Aquatic Invasive Species News

May 15, 2023

RECOMMENDED READING * PUBLIC COMMENT * NEW SPECIES * WATCH LIST * DREISSENID MUSSELS * BOAT INSPECTION/DECON *

BALLAST WATER/BIOFOULING * MARINE * AQUACULTURE *FRESHWATER *

FISH * AQUATIC PLANTS * CLIMATE CHANGE * OUTREACH AND EDUCATION *

OTHER * JOBS/GRANTS * LEGISLATION * EVENTS

RECOMMENDED READING	
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Sentinel plantings to guard against invasive pests, diseases at Washington ports (4/26/23)

Aiming to catch and identify invasive pests and diseases before they impact Washington farms and forests, scientists at Washington State University will plant trees and shrubs as sentinels at the Port of Tacoma.

"Sentinel plants, watched by trained scientists and volunteers, are an early warning system for potentially devastating insects and pathogens," said WSU professor and plant pathologist Gary Chastagner. "If an invasive species comes through the port, we want to detect it before it becomes widespread."

Stocked with plant host species to help monitor for pests and diseases, the Tacoma planting is the first of its kind at a Washington port. If successful, plantings at other port cities in the state could follow. The project is funded by the U.S. Department of Agriculture Forest Service's Office of International Programs and draws on the involvement of community scientists, the Port of Tacoma, USDA, and the Washington State Department of Agriculture.

PUBLIC COMMENT

Oregon's Integrated Water Resources Strategy

In Oregon, we have a statewide plan for our water called the <u>Integrated Water Resources Strategy</u>. The Strategy provides a way for our state to better understand and meet the many needs that plants, animals, people, and the land all have. Now it's time for us to update the strategy. Starting May 11th, you can <u>share</u> what you think!

Oregon's Kitchen Table is partnering with the Oregon Water Resources Department to hear from you as state agencies work to update our water strategy. You can participate in different ways:

- An <u>online survey</u> in nine languages.
- Join a <u>community conversation</u> in different parts of the state or a <u>Zoom conversation</u>. View the details for the conversation and register here.
- Host your own <u>Kitchen Table Conversation</u>. To learn how to hold a conversation with your own family, friends, or neighbors download the Guide <u>here</u>. OKT is available to help you think through how you might host the conversation. Reach out to us at info@oregonskitchentable.org!

We are also working with community organizers and partners to conduct culturally specific engagement activities.

Share what you think in one of these ways! We have through July 15th, 2023.

[Note: Language addressing invasive species in the <u>2017 Integrated Water Resources Strategy</u> can be found on pages 145-146]

NEW SPECIES SIGHTINGS

Want to get more new species alerts?

USGS NAS: https://nas.er.usgs.gov/AlertSystem/default.aspx
IMAP INVASIVES: https://www.imapinvasives.org

[Colorado] New Zealand Mudsnail (*Potamopyrgus antipodarum*) have been positively identified in Brush Creek near Eagle, Colorado. The populations were initially reported by Timberline Aquatics, visual identification was performed by ANS Lab Staff and confirmed through molecular analysis by Pisces Molecular.

WATCH LIST

- Alaska: Report your sightings via the <u>ADF&G Invasive Species Reporter</u> or by calling the Invasive Species Hotline: 877-INVASIV (877-468-2748). If you locate invasive green crab on Annette Islands Reserve, you can call 907-886-FISH to make a report.
- British Columbia: Take a photo, put it back where you found it, and email the information about where you saw it and when to: <u>AISPACIoFIC@dfo-mpo.gc.ca</u>
- Washington: Take a photo, put it back where you found it, and report suspect crabs here http://wdfw.wa.gov/greencrab
- Oregon: Retain green crab caught in your gear it is illegal to return them to state waters. They are part of your "Other Shellfish" daily catch limit. Try them as food with the rest of your catch. Do not mutilate or kill any crab while you are crabbing.

5 invasive pests to look out for in WA and how to report sightings

Destructive forest p	est, the	emerald	ash bore	er, arrive	s in O	regon;	public	asked	to repo	rt sig	htings
-							•		•		

DREISSENID MUSSELS

Manitoba Hydro, Parks Canada tackle invasive threat of zebra mussels (5/9/22) Manitoba Hydro is dealing with a plague of zebra mussels covering some of its generating stations, and says it will spend millions this summer in an effort to curtail the invasive species.

<u>2023</u> watercraft changes at LAK Reservoir near Newcastle, Wyoming (4/21/23) The threat of an introduction of invasive aquatic species into LAK Reservoir near Newcastle is resulting in changes to recreational access at the site.

<u>CPW continues fight against aquatic nuisance species in Colorado's lakes and reservoirs</u>
(4/28/23) The fight continues for the agency's statewide inspection program this year as Aquatic Nuisance Species staff will work to keep invasive species from spreading in the state's lakes and reservoirs.

Hords Creek Lake 'Fully Infested' with Invasive Zebra Mussels (5/11/22) The Texas Parks and Wildlife Department (TPWD) has designated Hords Creek Lake in Coleman County as "infested" with invasive zebra mussels, signifying that an established, reproducing population is present in the lake.

<u>Lake Winnipeg's future worries Manitoba's fishing industry after zebra mussel invasion</u> (5/10/23) "We're kind of in the infancy of dealing with this in Lake Winnipeg, so we're not quite sure how this is going to play out for the commercial fishing industry," said Chris Kristjason, a commercial fisherman.

