand management of vegetative ANS.
3. **Largemouth Bass Virus Assessment** - A major effort to assess the status and impact of Largemouth Bass Virus in the state is underway. Samples (60 largemouth bass) were collected from 35 waterbodies across the state in fall of 2017 and spring of 2018. Lakes selected included locations that are part of a largemouth bass age/growth research study, lakes with a past positive test for LMBV, lakes where the largemouth bass population has unexplainably declined, and reference "good" population lakes. Otoliths were also collected from the fish that were sacrificed for LMBV testing. We will compare age and growth information between lakes to determine if LMBV is affecting long-term growth potential. LMBV has been detected in 10 new lakes due to this effort. That brings us to a total of 17 lakes that are positive for LMBV.
4. **Bait Shop Inspections** – Inspections were conducted at bait shops statewide; no invasive species were found in commercial bait tanks during the inspection process. ANS literature was distributed to the bait shops during inspections.
5. **Joined *Don't Let it Loose* campaign** - Pet shops were visited by Bob Wiltshire in May. Information about participating Kansas locations has been added to the website. We are supplying additional bags as pet shops request. We plan to continue purchasing bags in the future. Initiation of the program was announced to the public via press release and posting on the Kansas Wildlife, Parks, and Tourism Facebook page.

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Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Thomas Woolf

Organization: Montana Fish Wildlife and Parks

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Montana is building partnerships to expand AIS prevention, early detection and education state-wide. The AIS program worked closely with tribes, cities, federal partners, counties, NGO's and conservation districts to operate watercraft inspection stations, promote early detection monitoring and deliver AIS outreach around the state. Partners utilized the standardized protocols, materials and data systems to promote accuracy and consistency state wide.
2. Rapid Response Planning: Through support from US Fish and Wildlife Service and Pacific States Marine Fisheries, a rapid response exercise was held at Flathead lake on in early September to promote response preparedness for a mussel detection. This was a unified command involving the Confederated Salish and Kootenai Tribes, Montana Fish Wildlife and Parks, and other partners from the area and was a great opportunity to build communication, partnerships and preparedness in that region.
3. FWP developed and deployed a new AIS monitoring app in 2018. This app allows for real time monitoring, reporting and tracking of AIS survey information in the state. The app is

available for partners to use and survey results are reported on the FWP website. <http://gis-mtftp.opendata.arcgis.com/datasets/ais-survey-locations>

4. Intensive AIS early detection monitoring found no evidence of dreissenid mussel in 2018. A new population of faucet snails was identified this season, but no other AIS populations were found this season.

Name: Jessica Howell

Organization: North Dakota Game and Fish Department

Title: Aquatic Nuisance Species Coordinator

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Major Accomplishments and on-going works

1. **Multi-media outreach campaign** – We initiated a contract with Jason Mitchell Outdoors to fund a statewide, multi-media ANS I/E effort; completed multiple internal webcast, video, press releases, and website updates; assisted with design of a new ANS sign, brochure updates, and state fair display; and met with various user groups to present information about ANS.
2. **Seasonal boater surveys and voluntary inspections** – We contracted work of four seasonal employees to conduct voluntary boater surveys and inspections at high-use locations in ND. In 2017, over 500 surveys were conducted; so far in 2018 we have exceeded 1,000 surveys.
3. **Industry ANS inspections** – ANS inspections were completed on high-risk commercial construction equipment and ANS facility inspections were completed at non-resident bait suppliers that sell live aquatic bait to ND bait vendors.
4. **ANS sampling** – We conducted regular monitoring of the Red River for zebra mussels; conducted early detection sampling on a number of non-infested waters for zebra mussels and other ANS; and conducted regular monitoring on the James River for silver carp. Two silver carp were collected in the James River this year, and otoliths were sent to USGS in Columbia, MO for an aging study.
5. **Coordination** – We hosted a ND AIS Committee meeting (held every spring and fall); met with various ND user groups and water advisory boards; and attended regional coordination meetings; we are also in the process of updating the ND ANS Management Plan (to be sent to the Governor for review and approval in early November).

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Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Allison Zach

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Title: Coordinator

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

Conducted 2,449 boater surveys and watercraft inspections at high use waterbodies throughout the state. 98% of boaters reported pulling their drain plug after last use. 98% of watercraft inspections had no risk factors. The state now has mobile decontamination units located at each Nebraska Game and Parks Commission district office. Emphasis was placed on inspecting watercrafts at fishing tournaments this year. Glenn Cunningham Lake in Omaha, NE was found to have a newly established zebra mussel population in July. The lake was closed to the public after the find. The US Army Corps of Engineers is drafting an Environmental Assessment to draw down the 337 surface acre reservoir completely to freeze the zebra mussels in the winter of 2018-2019. The proposed project would begin to draw the lake down in October or November 2018. Following a Rotenone application, the lake would be allowed to naturally refill which would take only one season under normal precipitation events. The lake is being drawn down because it is one of many lakes in Omaha, NE and this effort is to eradicate the zebra mussel population to prevent their spread to nearby waterbodies. Lake Zorinsky in Omaha, NE had a similar draw down in 2010 and in 2016 a single water sampling event found veligers. Since that time no veligers or adults have been found and it will be delisted as a zebra

mussel suspect lake in June 2019 if not veligers or adults are found. Nebraska now has 5 zebra mussel infested waterbodies including: Lewis and Clark Lake, Lake Yankton, the Missouri River, Offutt Air Force Base Lake and Glenn Cunningham Lake. It has 2 suspect zebra mussel waterbodies including Lake Zorinsky and Carter Lake in Omaha, NE.