Zebra mussels threaten all South Dakota lakes (5/13/22) Steve Charron, the vice president of South Dakota Lakes and Streams Association, will be in Huron to present a report on the zebra mussel threat to South Dakota's lakes. "Our lakes and streams are being challenged at the highest levels with aquatic invasive species," said Charron. "Most South Dakotans have no idea what we are being faced with."

Carra C. Carrillo, Bianca R. Charbonneau, Safra Altman, Jacque A. Keele, Sherri F. Pucherelli, Yale J. Passamaneck, Aaron C. Murphy, Todd M. Swannack. 2023. Patterns of dreissenid mussel invasions in western US lakes within an integrated gravity model framework. Journal of Environmental Management, Volume 332, ISSN 0301-4797 https://doi.org/10.1016/j.jenvman.2023.117383

BOAT INSPECTION/DECON

The <u>2023 Advanced Watercraft Decontamination Manual</u> by Tahoe Regional Planning Agency and Pacific States Marine Fisheries Commission has been released and is available on the <u>Trainer Resources page at WesternAIS.org</u> This revision creates a more user-friendly document, available electronically with searchable capabilities. This manual will continue to be a living document and will be updated as needed.

Mohit, S., Johnson, T.B. & Arnott, S.E. Watercraft decontamination practices to reduce the viability of aquatic invasive species implicated in overland transport. Sci Rep 13, 7238 (2023). https://doi.org/10.1038/s41598-023-33204-0

Colorado inspectors intercepted 148 boats entering state with mussels last year (4/29/23) Colorado Parks and Wildlife reports that 148 boats infested with invasive zebra or quagga mussels entered the state last year and were intercepted by inspectors before reaching state waters, down from a particularly high number of 181 vessels the year before.

Higher Lake Powell Water Levels Expected for 2023 Boating Season (4/28/23) To prevent the spread of aquatic invasive species, all boats departing Lake Powell require an inspection. We ask that watercraft users continue to be patient as our staff work to meet the inspection and decontamination requirements at Lake Powell during the boating season.

<u>Utah DWR to Conduct Administrative Checkpoints in 2023 (5/1/23)</u> Utah Division of Wildlife Resources conservation officers will be conducting an administrative checkpoint on June 2 in an effort to prevent invasive mussels from spreading from other states into Utah waterbodies.

Clean, drain, and dry your vessel this boating season to prevent the spread of invasive species (5/4/23) To keep lakes, rivers, and other water bodies clean and beautiful, the Washington Department of Fish and Wildlife (WDFW) is asking the public to take a few simple steps when launching boats or other vessels this season.

Yellowstone NP reminds boaters, anglers to stop spread of aquatic invasive species (5/5/23) Watercraft equipped with sealed internal ballast tanks are banned from all park waters as inspections cannot always detect aquatic invaders in these types of boats. Felt-soled footwear is banned because they can carry microscopic disease organisms even after cleaning.

Stop for watercraft inspections during summer boating season (5/6/23) Watercraft inspection stations that check for aquatic invasive plant and animal species began opening in the Sheridan Region in March.

BALLAST WATER/BIOFOULING

<u>Chaos brewing in ballast water (5/11/23)</u> The 15-year interval between the conception and entry into force of the IMO's Ballast Water Management Convention left abundant opportunity for invasive organisms to do their nasty work, and despite the sector's reputation for inertia, some shipowners grew tired of waiting.

<u>Draft revised Biofouling Guidelines approved at PPR 10th session (5/3/23)</u> The Sub-Committee on Pollution Prevention and Response has approved the revised Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. It came during the Sub-Committee's 10th session (PPR 10, 24-28 April) and follows a comprehensive review of the Guidelines.

<u>Implications of stricter biofouling standards (5/1/23)</u> Tankers can spend days, if not months, idle on storage duties accumulating underwater growth, which could be an expensive issue now ports and terminals are becoming increasingly sensitive to underwater fouling.

IMO: A protocol for BW compliance monitoring devices is vital (5/4/23) The IMO Sub-Committee on Pollution Prevention and Response (PPR 10), 24-28 April 2023, agreed to a draft Protocol for verification of ballast water compliance monitoring devices, to be submitted to MEPC 80 for approval.

<u>How effective is UV treatment in fresh water? (5/5/23)</u> Researchers at the Shanghai Ocean University, China have been conducting experiments on the impact of fresh water on ballast water treatment, and a paper has now been published in Regional Studies in Marine Science

<u>Academic paper reviews BWMS treatment methodologies (5/8/22)</u> Two researchers at the University of Tokyo have published a paper in the Journal of Maritime Commerce reviewing methodologies and processing of ballast water treatment systems

Guillaume Drillet, Claudio Gianoli, Li Gang, Aristea Zacharopoulou, Gerd Schneider, Peter Stehouwer, Vladimiro Bonamin, Robert Goldring, Lisa A. Drake. 2023. Improvement in compliance of ships' ballast water discharges during commissioning tests. Marine Pollution Bulletin, Volume 191, 2023, 114911, ISSN 0025-326X, https://doi.org/10.1016/j.marpolbul.2023.114911

Song, R., Tavakoli, Y., Bailey, S.A. et al. A temporal assessment of risk of non-indigenous species introduction by ballast water to Canadian coastal waters based on environmental similarity. Biol Invasions 25, 1991–2005 (2023). https://doi.org/10.1007/s10530-023-03019-1

MARINE

Over 38,000 European green crab caught this year; future efforts prioritize local Washington waters

<u>Federal funding coming for local habitat restoration projects (4/25/23)</u> Lummi Nation will also get \$868,000 to help protect eelgrass beds from invasive European green crabs.