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Name: John Wullschleger

Organization: National Park Service

Title: Fish / AIS Program Lead

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Email address:

Phone: 970.225.3572

Fax: 970-267-2186

Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Conducted a National Park Service (NPS) AIS Workshop with emphasis on trailered boats and western parks. Representatives from ten parks, two regions and the national office attended. The workshop resulted in commitments to minimum standards and standard practices and a list of action items which are in progress or completed. Completed items are included in this list.
2. Completed a draft NPS AIS Strategic Plan for western parks.
3. Completed an NPS AIS Communications Plan for western parks.
4. Obligated over \$1 million in additional FY18 funds to projects, activities and equipment to help prevent the introduction and spread of Dreissenid mussels and other AIS in western parks; developed a process for allocating FY19 Dreissenid mussel / AIS funds and issued call for projects.
5. Continued to make progress and report on action items under the DOI initiative *Safeguarding the West*. Actions items included developing housing for WID staff at Lake Powell, completing a lessons learned document for Glen Canyon / Lake Mead, reviewing regulatory options, obtaining OMB approval for participation in regional data-sharing, and expanding commercial decontamination capacity.

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Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Stephanie Otts

Organization: National Sea Grant Law Center

Title: Director

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. The NSGLC continued its work on the Model Legal Framework for Watercraft Inspection and Decontamination Programs. The NSGLC updated its companion report to the model WID legal framework which analyzes how each state's program compared to the authorities set forth in the Model State Legislative Provisions and Model Regulation. The update was released in December 2017 and reflects legislative and regulatory changes enacted by states in 2017. The NSGLC is currently working on a model MOU, which is the final piece of the framework. A Model MOU advisory committee was formed in July 2018 and the committee met via phone in August 2018 to provide feedback on the draft outline. The model MOU will be released by the end of the year. For more information about this project, visit <http://nsglc.olemiss.edu/projects/model-legal-framework/>.
2. The NSGLC organized a webinar for National Invasive Species Awareness Week entitled "Legal Issues Surrounding Invasive Species Management." The webinar was held on February 27 and featured presentations on the USARK decision, VIDA, and the model legal framework for watercraft inspection and decontamination programs. A recording of the webinar is available at <https://www.nisaw.org/meetings/2018/legal-issues-surrounding-invasive-species-management/>.

3. The NSGLC Director Stephanie Otts gave a presentation entitled “Building Consensus in the West: Developing a Model Legal Framework for State Watercraft Inspection and Decontamination Programs” during a leadership briefing at the U.S. Department of Interior headquarters on March 9, 2018.
4. The NSGLC was involved in a project lead by Lisa DeBruyckere, Creative Resource Strategies, to develop a model zebra/quagga mussel reciprocal vessel certification program for Clear Lake, California and neighboring lakes. The NSGLC conducted legal research and prepared model policy documents to provide guidance regarding program implementation, including a model local watercraft inspection and decontamination ordinance. The final report was published in March 2018 and is available at https://docs.wixstatic.com/ugd/0e48c2_634127fc24d04b0bbe85ca1a80188c6c.pdf.
5. The NSGLC assisted Lisa DeBruyckere, Creative Resources Strategies, with an analysis of the City of Portland’s invasive species authorities. The authority of local governments to address invasive species risks is not well researched or documented. The analysis involved the identification of responsible city departments, relevant state law, regulation, or local authority, and recommendations for local action for priority pathways. This research revealed that municipalities have a wide range of authorities that can be drawn upon to address invasive species risks within their jurisdictions. This project also resulted in the development of a research approach that could be used by any jurisdiction – federal, state, local, or tribal – to identify gaps and opportunities for action.

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Name: Rick Boatner

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Watercraft Inspection Program: This year in Oregon, we kept two inspection stations open the entire year. One station was located at the Ontario Rest Area on I-84 and the other was located at the Ashland Point of Entry on I-5. From the months of November 2017 thru March 2018, these two stations inspected 1,917 watercraft and intercepted 27 watercraft with other types of aquatic invasive species and hot water decontaminated four watercraft for zebra or quagga mussels. Operating check stations during the winter months did pose some challenges, to keep the decontamination units from freezing. We ended up putting heat tape and insulation on the water pipes and storing the unit in a heated storage shed. This year we will keep the same two station open the entire year with two personal at each station.

We operated six station this season. Stations where located: north bound on Hwy 101 in Gold Beach, north bound on Hwy 97 in Klamath Falls, west bound on Hwy 79 in Burns, south bound on Hwy 395 in Umatilla, north bound I-5 in Ashland and west bound I-84 in Ontario. We were unable to open our north bound station on Hwy 395 in Lakeview, due to, we could not find anyone to accept the position in that area. The six stations, inspected 27,202

watercraft, of which 339 were found with other types of aquatic bio-fouling and 10 watercraft, intercepted and hot water decontaminated for zebra or quagga mussels.

2. A new population of Rusty Crayfish (*Orconectes rusticus*) was discovered in a 0.5 acres fire pond in Grant County, near Summit Prairie. We believed, that they may have been introduced when someone illegally stocked Smallmouth bass from the John Day river system into pond. Summit Prairie Pond is located in the Malheur Basin in Eastern Oregon. We conducted a one day preliminary trapping surveys in the pond and removed 442 crayfish. We are working in partnership with Oregon Dept. of Agriculture to develop an experimental chemical treatment project, to eradicate the Rusty crayfish from the pond before they are able to spread to nearby Summit Creek.
3. A population of Flowering Rush was detected by a homeowner in Southern Oregon in the Klamath River Basin. This is the first known population of Flowering Rush outside of the Columbia River Basin in Oregon. Oregon Dept. of Agriculture (ODA) and Oregon Dept. of Fish & Wildlife, drained the pond and contained the privately owned, prized Koa before the herbicide treatment was applied. ODA will continue monitoring the area for any new populations of Flowering Rush that might appear in the area.

Member Update Reports for the Western Regional Panel Meeting

Name: Pacific Sea Grant Programs (submitted by Jeff Adams)

Organization: Washington Sea Grant

Title: Marine Ecologist

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Fax: 360-227-1874

Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

Sea Grant programs from California to Alaska to Guam include invasive species content in their outreach, research and stewardship programs. Below are recent examples from a few of the programs.