The March/April European Green Crab Public Update is now available, online at: https://wdfw.wa.gov/sites/default/files/2023-04/egc-public-update-marapr-23-final-1.pdf These public reports are archived at: https://wdfw.wa.gov/species-habitats/invasive/carcinus-maenas#conservation

VIDEO: WA Fish and Wildlife says European green crab continues to cause issues

Effort mounts to track insidious, invasive green crab in Alaska (4/29/30) [\$] Forty people spread across the estuarine beach of northwest Tamgas Harbor on Monday to study the invasive european green crab that's been moving into the large bight on the southern shore of Annette Island since at least July of 2022.

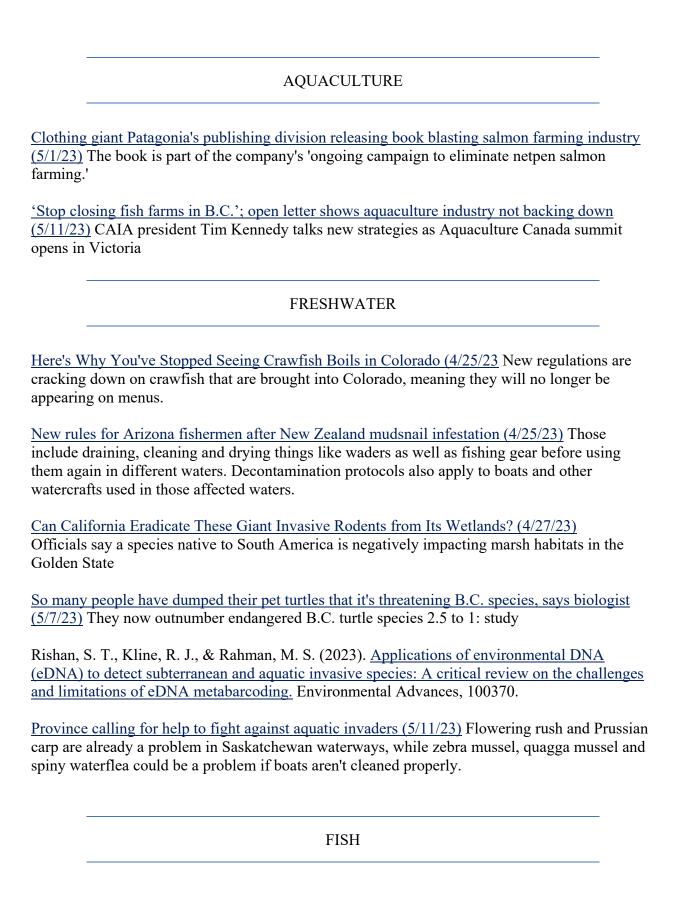
Haram, L. E., Carlton, J. T., Centurioni, L., Choong, H., Cornwell, B., Crowley, M., ... & Ruiz, G. M. (2023). Extent and reproduction of coastal species on plastic debris in the North Pacific Subtropical Gyre. Nature Ecology & Evolution, 1-11.

WSU Extension and WA Sea Grant collaborate on volunteer program to protect Puget Sound from invasive European green crab species (4/30/23) Washington State University (WSU) Extension and Washington Sea Grant have launched a new program to train volunteers to detect and report the presence of invasive European green crab molts along Puget Sound shores.

<u>Trapping of invasive green crabs restarts (5/5/23)</u> The search for invasive European green crabs has restarted in Padilla and Samish bays after a winter pause.

Jofré Madariaga, D., González, M.T., Días Bórquez, C. et al. Successful intertidal colonization of the invasive macroalga Codium fragile near its equatorial/warm range limit in the South-East Pacific. Biol Invasions 25, 1859–1879 (2023). https://doi.org/10.1007/s10530-023-03015-5 [\$]

Schroeder, A., Camatti, E., Pansera, M. et al. Feeding pressure on meroplankton by the invasive ctenophore Mnemiopsis leidyi. Biol Invasions 25, 2007–2021 (2023). https://doi.org/10.1007/s10530-023-03023-5



Seven Wild Ways Scientists Are Trying to Stop Invasive Carp (5/9/23) Researchers and local officials are using unusual methods to keep invasive carp from intruding into the Great Lakes and other waterways

Brandon Road Carp Project Still Awaits Funding Agreement (4/28/23) Without the signed agreement between the Corps of Engineers and the state of Illinois, the current funding mechanism will be exhausted by the end of June, Andrew Leichty, who oversees the project as senior project manager for the Rock Island Engineer District, said in a quarterly webinar April 26 to update the public on the project's progress.

<u>Is the new salmon on Canada's East Coast friend or foe? (5/3/23)</u> In the mid-1950s, the fishing industry in modern-day Russia was determined to do something that may seem unusual today: introduce an invasive species in hopes of creating a new fishery.