1. Alaska Sea Grant, Gary Freitag, 907-617-8990, gary.freitag@alaska.edu

- Alaska Sea Grant developed a underwater Time Lapse Camera system to study Invasive species interactions with indigenous invertebrates as part of the Smithsonian Environmental Research Center (SERC) plate watch program. The imagery discovered a species of Sea Star (*Dermasterias imbricata*) that homed in on the invasive colonial Tunicate *Botrylloides* and ingested it selectively(100%). The information could be used to guide control using an indigenous species to address the spread of the tunicate to native clam and mussel populations as well as farmed caged oyster mariculture operations. The video can be viewed at:
<https://drive.google.com/file/d/0B65ad09QZTtsS0JTd19DOFlxNVU/view?usp=sharing>
- Temple University / Smithsonian(SERC) and Alaska Sea Grant BioVision, identifying the spread of non- indigenous species, resulted in the discovery of several new species of invasives and in increased knowledge of the risks of invasive species. It has resulted in a peer reviewed Journal publication, and several news articles (one link below) as outreach to the public.
Jurgens, L.J., M. Bonfim, D.P. Lopez, M.F. Repetto, G. Freitag, L. McCann, K. Larson, G.M. Ruiz, and A.L. Freestone. 2018. Poleward range expansion of a nonindigenous bryozoan and new occurrences of exotic ascidians in southeast Alaska. BiolInvasions Records 7 (in press).
http://www.sitnews.us/0918News/092818/092818_invasive_bryozoan.html
- ASG reach out to diverse audiences to increase awareness, observation and reporting of invasive species. Example presentation:
<https://drive.google.com/file/d/1n81HSEdlp82SrJREOSGKCTTPcUjHPpaC/view>

2. Oregon Sea Grant, Sam Chan and Tania Siemans, 503-679-4828,
samuel.chan@oregonstate.edu

- Oregon is a leader and inspiration among the Pacific Sea Grant programs, engaging with and included the other programs in work they initiate to broaden program impacts.
 - The West AIS toolkit, Menace to the West created by the Oregon, Washington, USC and California Sea Grant Programs are now fully available on line complete with 13 Invasive species guides, and 20 standards aligned lesson plans. Requests have been received from around the nation and physical toolkits are in circulation. On line materials: <https://seagrant.oregonstate.edu/menacetothewest>
 - The Don't Pack a Pest (DPAP) Project on Understanding International Academic Traveller Packing Habits and Needs, is currently in expansion phase reaching out to agency partners and international programs in 8 states: HI, AK, CA, WA, OH, WI, TX, and FL. Student surveys and focus groups will be launched in the coming year. The Don't Pack a Pest Brochure is available at: <https://www.oregoninvasivespeciescouncil.org/dont-pack-a-pest/>
 - Five Sea Grant Programs, including Oregon Sea Grant have deployed test panels coated with an EPA registered capsaicin pesticide for their ability to resist fouling by marine organisms. The product has a unique crayon based application that had both benefits and drawbacks. Tests in freshwater are showing that the product is resisting Dreissinid mussel fouling. However, tests in saline marine conditions have only been recently deployed. In Oregon, our test panels are in the Charleston Boat Basin.
 - Asian jumping worm impacts on carbon and nutrition research initiated. Linda Tucker, PhD student advised by Sam Chan is initiating a mecosystem-based study looking at the ecological impacts of the Asian jumping worm (spread through fishing bait and horticulture) in wetlands and agricultural lands, Linda is also developing outreach and teaching approaches using the phenomenal characteristics of the Asian jumping worm.
3. Washington Sea Grant, Jeff Adams, 360-229-9398, jaws@uw.edu
- Washington Sea Grant has worked closely with Washington Department of Fish and Wildlife, Department of Fisheries and Oceans Canada, and numerous Tribes and partners in the Salish Sea region to develop a transboundary European green crab management plan and continue/expand the early detection and rapid response network that has proven highly effective and expanded since its inception in 2015.
 - During the past year, integration of research projects focused on identifying sources has been a significant, new element of the program. Ocean modeling showed that potential larval sources from southern Oregon to coastal Vancouver Island all had the potential to deliver larvae to the interior of the Salish Sea, but only during particular climate/ocean conditions in which the surface flow reversed from west to east in the Strait of Juan de Fuca. Additional genetics research reinforced those findings, showing the one local source of larvae (Sooke Harbor) contributed larvae more to coastal bays than the Salish Sea and that green crab found in the Salish Sea (Dungeness Spit) had clearly come from the outer coast. These flow reversal conditions are infrequent enough that they could be used, in conjunction with timing of green crab larvae in the water column, as a predictor of when the Salish Sea might be more at risk from settling green crab. More information on the early detection program can be found at: <http://wsg.washington.edu/crabteam>

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Tacoma, Washington

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Name: Stephen Phillips

Organization: Pacific States Marine Fisheries Commission

Title: Senior Program Manager

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. **Watercraft Inspection Training (WIT):** PSMFC contractor D Davis continued to watercraft inspection trainings in Fall 2018 and Spring 2018. Level Two training, delivered over two days at Lake Mead, is intensive and designed for professionals in all fields that expect to be actively involved in the inspection and decontamination of trailered watercraft and those who wish to become trainers within their state or work group. This project is funded by USFWS (QZAP) and BPA. Besides training at Lake Mead, additional remote Level II trainings by D were also carried out in Lake Nacimiento, CA, Lake Berryessa, CA, Castaic Lake, CA, and Bishop, CA; A WIT III (Trainer Training) was conducted @ Lake Mead, NV and WIT IV (Advanced Decontamination) classes were held at Lake Mead And Navajo Lake, NM.
2. **UMPS:** The next step in the "UMPS" process was to release "A Review of Chemical Use Associated with Watercraft Decontamination to address Aquatic Invasive Species" (Leah Elwell, ISAN, lead author)
https://docs.wixstatic.com/ugd/0e48c2_9d1772846e684a4dab9e3af36b882ec8.pdf