Feely, J.R., Sorensen, P.W. Effects of an ensonified bubble curtain and a cyclic sound on blocking 10 species of fishes including 4 invasive carps in a laboratory flume. Biol Invasions 25, 1973–1989 (2023). https://doi.org/10.1007/s10530-023-03022-6 [\$]

AQUATIC PLANTS

Nearly \$500,000 from NV Lake Tahoe License plate proceeds to fund aquatic invasive species removal (4/29/23) The Nevada Division of State Lands recently announced that over \$470,000 from Nevada Lake Tahoe license plate proceeds will fund aquatic invasive species removal, sustainable recreation and stewardship, and more in the Tahoe Basin.

<u>LakeLine 43-1: Aquatic Invasive Species – North American Lake Management Society</u>
(NALMS) This issue of LakeLine focuses on Aquatic Invasive Species (AIS), with contributions from several authors sharing different aspects of AIS work, from the national level to the local level, and from the United States and Canada.

Includes:

- The U.S. Army Corps of Engineers' (USACE) Aquatic Plant & Nuisance Species Research Program
- Starry Stonewort: An Aggressive Invasive Freshwater Macroalga
- Better-Informed Invasive and Native Macrophyte Management

CLIMATE CHANGE

Emiroğlu, Ö., Aksu, S., Başkurt, S. et al. Predicting how climate change and globally invasive piscivorous fishes will interact to threaten populations of endemic fishes in a freshwater

biodiversity hotspot. Biol Invasions 25, 1907–1920 (2023). https://doi.org/10.1007/s10530-023-03016-4 [\$]

OUTREACH AND EDUCATION

"Community scientists" lead the charge against invasive species in BC (5/4/23) Gail Wallin, Executive Director from the ISCBC says that anyone in the province with a smart phone can get involved, all they need to do is download an app. Using the free iNaturalist app the public can become "Community Scientists" and add to the ISCBCs database.

<u>Mussel Walk: Students learn to defend Flathead from AIS (5/11/23)</u> Students from St. Ignatius High and Two Eagle River School in Pablo learned about the scourge of Aquatic Invasive Species (AIS) during a recent Mussel Walk – one of three scheduled this spring along the shores of Flathead Lake.

OTHER

Former strays trained to sniff out invasive species on Guam (4/30/23) Four rescue dogs from Guam and Hawaii are now ready to come to the aid of the island by sniffing out invasive species that threaten the environment and prevent pests from making their way to other places in the Pacific.

<u>First Colorado bat tests positive for deadly White-nose syndrome (4/24/23)</u> The bat was an adult, female Yuma bat (*Myotis yumanensis*) found March 29 by National Park Service (NPS) staff at Bent's Old Fort National Historic Site in Otero County outside of La Junta.

Fusco, E.J.; Beaury, E.M.; Bradley, B.A.; Cox, M.; Jarnevich, C.S.; Mahood, A.L.; Nagy, R.C.; Nietupski, T.; Halofsky, J.E. 2023. The invasive plant data landscape: a synthesis of spatial data and applications for research and management in the United States. Landscape Ecology. https://doi.org/10.1007/s10980-023-01623-z [\$]

Potter, K.M.; Giardina, C.P.; Hughes, F.; Kuegler, O.; Cordell, S.; Koch, A.; Yuen, E. 2023. How invaded are Hawaiian forests? Non-native understory tree dominance signals potential canopy replacement. Landscape Ecology. https://doi.org/10.1007/s10980-023-01662-6 [\$]

Reed, C.C.; Hood, S.M.; Cluck, D.R.; Smith, S.L. 2023. Fuels change quickly after California drought and bark beetle outbreaks with implications for potential fire behavior and emissions. Fire Ecology. 19: article 16. https://doi.org/10.1186/s42408-023-00175-6

JOBS/GRANTS

New:

- The Office of Personnel Management launched a <u>new portal</u> as part of USAJOBS for students interested in applying for internships at federal agencies, billed as a "one-stop shop" for those interested in exploring a career in government.
- Are you ready to make a contribution to fisheries of the West Coast? Begin your job search and application process by searching for <u>specific jobs at PSMFC</u>

Jobs

Washington Invasive Species Council Executive Coordinator (WMS2)

Salary \$75,000.00 - \$95,000.00 Annually

Location Thurston County - Olympia, WA

Job Type Full Time – Permanent Remote Employment Flexible/Hybrid

Job Number 2023-RCO-003

Department Recreation and Conservation Office

Opening Date 05/10/2023

Closing Date 5/30/2023 11:59 PM Pacific

We are looking for a motivated individual to take on the role of the Executive Coordinator of the Washington Invasive Species Council. This individual will lead a council of agencies and organizations tasked with developing and implementing strategies for statewide invasive species protection.

Some of what you'll enjoy doing includes:

- Provide leadership in assisting the council implement its strategic plan and work plan.
- Secure agreement of the council on the project scope of work, deliverables, schedule, and budget. Work with the council chair and executive committee on meeting planning and preparation. Make presentations to the council, as necessary.
- Develop project recommendations for council consideration and oversee production of interim and final project reports.
- As necessary, recruit and recommend hiring any necessary project staff, form workgroups, and develop and oversee consultant contracts.
- Perform technical and administrative support related to project implementation.
- Communicate with, and provide meaningful involvement for, stakeholders including but not limited to: federal, state, and local government agencies, tribal governments, land management interests (forestry, agriculture, land trusts, small landowners, and transportation), and the general public.
- Performance expectations of the coordinator:
- Assist the council in being organized and being a cohesive work unit.