3. **Outreach and Education:** Produced and distributed “AIS News” ~ bi-weekly e-newsletter (Robyn Draheim, editor); continued to upgrade and add information to the PSMFC website <http://www.westernais.org/> ; reprinted, redesigned and distributed “Western States Rack Card”; “Don’t Move a Mussel 2011” “On the Lookout”, and “Threats to the West” to ANS coordinators and others throughout the region. Attended sport/commercial fishing shows with AIS booth in Seattle, Boise, Portland and Sacramento (with CDFW),
4. **WRDA:** In April 2017 The PSMFC entered into a cooperative agreement with the USACE (Walla Walla) to represent the 4 CRB states and administer the “WRDA” watercraft inspection station and monitoring funding. Again in 2018 PSMFC and the USACE signed an amended agreement for PSMFC to administer the WRDA funding (as part of the FY 2017/18 appropriation). Watercraft inspection 1:1 matching funds (~\$4.1 million dollars) are being provided to MTFWP, ISDA, ODFW and WDFW. Monitoring funds (~\$692,000) are being provided to MTFWP, WSU, ODFW, PSU and WDFW.
5. **Coordination/Other:** We hosted meetings of the Pacific Ballast Water Group (<https://www.westernais.org/pacific-ballast-water-working-group>) in April in Seattle, WA, that included a WRP Coastal Committee meeting, and Columbia River Basin Team of the 100th Meridian Initiative meetings in November and June (PDX) (<https://www.westernais.org/regional>); the PSMFC dreissenid monitoring database has been transferred to <http://www.westernais.org/monitoring> and a Columbia River Basin Monitoring Forum was held in June and chaired by Tim Counihan, USGS; Continued coordination and meeting with DOI and WGA on mussel initiatives; hosted rapid response exercise, supported by USFWS, in Kalispel Montana with MTFWP and CTSK, and continued to maintain West911 “hotline” listserve and website, etc. etc.

Member Update Reports for the Western Regional Panel Meeting

Annual Meeting October 24-26, 2018 Tacoma, Washington

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Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Mike Greiner

Organization: South Dakota Game, Fish and Parks

Title: AIS Coordinator

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Began processing veliger samples in house for the first time
2. Used geofencing at boat ramps on Zebra Mussel containment waters to send targeted messaging to boaters
3. Used a prize giveaway to survey boaters and found that 81% of the 3380 respondents understand the risks of residual water in boats (n=2732) and our boat plug rules (n=2735) indicating a successful education/outreach campaign. The majority of respondents (56%; n=1896) get their AIS information from our sdleastwanted.com website.
4. Inspected over 3,000 boats from May- Sep statewide as part of WID program
5. The following changes were made to aquatics regulations:
 - a) Added Starry Stonewort to AIS list
 - b) Added Lake Yankton to list of Zebra Mussel containment waters
 - c) Provided exemption to AIS possession/transport rule to allow commercial plant harvesters and lakeshore homeowners to remove AIS plants under the direction and supervision of the Department.

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Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Dennis Zabaglo

Organization: Tahoe Regional Planning Agency

Title: Aquatic Resources Program Manager

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. The Tahoe Regional Planning (TRPA) agency along with its primary partner, the Tahoe Resource Conservation District (Tahoe RCD) celebrated 10 years of fighting invasive species, highlighted by the boat inspection program successfully preventing the detection of any new species since its inception in 2008. Dozens of other partners contributed to that success, such as other private and public agencies that operate launch facilities, environmental organizations, non-profits and elected officials. TRPA is grateful to all those who support the program.
2. TRPA was appropriated \$3.088 million for AIS efforts from the US Fish & Wildlife Service through the Lake Tahoe Restoration Act.
3. TRPA has coordinated a stakeholder team to embark on a collaborative decision-making process to inform treatment actions in the largest invasive aquatic plant infestation at Lake Tahoe. A private development of over 1500 homes that consist of over 170 surface acres of waterways, channels and lagoons (almost entirely infested with Eurasian watermilfoil and curlyleaf pondweed) that connect directly to Lake Tahoe, has proposed to use aquatic herbicides. Until recently, their use has been completely prohibited and

have never been used in a Tier 3/Outstanding National Resource Water, such as Lake Tahoe. In addition to the strict regulations, there is considerable differences in opinion on whether herbicides should be used in Lake Tahoe. The stakeholder team consists of regulatory agencies, environmental organizations, AIS control experts and drinking water purveyors. The collaborative process has begun and is being guided by Zephyr Collaboration. Development of the necessary environmental documents will commence by the end of 2018.

4. TRPA has released an RFP for the purchase of a new decontamination unit that incorporates 10 years of lessons learned, input from the WRP Think Tank Committee, and the boat industry. The ABYC Professional Technical Committee supported the specifications and members of industry are encouraged by the response of resource managers to their concerns with decontamination practices.
5. TRPA and partners are developing a plan that enhances the existing AIS control strategic plan by incorporating meaningful metrics, rather than simple “acres treated”. Demonstrating what success looks like, how much varying levels of success cost and a financial roadmap to get there. Creative Resource Strategies, LLC was selected to help develop these products. A lake-wide surveillance of aquatic plants was initiated to inform the process and will incorporate advanced remotes sensing techniques, bathymetric LiDAR, to help identify locations were plants exist.

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Name: Jolene Trujillo

Organization: US Bureau of Reclamation

Title: IPM/Invasive Species Coordinator

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

Reclamation's primary focus for the past year has been the implementation of the Fiscal Year 2018 Mussels Spend Plan. In June 2017, the Department of Interior (Department) launched a government-wide initiative entitled Safeguarding the West from Invasive Species- Actions to Strengthen Federal, State, and Tribal Coordination to address Invasive Mussels (Initiative). The Initiative focuses on keeping invasive dreissenid mussels out of the Columbia River Basin and containment of invasive mussels in the lower Colorado River.

As part the Initiative, Reclamation provided approximately \$4.3 million dollars to support various mussel's management activities across the West. Activities that these funds supported are described below:

- Purchasing inspection and decontamination stations to inspect and decontaminate boats leaving the lower Colorado River in California and Nevada, including supporting the National Park Service at Lake Mead National Recreation Area.