- Provide leadership in the development of the council's work plan to address the tasks in Engrossed Substitute Senate Bill 5385 and future state and federal legislation.
- Assist the council in carrying out its vision, strategic plan, and work plan.
- Procure funding, including agency contributions, dedicated funds, and external grants, for council budget.
- Secure agreement of the council on work plans, deliverables, schedules, and budgets. Work with the council chair on meeting planning and preparation and make presentations to the council, as necessary.
- Develop project recommendations for council consideration and oversee production of interim and final project reports.
- As necessary, recruit and form workgroups, and develop and oversee consultant contracts. Perform technical and administrative support related to project implementation.
- Represent the council in meetings, in conference and workshop presentations, and during Legislative testimony.
- Maintain and update the council website.
- Respond to public requests for educational materials or general information on invasive species and to reports to the invasive species hotline.
- Perform or procure independent research or analysis to implement the Council's work, including:
- Develop pilot projects intended to apply and evaluate methods and incentives for inclusion in plan.
- Identify establish, and coordinate inventories and monitoring for invasive species.
- Develop recommendations for presentation to the Legislature and policymakers.
- Develop a long-range public education strategy and curriculum focuses on the important of invasive species control.

Washington State Governor's Salmon Recovery Office: Science Coordinator

Salary \$85,000.00 - \$100,000.00 Annually Location Thurston County – Olympia, WA Job Type Full Time – Permanent Remote Employment Remote Optional Job Number 2023-RCO-002 Department Recreation and Conservation Office Opening Date 05/08/2023

Closing Date 5/25/2023 11:59 PM Pacific

In this role, you will serve as the Governor's Salmon Recovery Office senior advisor for science and monitoring. This position provides analyses, advice, and coordination on statewide policies and priorities related to science and monitoring for salmon recovery including, but not limited to, Governor's statewide salmon strategy, regional salmon recovery plans, and orca task force recommendations.

Some of the duties include:

- Act as primary science advisor for Governor's Salmon Recovery Office to guide, advise, and inform technical and policy issues and forums relevant to the science and monitoring for salmon and orca recovery.
- Coordinate with state agencies, tribes, federal partners, and regional salmon recovery organizations to advance science and monitoring priorities.

- Guide the Salmon Recovery Funding Board (SRFB) monitoring panel and monitoring programs.
- Work with tribes to better understand traditional and indigenous ecological knowledge.
- Represent GSRO on regional or statewide science forums and bodies.

SE Alaska Regional Invasive Plant Coordinator

Job Title: Invasive Plant Coordinator

Application Closing Date: Open Until Filled

Remuneration: \$55,000-\$70,000 per year, depending on experience, exempt FTE with leave policy, plus medical & dental package, retirement stipend after first year of employment. Location: Juneau, AK (Other SE AK communities will be considered on a case-by-case basis). **The Southeast Alaska Watershed Coalition** (SAWC) is a nonprofit organization that fosters partnerships and inspires Southeast Alaskans to steward our watersheds through participatory projects, research, and learning.

Position Scope: Are you an experienced biologist who wants to pursue your professional goals as part of a fun and productive team? Are you tired of agency bureaucracy? Craving flexibility? Does your creative spirit need to be unleashed? Consider joining SAWC. We are a small but growing non-profit watershed organization with a professional staff of 5 full-time employees. With an expanding program of work, we are looking to add new capacity in the form of a Regional Invasive Plant Management Coordinator for Southeast Alaska. For more information or to apply, please email a cover letter, writing sample, and resume including three references to: John Hudson (john@sawcak.org) or 907-419-4677. Please put "Invasive Plant Coordinator" in the subject line. Applications will be considered on a rolling basis.

Aquatic Ecology Research Associate

Natural Resources Research Institute, University of Minnesota Duluth

Job Opening: 355112, Researcher 6: Aquatic Ecologist Research Associate NRRI is hiring a full-time researcher (professional staff) to work within our Water Research Group. Individuals with expertise in any of several aquatic disciplines, including fisheries ecology, stream or wetland ecology, wetland plant ecology, aquatic toxicology, restoration ecology (aquatic focus), hydrology or hydrogeology, or a related field. The candidate will initially work with the Freshwater Ecosystem Research and Monitoring Lab on research projects related to understanding stream, wetland, and Great Lakes nearshore ecology, including effects of aquatic invasive species, use of biotic metrics to assess ecological condition, and assessing the success of restoration activities. As the successful candidate's own research program develops, they will lead projects and develop an extramurally funded research program of their own related to NRRI's mission and vision as it applies to aquatic resources. Application review will begin in mid-May

Recruiting Aquatic Ecology Research Associate

Natural Resources Research Institute, University of Minnesota Duluth Job Opening: 355112, Researcher 6: Aquatic Ecologist Research Associate NRRI is hiring a full-time researcher (professional staff) to work within our Water Research Group. Individuals with expertise in any of several aquatic disciplines, including fisheries ecology, stream or wetland ecology, wetland plant ecology, aquatic toxicology, restoration ecology (aquatic focus), hydrology or hydrogeology, or a related field. The candidate will initially work with the Freshwater Ecosystem Research and Monitoring Lab on research projects related to understanding stream, wetland, and Great Lakes nearshore ecology, including effects of aquatic invasive species, use of biotic metrics to assess ecological condition, and assessing the success of restoration activities. As the successful candidate's own research program develops, they will lead projects and develop an extramurally funded research program of their own related to NRRI's mission and vision as it applies to aquatic resources.

Application review will begin in mid-May

Fisheries/Aquatic Ecology Research Technician (Hourly)

Kaskaskia Biological Station, Sullivan IL

Under the direction of Dr. Joseph Parkos, III.

Employer: University of Illinois at Urbana-Champaign

Job Description

Conduct field and laboratory work in support of research projects on sportfish management and invasion biology in lakes and rivers. Current research projects include spatial ecology and food web effects of habitat enhancements in reservoirs, experimental harvest regulations, and the ecology and management of invasive carp in the Illinois River. Field work responsibilities include measuring limnological parameters, sampling fish, zooplankton, and macroinvertebrate communities, and conducting creel surveys in rivers and lakes throughout Illinois. Primary laboratory responsibilities include the identification and quantification of larval fish, zooplankton, and macroinvertebrates using standard microscopy techniques. Must be able to maintain focus for extended periods working at a microscope with high standards for accuracy and data quality. Must be knowledgeable or willing to learn field and laboratory techniques associated with fisheries and aquatic ecology research. Experience operating boats, outboard motors, and trailers is preferred. Other duties include data entry, and maintenance of sampling gears, boats, outboard motors, boat trailers, and laboratory equipment. Experience with field gears, microscopy, and the use of dichotomous keys is preferred. Work will be conducted in conjunction with faculty, graduate students, and other research assistants. Job offers come with an expected commitment of 12-24 months. Closes 6/2/23

Invasive Plants Survey Technician (USFS Humboldt-Toiyabe)

Great Basin Institute Austin, Nevada, United States (On-Site)

The Great Basin Institute, in cooperation with the U.S. Forest Service Humboldt-Toiyabe National Forest, is recruiting (15) AmeriCorps Invasive Plants Survey Technicians to participate in non-native, invasive plant species survey, treatment, and monitoring for the forest's noxious weed control program. The primary focus of this position will be the manual and chemical treatment of invasive and noxious weeds. Most of this work is conducted using backpack sprayers, UTV's, and large 4WD spray vehicles traveling on remote 4WD roads. Appropriate personal protective equipment will be supplied by the Forest Service and always utilized by Technicians. A tablet with FieldMaps, Avenza Maps, and EDDMapS West will be used to record plant populations. A Garmin InReach device will be provided for added safety measures. Primary duties:

• Treat invasive plant infestations (Treatments primarily involve using herbicides, but may also be accomplished by hand-pulling and/or using hand tools, power tools, mowers, and other standardized control methods);

- Identify non-native plant species using various field guides and survey methods for target plants;
- Collect data on infestation location and status;
- Accurately record data related to invasive plant treatments according to specific protocols; and
- Perform basic mathematical calculations related to herbicide mixing and applications.

Grants

California State Parks Division of Boating and Waterways (DBW) will accept applications for the 2023 Quagga and Zebra Mussel Infestation Prevention Grant Program: April 10, 2023 - May 19, 2023, subject to available funds.

Minimum Eligibility Requirements:

- 1. Grant applicant must own/manage any aspect of the water in a reservoir where recreational activities are permitted.
- 2. The reservoir must be open to the public.
- 3. Grant applicant must demonstrate that the reservoir is uninfested with dreissenid mussels. To demonstrate that the reservoir is uninfested, applicants must provide mussel monitoring data collected since March 2022. Monitoring data can be from surface surveys, artificial substrates, and plankton tows.

The Washington State Recreation and Conservation Office, on behalf of the Washington Department of Fish and Wildlife, is soliciting proposals for interagency agreement funding to support response to the ongoing European green crab emergency. Please visit https://rco.wa.gov/about-us/employment-and-contracts/ for more information about the available funding for public agencies. (Rolling deadline until funds fully allocated)

For more information on European green crab and the state response, please visit https://wdfw.wa.gov/species-habitats/invasive/carcinus-maenas and https://wdfw.wa.gov/news/emergency-measures-deployed-control-invasive-european-green-crabs-washington-waters

The Funding Opportunity for the U.S. Fish and Wildlife QZAP FY2023 has officially been posted. The total funding amount for projects is approximately \$2,200,000.00, which is similar to last year. There has been significant change in the application process over the past three years, resulting from our transition to GrantSolutions.gov. This opportunity will be open for application through June 12, 2023.

Applications will need to be submitted through <u>grantsolutions.gov</u>, and you will need to create a login and password to access the system. There are recipient tutorials online linked below. Below are the steps you will need to take to access and locate the funding announcement. The funding announcement number is **F23AS00319** and the full title is "F23AS00319 FY2023 Implementation of the Quagga and Zebra Mussel Action Plan (QZAP) in the Western United States - 2023".