- Supporting the Salish Kootenai Tribe at Flathead Lake Aquatic Invasive Species program.
- Develop vulnerability assessments for facilities and infrastructure at risk of mussel infestation in the Columbia River Basin.
- Assisting the State of Arizona in providing law enforcement support at inspection stations.
- Funding research for the State of Montana and Reclamation on viability of veligers in residual water in boats.
- Supporting watercraft inspection stations at Reclamation reservoirs in Nebraska and Kansas.
- Implementing the state Aquatic Invasive Species Management Plan at water bodies owned by Reclamation in Utah.
- Analyzing water quality to determine which water bodies should be prioritized for invasive mussel monitoring and prevention in California.
- Continuing and enhancing water quality and quagga mussel monitoring program at high-priority programs in the Pacific Northwest and various reservoirs in the upper Colorado River Basin.
- Conducting watercraft inspections at Navajo and Elephant Butte reservoirs in New Mexico.
- Improve watercraft inspection and decontamination stations at Tiber Reservoir in Montana.
- Mussel's prevention and early detection efforts (training exercises, equipment, canine efforts) in the states of Washington and Montana.
- The Pyramid Lake Natural Resources development and implementation of an Aquatic Invasive Species Management Plan
- Support for Watercraft Inspection Stations in the state of Nevada
- Enhancement and further roll-out of a watercraft inspection and decontamination database housed with Colorado Parks and Wildlife.

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Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Cynthia Tait

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

REGION 1 (MT, n. ID)

- Flathead NF (MT) contributes funds to the Flathead Basin Commission, which runs several inspection stations. The commission operates the Highway 2 station on the Blackfoot Reservation, where 40 percent of MT's contaminated boats were intercepted last year.
- Lolo NF (MT) contributed to inspection/wash stations in the Clearwater Basin, including FS boat launches.
- The Region is coordinating with Montana on veliger detection and **National Genomics Center for Wildlife and Fish Conservation / USDA Forest Service Rocky Mountain Research (RMRS)** has been advising on genetic methodology for veliger detection.

REGION 2 (CO, E. WY, SD, NE, KS)

- USFS has a Cost Share Agreement with Colorado Parks and Wildlife (CPW) as well as other partnerships for boat inspection and decontamination programs on 10 reservoirs across 5 National Forests in the Region. In FY 2108, the FS cost-shared a total of \$200,000 with CPW for boat inspections and decontaminations on NFS waters across Colorado:
 - a. San Juan NF – McPhee Reservoir. 4 way partnership with CPW, FS, BOR, and Delores Water Users. FS Share = \$22,000K
 - b. Grand Mesa/Uncompahgre/Gunnison NF – Taylor Park Reservoir. FS share = \$24,000K

- c. Pike/San Isabel NF – Turquoise and Twin Lakes. FS Share = \$15K (with an additional \$10,000K for New Zealand mudsnail signage and education) total of \$25,000K
- d. White River NF – Green Mountain and Ruedi Reservoirs. FS Share = \$29,000.
- e. Arapaho Roosevelt NF – Colorado Big-Thompson System of Grand Lake, Shadow Mountain and Lake Granby. FS Share = \$100,000K

REGION 3 (AZ, NM)

- Tonto NF has an active public education program for quagga mussels, “Don’t move a mussel”, and AGFD and Reclamation operate and monitor boat wash stations and reservoirs on the lower Salt River Project, including Saguaro Lake which was recently invaded by quaggas.
- Several forests in NM and AZ have active projects for removing nonnative species from sensitive reaches that contain T&E species. Forests partner with AGFD each year to remove thousands of apple snails and their egg masses along the lower Salt River. There are also volunteer groups working to remove crayfish in springs with Gila topminnow.

REGION 4 (UT, NV, s. ID, w. WY)

- The Regional Office continues to fund AIS inspection, outreach, and AIS monitoring on high risk USFS waterbodies, through partnerships with Utah Department of Wildlife Resources, Idaho Department of Agriculture, and Wyoming Department of Game & Fish. To date, there are no known occurrences of invasive mussels in any Regional USFS waterbody. In 2016, the Region approved funding \$400,000 to cover our three state partners for the next 3 years, through 2019.
- Forests are re-evaluating all special use permits to pay careful attention to AIS invasion potential, and prescribe best management practices to mitigate risks.
- Salmon Challis NF maintains a boat inspection and outreach program for seasonal rafters floating the Salmon River.

Organization: U.S. Fish & Wildlife Service

Name: Joanne Grady

Title: R6 AIS Coordinator

Mailing address: 134 Union Blvd, Ste 665; City: Lakewood State: CO Zip: 80228

Email address: joanne_grady@fws.gov

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Headquarters - Branch of Aquatic Invasive Species – Craig Martin, craig_martin@fws.gov

- **ANSTF Update** - The ANS Task Force met on June 12- 24, 2018 at NOAA Headquarters in Silver Spring, Maryland. This was the first time the ANS Task Force held a meeting since November 2016 as a result of the DOI's advisory committees review which required the postponement of all FACA meetings and activities. The meeting included several informational sessions including new species occurrences reported in the U.S. Geological Survey database, ballast water management tools, 2018 Asian Carp Action Plan, and outreach efforts to engage the pet trade industry. The meeting had a strong focus on strategic planning; utilizing breakout sessions to evaluate past Task Force and regional panel accomplishments and identify priorities and strategies to further advance the Task Force mission in the revised ANS Task Force Strategic Plan. The draft goals and objectives discussed at the ANS Task Force meeting are currently being refined and were discussed on a conference call on October 15, 2018. A draft Strategic Plan will be discussed at the next ANS Task Force meeting, scheduled for week of December 12-13, 2018 in Falls Church, Virginia.
- **State/Interstate Aquatic Nuisance Species (ANS) Management Plan Grant Program** - FAC received \$2 million again this year for the FY18 State and Interstate ANS Management Plan Grant Program. Forty-two of the forty-three eligible plans applied for funding this year (New York did not), and each plan was notified that it could work with its appropriate Region to apply for approximately \$47,000. All the Regional AIS Coordinators should now be working with their Regional grant folks and their States to get their grants completed. At the June ANSTF meeting, the Nevada AIS Plan was approved, bringing the total number of approved plans to 44 (41 State and 3 Interstate).
- **Habitattitude** - The USFWS and PIJAC have been working to revitalize Habitattitude™, a nationally branded social marketing campaign targeting aquarium owners and water gardeners to promote environmentally responsible behavior and prevent the establishment of invasive species. The core of this public-private partnership is Habitattitude.net, a website that seeks to inform pet owners and water gardeners about the importance of not releasing potentially harmful fish and aquatic plants. Although the objectives and message of Habitattitude™ remain, the revitalized website will address a different and broader audience, reaching out to prospective aquarium owners, reptile and amphibian keepers, water

gardeners, and teachers considering classroom pets to enhance the educational experience. By providing guidelines on choosing appropriate species and advice for proper care and housing, Habitattitude™ seeks to increase the chances for success in the pet experience, thus reducing the likelihood of releasing potentially invasive animals and plants. As the new website rolls out, PIJAC, USFWS, and others will develop plans to re-establish a partner network to promote the message through both retail and governmental channels.

- **USFWS prevention website and availability of ERSSs** - The Service's ERSS process efficiently characterizes and prioritizes the potential risk of invasiveness for wild animal and plant species. It provides an estimated prediction of a species' invasiveness and can be used by the Service, its natural resource partners, industry, and the public to help inform decision-making. Examples of recent accomplishments: 1) Approximately 750 ERSSs are posted on the FAC prevention website and 2) An update to the Risk Assessment Mapping Program (RAMP) has been completed, which expands the Service's climate matching capabilities with new options to target individual States and territories and will include a user's manual.
- **Salamander Chytrid Fungus** - On January 12, 2016, the Service published an interim rule in the Federal Register to list 201 species of salamanders from 20 genera as injurious because they pose a serious threat to native salamanders as carriers of the lethal fungus *Batrachochytrium salamandrivorans* (Bsal). The interim rule took effect on January 28, 2016. We reviewed the peer and public comments and are working on a final rule. The interim rule has no sunset clause.

Region 1 (HI, ID, OR, WA) – Theresa Thom (theresa_thom@fws.gov)

- **Safeguarding the West**: As part of Interior Secretary Zinke's Safeguarding the West Initiative, R1 Fish and Aquatic Conservation (FAC) Program funded and is leading a team comprised of the Pacific States Marine Fisheries Commission and NOAA Fisheries to develop a manual to facilitate Endangered Species Act Section 7 consultations on rapid response actions for *Dreissenid* mussels in the Columbia River Basin. Other federal and state agencies, tribes, and organizations are collaborating on this effort. Due in early 2019, the manual will provide the information needed to conduct response actions with minimal adverse impact on listed species. Additional outcomes include improved coordination and preparedness among partners engaged in invasive mussel rapid response actions in the Columbia River Basin.
- **FY18 ANS Awards**: In fiscal year 2018, the Service awarded \$47,695 to each of the States of Hawaii, Idaho, Oregon, and Washington through the State/Interstate Aquatic Nuisance Species Management Plan Grant Program. The funds are being used for a aquatic invasive species (AIS) prevention-, education-, and management-focused projects. The State of Idaho is developing signage to ensure the traveling public are aware of regulatory prohibitions regarding transport of invasive species into the State of Idaho. Hawaii is developing and implementing a ballast water and biofouling program to minimize introduction of AIS into state waters. Oregon is conducting early detection surveys, research into ecological impacts and control methods for AIS, and participating in interstate and regional workgroups such as

the 100th Meridian Workgroup and Western Regional Panel. Washington is staffing watercraft inspection stations to prevent importation of AIS via watercraft, developing an interagency early detection and rapid response protocol to address AIS invasions, and working with the Columbia River Group to develop a response plan for zebra mussels.

- **Interstate ANS Tribal Plan:** Fish and Wildlife Service has partnered with the Columbia River Inter-Tribal Fish Commission on AIS outreach and education to tribal members with the intent of laying a foundation for an Interstate ANS Tribal Plan. An AIS training workshop for tribal fisheries staff will occur in early to mid-winter 2019. FWS made a financial commitment to assist with training and travel to facilitate tribal participation.
- **Region 1 Proposal for HO 2018 Prevention Funding:** Abernathy Fish Technology Center (FTC), Columbia River Fish and Wildlife Conservation Office (FWCO), and Carson NFH submitted a proposal for \$150,000 for a proof-of-concept eradication of brook trout in Tye Springs (above ATC) using the YY male approach. The proof-of-concept evaluation of the YY male methodology can help the Service and its partners determine if and how this approach could control nuisance brook trout populations in other locations, and for other nuisance AIS, like common carp. A feasibility study for control of common carp at Malheur using the YY male approach has been proposed. The results of this brook trout eradication project will provide science to inform that effort.
- **Region 1 Invasive Species Policies:** The Region developed and signed a policy on “Minimizing the Introduction of Invasive Species by Service Activities” in 2016. The policy directed that each Program in the Region develop their own step-down guidance. The Region 1 Fisheries & Aquatic Conservation Program (FAC Program) developed step-down guidance, "Invasive Species Policy Guidelines to Minimize the Introduction of Invasive Species" that will be rolled out to the Program in November 2018. The guidelines apply to relevant field activities for Region 1 FAC employees. These guidelines were developed to emphasize the prevention, early detection, and removal of invasive species under common working scenarios.
- **Northern Pike Summit:** Region 1 staff attended the Northern Pike Forum and Coordination Summit at the Pacific NorthWest Economic Region Meeting in Spokane, WA in July 2018. The Service volunteered to participate on a new Cross-Border Committee, and also will remain engaged with partners on efforts to control Northern pike in the Columbia River Basin.
- **European Green Crab Control/Rapid Response:** The Service provided funding to the Makah Tribe to respond to the recent invasion of European Green Crab to estuaries on the Makah Indian Reservation. Efforts include assessing the extent of invasion, controlling crab population growth, and providing training to tribal staff to continue and expand control efforts. The Service provided \$30K through the National Fish Habitat Partnership Program, with \$52K in matching funds from the Makah. The Pacific Marine and Estuarine Partnership selected this project for funding in 2018.