Please disseminate this opportunity to all interested parties. Please feel free to reach out to barak_shemai@fws.gov. The opportunity can also be found at grants.gov but applications may NOT be submitted through grants.gov 2023 QZAP GRANT

PLEASE FOLLOW THESE INSTRUCTIONS AFTER CREATING A GRANTSOLUTIONS.GOV LOGIN AND PASSWORD

- Sign into grantsolutions.gov
- Go to the Funding Opportunities page
- Once there use CTRL + F to search the name of the opportunity "name in full" or "OZAP"
- You should see the QZAP opportunity Select Apply on the far right

Links to the recipient training videos:

- https://www.doi.gov/grants/grantsolutions
- <u>GS Recipient Training Videos</u> <u>https://home.grantsolutions.gov/home/recipient-training-videos/</u>

Link to general information:

- <u>FWS GrantSolutions https://doimspp.sharepoint.com/sites/fws-FF09W00000/SitePages/GrantSolutions.aspx</u>

DO NOT SUBMIT APPLICATIONS THROUGH GRANTS.GOV

	LEGISLATION	
Advocacy		

State/Provincial

Oregon Legislation Offers More Flexibility In Managing Non-Native Game Fish -Bass, Walleye-That Gobble Up Native Salmon, Steelhead Smolts (5/5/23)

A legislative bill [House Bill 2966] sitting on Oregon Gov. Tina Kotek's desk waiting for signature would give Oregon more flexibility in managing predatory non-native game fish species –such as bass and walleye — that consume salmon and steelhead smolts in the Columbia River basin.

Washington and Idaho already have the flexibility to allow anglers to fish for bass without limits on size and quantity of fish caught and kept, depending on area, and there are no size or quantity limits on the Columbia River shared by Oregon and Washington.

The Oregon bill originated with main sponsors Sen. Brock Smith (R-Port Orford) and Rep. Virgle Osborne (R-Roseburg). Primarily drafted to target bass tournaments, during the recent Oregon legislative session the bill was amended to also give the Oregon Department of Fish and

Wildlife more flexibility to allow anglers to remove more of the non-native fish from Oregon waters that host threatened salmon and steelhead.

According to Michelle Dennehy, ODFW spokesperson, the original version of the bill gave the agency authority to issue permits for tournaments in which the primary goal is to remove non-native species, such as bass or walleye, in areas where the Department has determined that these species are having a significant adverse impact on native species. She added that under current state statute, ODFW cannot authorize such tournaments unless the fish are returned in a healthy condition to the waters where they are caught. If approved by Kotek, the bill would go into effect Jan. 1, 2024. ODFW plans to develop plans to implement this authority over the summer and fall.... (Source: Columbia Basin Bulletin, Full Article HERE \$\$\$\$)

Federal: Executive

EPA Announces Plan to Protect Endangered Species and Support Sustainable Agriculture (4/12/23) New comprehensive workplan will further species conservation while improving certainty for farmers, local public health agencies, and other pesticide users

Federal: Congressional

Recovering America's Wildlife Act (RAWA) (May 2023, Source: *AFWA Invasive Species News*)

The Recovering America's Wildlife Act (S. 1149) was introduced [by Sens Heinrich (D-NM) and Tillis (R-NC)] in the Senate on Thursday, March 30... The big news first—Senator Collins (R-ME) is the first cosponsor on the Recovering America's Wildlife Act (S.1149) in this Congress. Additionally, we learned that Senators Graham (R-SC) and Moran (R-KS) have been added as the second and third Republican cosponsors. Senator Heinrich's staff will bring on these new cosponsors officially with bipartisan pairings and perhaps as part of a bigger batch of cosponsors pending further commitments from other offices, so stay tuned for official announcements. The near term goal is to get to 10 R's, which will then give Leader Schumer the bipartisan support he needs to get the bill to the floor. The Alliance for America's Fish & Wildlife sign-on letter (click here) was sent up to Senate leadership to encourage advancement of the bill. We heard appreciation and positive signals back from both offices. Please feel free to use this letter in any follow up or correspondence as you see fit.

Current co-sponsors are as follows:

• Cosponsors (10 new, 11 total)

Cosponsor: 05/09/2023: Sen. Stabenow, Debbie [D-MI]
Cosponsor: 05/09/2023: Sen. Collins, Susan M. [R-ME]
Cosponsor: 05/09/2023: Sen. Carper, Thomas R. [D-DE]
Cosponsor: 05/09/2023: Sen. Graham, Lindsey [R-SC]

Cosponsor: 05/09/2023: Sen. Rosen, Jacky [D-NV]
Cosponsor: 05/09/2023: Sen. Moran, Jerry [R-KS]
Cosponsor: 05/09/2023: Sen. Tester, Jon [D-MT]
Cosponsor: 05/09/2023: Sen. Boozman, John [R-AR]
Cosponsor: 05/09/2023: Sen. Sinema, Kyrsten [I-AZ]
Cosponsor: 05/09/2023: Sen. Budd, Ted [R-NC]

Case and Tokuda Introduce Measure To Combat Invasive Species in Hawai'i (4/28/23)

(Washington, DC) - Congressman Ed Case (HI-01), and Congresswoman Jill Tokuda (HI-02) announced the introduction of their Hawai'i Invasive Species Protection Act [H.R.2881], a bill to require that baggage and cargo transporting into the State of Hawai'i by air or sea be preinspected for invasive species and high-risk agricultural materials, in the same manner as similar baggage and cargo transported to the U.S. mainland must be inspected pre-departure.