- **The Washington Fish and Wildlife Conservation Office** worked with the Washington Invasive Species Council and provided invasive species coordination, technical support, and outreach to Federal, State, Tribal, and local governments in the Pacific Northwest. The WWFWCO provided prevention-focused invasive species information to our partners and the general public through venues such as the Seattle Boat Show and the Science Olympiad State Tournament. Office biologists also removed invasive plants within 2 acres along Red Salmon Creek in the Nisqually River Basin.
- **The Oregon Fish and Wildlife Office** continued to serve on the Oregon Invasive Species Council and supporting the OISC strategic plan, including consultation, habitat restoration and technical support.
- **The Pacific Islands Fish and Wildlife Office** implements activities to prevent, mitigate, control, and eradicate populations of aquatic non-native invasive species (AIS) in Hawaii and other Pacific Islands, including identifying and strengthening biosecurity actions. The Office actively participates with the Hawaii Invasive Species Council and the Hawaii Alien Aquatic Organism Task Force. Office scientists are providing technical assistance for research that can help with Early Detection efforts for AIS, such as using eDNA to detect ship-borne AIS introductions in the Ports of Honolulu and Apra Harbor, Guam. The Office is currently focusing on marine biosecurity from biofouling organisms, hull fouling, and new and expanding aquaculture operations within the State.

Region 2 (AZ, NM, OK, TX) –Barak Shemai AIS Coordinator, barak_shemai@fws.gov

- Region 2 awarded seven QZAP grants totaling \$960,000, The awardees include the following.
 1. Pacific States Marine Fisheries Commission, \$77,499, Watercraft and Decontamination Training Program
 2. Utah Department of Natural Resources, \$225,338, for boat inspection and decontamination, and outreach in Utah with an emphasis on containment near Lake Powell.
 3. Nevada Department of Wildlife, \$222,633, for containment and decontamination at Lake Mead and outreach for Las Vegas Area Watercraft Dealers
 4. Lake Havasu Marine Association, \$10,000, for industry outreach on SLIDE Anchor.
 5. Arizona Game and Fish Department, \$200,000, for boat inspection and decontamination, and public outreach throughout the Lower Colorado River
 6. Invasive Species Action Network , \$103,400, Non-motorized boater outreach through industry partnerships, advertising, and agency coordination.
 7. University of Montana, Flathead Lake Biological Research Station, \$121,100, to quantify the lowest natural abundance of invasive mussel

observable using the DNA-Tracker to facilitate improvements in
Early
Detection.

- Awarded a sole-source grant in the amount of \$193,000 to Arizona Game and Fish Department for Watercraft Inspection and Decontamination at Lake Havasu and Pleasant within the state of Arizona.
- Hosted a HACCP and train-the-trainer course for state and federal partners in the western United States. Tuition and supplies were funded by USFWS.

Region 6 (CO, KS, MT, ND, NE, SD, UT, WY) – Joanne Grady, joanne_grady@fws.gov

- Newly appointed American Co-Chair for the International Red River Board Aquatic Ecosystem Committee.
- R6 dive team supports state partners in diving for invasive mussels. Dove at Tiber Reservoir, MT to search for mussels and Flathead Lake, MT as part of Columbia River Basin rapid response exercise.
- Serve as FWS Member and on ExCom as well as on the Columbia River Basin Team.
- Prioritization and allocation of 100th Meridian Initiative grant funding. Annual grant competition largely focused on supporting efforts to collectively protect the Western U.S. from invasive species spread.

Region 7 (AK) – Aaron Martin, aaron_martin@fws.gov

- The Service conducted the 3rd year of pilot work (10 days each May) focused on watercraft inspections and decontamination at the Alcan Port of Entry in coordination with APHIS and Customs and Border Protection. These efforts have shown that ~50% of all watercraft entering Alaska at this point are coming from high risk states and that >25% of all watercraft have not been inspected on their way to Alaska.
- The Service partnered with multiple entities to conduct early detection surveys and invasive species management efforts of Elodea spp, Signal Crayfish, and Northern Pike throughout various regions of the state. Early detection surveys identified three new water bodies infested with Elodea in Interior Alaska.
- The Service is collaborating with the Department of Defense at Fort Wainwright to conduct field trials that will determine the detection probability of Elodea in newly infested waterbodies. The results of the project will help establish a standardized survey protocol.
- The Service worked with outdoor gear retailers to implement a regional outreach campaign on “clean boating” and “clean fishing” practices in collaboration. The businesses and the Invasive Species Action Networked assisted us in creating various materials that retailers can display and distribute.
- The Service has been actively involved in implementing the Arctic Council’s Arctic Invasive Alien Species Strategy and Action Plan and is the regional U.S. representative of the circumpolar implementation coordination group.

Region 8 (CA, NV)– Louanne McMartin, louanne_mcmartin@fws.gov

- Former FWS R8 AIS Coordinator, Ron Smith, retired.
- Funded by the Service, investigators from the University of California at Davis developed DNA markers specific for *N. fasciata* and *N. sipedon* and conducted an occupancy survey

study using eDNA to determine the presence or absence of watersnakes from suitable wetland habitat in the Central Valley. The field work occurred during years of 2014-2015, with data analysis and preparation of final report to follow in early 2017.

Member Update Reports for the Western Regional Panel Meeting

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Name: Adam Sepulveda¹; Tim Counihan²

Organization: US Geological Survey

Title: ¹ - Research Zoologist; ² -Lead Research Fishery Biologist

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Fax: ¹ - 406 994 6556; ² - 509-538-2843

Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

- ¹ - Testing of automated eDNA water samplers for biosurveillance at USGS streamgages
- ¹ - Early detection eDNA monitoring for dreissenid mussels at USGS streamgages in the Columbia River Basin
- ¹ -Evaluating the efficiency and reliability of multiple eDNA markers for dreissenid mussel early detection
- ² -Convened the Columbia Basin Dreissenid Mussel Monitoring Forum, in collaboration with Pacific States Marine Fisheries Commission (PSMFC) and regional stakeholders, that seeks to coordinate regional early detection monitoring in the US and Canadian portions of the Columbia River Basin
- ² - Developing a regional risk assessment tool in collaboration with the PSMFC and University of Alberta that will provide a tool for estimating Dreissenid mussel introduction and establishment risk in the Columbia River Basin

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Name: Nathan Owens

Organization: Utah Division of Wildlife Resources

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Deer Creek Reservoir was reclassified to an "Undetected Water" in January 2018 following three years of successful sampling after an initial veliger finding. Lake Powell remains the only mussel-affected waterbody in Utah.
2. Completed the first full year of the re-organized Utah AIS Program. In early 2017, all interdiction operations were moved from the Aquatics Section to Law Enforcement, increasing law enforcement involvement in the program and increasing capacity for additional early detection monitoring and AIS surveys. Despite some growing pains, the first year has been considered a success and the reorganization allowed the program to quickly respond to changing conditions at Lake Powell. The program exceeded annual performance measures from previous years for the number of watercraft inspections (~220,000 to date) and decontaminations (~7,500) performed.
3. Utah has re-vamped the AIS training program for new Utah Conservation Officers as part of their initial training process (FTO). The 2-3 day training session will be conducted at Lake Powell and will include a required law/rule study by the officers, followed by testing. The officers will then attend a two- hour interactive lecture on the major AIS species in Utah, the history of quagga/zebra mussels in Utah and the west, the history of Utah's AIS

program, partnership building (NPS, BOR, AZ), and the practical application of law/rule. The officers will then spend 1-2 days working on the boat ramps at Lake Powell to gain first-hand experience contacting boaters, working with biologists/technicians, and observing where mussels are found and how to deal with them.

4. Worked with the office of the Governor to develop a letter informing all Utah registered boaters of Lake Powell quagga mussel developments and the need for increased vigilance. The letter was distributed by mail to over 56,000 Utah residents, urging them to take extra precautions when departing Lake Powell.
5. Modified and adapted the Lake Powell containment/interdiction strategy to meet the new issues regarding sea strainers/anchors. In early June, several boats were encountered around the state with adult mussels present in sea strainers. This had not been observed previously. Interdiction teams rapidly mobilized to modify existing inspection and decontamination protocols to combat this new development. Additional personnel were also deployed to Lake Powell to aid in efforts. Evaluation of current protocols and adaptation to meet evolving needs continue. Over 63,000 watercraft were inspected exiting Lake Powell and 4,000 decontaminations were performed.

Member Update Reports for the Western Regional Panel Meeting

Annual Meeting October 24-26, 2018 Tacoma, Washington

Please fill out this form to provide a **brief** written report that highlights your top five priority program activities or accomplishments since September of 2017. Please include any legislative updates or the link to your website where more information can be found. Reports will be distributed at the 2018 WPR Annual Meeting in Tacoma, WA and added to the meeting minutes. **Please limit your entry to 2 pages total. Your report will not be edited. There will not be verbal reports at the 2018 meeting.** Non-Member participants are also welcome to submit an activity report.

Please return your completed form to Dennis Zabaglo (dzabaglo@trpa.org) by COB **Wednesday, October 17, 2018.**

Name: Toni Pennington

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Title:

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. 2018 annual meeting was held in Reno, NV with roughly 100 attendees from WA, OR, ID, MT, CA, IN, NC, and CO; from academia, state and local governments, and private industry.
2. WAPMS provides a travel stipend to encourage student participation at each annual meeting.
3. Sponsored at the Flowering Rush Summit in Spokane Feb. 27-28, 2018
4. Sponsored at the joint conference of the Oregon Lakes Association – Washington Area Lake Protection Association
5. 2019 annual meeting will be a joint meeting of the WAPMS and the national Aquatic Plant Management Society July 13-19 in San Diego. More information: <https://wapms.org/event-2631684>.

Member Update Reports for the Western Regional Panel Meeting

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Name: Beth Bear

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Please provide a description of your top five AIS activities/accomplishments/priorities for the past year:

1. Outreach provided AIS information at local events, fairs, in schools and at the Wyoming Outdoor Expo. The boater appreciation raffle was conducted to thank boaters for cooperation with watercraft inspections, increasing compliance with watercraft stopping at check stations by incentivizing the inspections, and gathering information from boaters about the inspection process. As of late September, there were a total of 1,215 entries in the raffle survey; of those 679 unique individuals entered the raffle. The majority of boaters (94%) indicated they were very satisfied (80%) or satisfied (14%) with their overall inspection experience.
2. Watercraft check stations operated from April 28 through September 15 at fifteen permanent check stations at port of entry, rest area, and other locations to intercept watercraft entering the state. Roving crews focused on inspections at major waters throughout the state to contact resident boaters. Through mid-September, a total of 46,399 inspections have been conducted. Of these, 2,810 were high risk watercraft and 461 were decontaminated for water onboard or suspect AIS. Fifteen boats were intercepted with mussels attached; on all the mussels were dead and watercraft were thoroughly decontaminated and released.

3. Over 60 waters were surveyed for aquatic invasive species during 2018. Results are still pending for the majority of waters sampled but to date no evidence of mussel veligers has been confirmed in a Wyoming water. Monitoring in 2018 did document new occurrences of New Zealand mudsnail in the Salt River and in the North Platte River at the Gray Reef access. This documents an unfortunate spread of AIS within Wyoming and highlights the need for continued outreach to anglers and boaters on the importance of following Clean, Drain, and Dry protocols for fishing and boating gear.
4. The AIS regulation now requires all watercraft to have bilge and other plugs removed and watercraft drained and free of aquatic vegetation while traveling throughout the state. In 2018 boaters were primarily educated on this change in regulation and enforcement was not emphasized. Over 79% of watercraft inspected in 2018 had bilge plugs pulled which shows good compliance with this new regulation.
5. More information can be found at wgfd.wyo.gov/AIS