Federal	: Appropriations
	EVENTS
	EVENIS

Archived Events:

Ongoing Training Opportunities:

Watercraft Inspection Training

Virtual (TBA):

- Virtual WIT or Level 1 Inspector Training (2 days 8 am Noon PST) https://www.westernais.org/level-1-inspector-training
- WIT or Level 2 Inspector & Decon Training (3 days 8 am Noon PST) https://www.westernais.org/level-2
- WIT or Level 3 Trainer Training (3 days- 9 am 4pm PST) https://www.westernais.org/le

In-Person:

TBA

DOI Invasive Species Training Opportunities Spreadsheet

PNW IPC Citizen Science Trainings

<u>InvasivesU – NAISMA</u> - InvasivesU is NAISMA's exclusive online learning library intended to provide professionals, students, and interested individuals with the knowledge and tools necessary to prevent and manage invasive species in North America. NAISMA experts have thoughtfully curated and developed this content, especially for you!

Calendar of Events

May

11th International Conference on Marine Bioinvasions May 15 – 19, 2023; Baltimore, Maryland

NAISMA Webinar Series

May 17, 2023 @ 1:00 pm - 2:00 pm CDT Webinar: Chemical Control of Invasive Weeds: Herbicide Selectivity, Modes of Action, and the Use of Herbicides

Invasive Mussel Collaborative: How invasive mussels impact and are affected by North American ecosystems May 30, 10:00 - 11:30 a.m. Eastern (9:00-10:30 a.m. Central, 8:00-9:30 a.m. Mountain, 7:00-8:30 a.m. Pacific) Mussel squeeze: dissolved oxygen and temperature can "squeeze" zebra mussels out of invaded reservoirs by Rich Miller and Crysta Gantz with Portland State University, Portland, OR Dreissena in the Great Lakes: what have we learned in 35 years of invasion by Alexander Karatayev with SUNY Buffalo State, Buffalo, NY

June

NC RISCC spring 2023 webinar series June 2, 2023, 10 - 11 am (MT): <u>NEDRRIS</u>. <u>presented by Amy Wray (USGS)</u>

On behalf of the Flathead Lake Biological Station and MT Fish, Wildlife & Parks, with generous support from the Montana Invasive Species Council and MT Natural Resources and Conservation, you are cordially invited to an early detection and monitoring training for the management of aquatic invasive species. We have scheduled this two-day training for Monday June 5th at the Flathead Lake Biological Station (Polson, MT) from 10:00 AM to 4 PM, and Tuesday June 6th (field day) on the beautiful Flathead Lake at Bigfork, MT and on the Swan River (east of Bigfork) from 10:00 AM to 2:00 PM. To join us, please RSVP for this in-person training to Phil Matson at mailto:phil.matson@umontana.edu by May 20th.

Columbia River Basin (CRB) Team: The next meeting of the 100th Meridian Initiative Columbia River Basin AIS Team will be held June 6-7, 2023 at the SpringHill Suites in Boise, Idaho.

Register online here. Hotel rooms can be reserved at government per diem rates until May 22, 2023. Contact Amy Stark for further information @ astark@psmfc.org

NAISMA Webinar Series

June 21, 2023 @ 1:00 pm - 2:00 pm CDT Webinar: Advancing International Invasive Species Prevention Efforts and Developing a Model Legal Framework for Noxious Weed Programs

EUCI TRAINING: Zebra and Quagga Mussel Mitigation
June 26-27, 2023 | Online :: 9:00am-4:00pm Central Time

July

32nd PNWER Annual Summit July 16 – 20, Boise, ID

All are welcome to virtually attend the next ANS Task Force Meeting July 18-19, 2023. More information can be found here.

NAISMA Webinar Series

July 19, 2023 @ 1:00 pm - 2:00 pm CDT Webinar: Using People Powered Restoration to Manage Invasive Species in an Urban National Park

August

Ecological Society of America 2023 Annual Meeting in Portland, Oregon August 6-11, 2023.

NAISMA Webinar Series

August 16, 2023 @ 1:00 pm - 2:00 pm CDT Webinar: Introduced Plant Pathogens Threatening North American Forests

Invasive Species Advisory Committee August 15, 2023; Virtual

<u>American Fisheries Society 153rd Annual Meeting</u> August 20-24, 2023 | Grand Rapids, Michigan

September

The 2023 Western Regional Panel Annual Meeting will be September 20-21 in Salt Lake City, Utah.

<u>Association of Fish & Wildlife Agencies 113th Annual Meeting</u> September 24-27, 2023; Calgary, Alberta

October

North American Invasive Species Management Association's 31st Annual Conference October 16-19, 2023; Lincoln, Nebraska

2023 Montana Lakes Conference, October 18-20. The theme for the conference is "Montana Lakes at Risk; Challenges and Opportunities." Whitefish, MT

November

<u>Coastal and Estuarine Research Federation (CERF) 2023:</u> Resilience & Recovery Portland, Oregon, USA | 12–16 November 2023

2024

May

The $\underline{23rd\ International\ Conference\ on\ Aquatic\ Invasive\ Species}$ will take place in Halifax, Nova Scotia, Canada, from May 12-16, 2024. The conference theme is 'Meeting Challenges with Innovation'. Stay tuned for more details.

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