



AQUATIC INVASIVE SPECIES NEWS

9/17/21

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SPOTLIGHT:

[Chicago River has become invasive species super highway](#)

Standing on the banks of the Chicago River, you realize that maybe the best thing about this filthy waterway is that it was reversed over a century ago so it flows away from Lake Michigan instead of into it.

Water isn't even the first thing you notice where the river merges with a notoriously fouled little tributary, dubbed Bubbly Creek for the gases still belching from untold tons of cow carcasses dumped into it by the city's old stockyards.

Floating on the surface is the crinkly corpse of a pink Mylar balloon that's wrapped itself around a 40-ounce beer bottle. Nearby is a pumpkin stuck in the muck, orbited by an array of tampon applicators and plastic bottle caps. Just below a sewer pipe that excretes a septic stew when big rains hit, a boot floats sole-up next to a tennis shoe; if the pair were a match you'd fret they were attached to feet.

Above it all, gleaming in the midafternoon sunlight a few miles to the northeast, are the two white tusks atop the Willis Tower, pinnacle of Chicago's lakeshore skyline. The Chicago River no longer flows that direction, toward Lake Michigan - the city's drinking water source. It instead tumbles into a man-made canal that whisks it across a continental divide, away from the Great Lakes, and into the Mississippi River basin.

At least it does for now.

[\[cont.\]](#)

PUBLIC COMMENT

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[Agencies Seek Public Input on Aquaculture Regulatory Efficiency and Science
Planning Task Force draft strategic plans
Notice](#)

NOAA Fisheries and U.S. Department of Agriculture's Agricultural Research Service (USDA-ARS) are providing notification, on behalf of the National Science and Technology Council's Subcommittee on Aquaculture, of a 45-day comment period for the two Regulatory Efficiency and Science Planning Task Force draft strategic plans: The Strategic Plan to Enhance Regulatory Efficiency and the Strategic Plan for Federal Aquaculture Research. The 45-day comment period for both plans is **open through September 18, 2021**. These two plans establish a road map for federal agencies to increase the overall effectiveness and productivity of federal aquaculture regulation, research, and technology transfer. The Federal Register notice can be viewed at <https://www.federalregister.gov/documents/2021/08/05/2021-16711/notice-for-comment-on-two-strategic-plans-for-the-subcommittee-on-aquaculture-science-planning-and>

[Notification of Rulemaking Activity](#)

The Washington State Dept. of Agriculture initiated rulemaking to amend chapter 16-470 of the Washington Administrative Code (WAC), Quarantine – Agricultural Pests, by filing a CR-101 with the Office of the Code Reviser on September 1, 2021.

Overview of Rulemaking

The department is considering amending the rule by establishing a quarantine on Dreissenid mussels, specifically zebra and quagga mussels (*Dreissena polymorpha* and *Dreissena rostriformis bugensis*) as harmful plant pests and regulating the import of *Aegagropila linnaei* (common product Marimo moss balls), in order to prevent the introduction of Dreissenid mussels to Washington State.

Documents Related to Rulemaking

The CR-101 can be found on our website at <https://agr.wa.gov/services/rulemaking/wac-16-470-mussel-q-080121>

We will send you additional information as we progress through the rule making process.

Participate in the Rulemaking Process

Stakeholder feedback is a vital component in the rule making process. We invite you to participate.

Please contact Cindy Cooper to discuss how you can participate in the decision to amend the rule and formulation of the proposed rule language.

By mail:

Cindy Cooper, Plant Service Program Manager
Plant Protection Division
Washington State Department of Agriculture
PO Box 42560
Olympia, WA 98504-2560
By phone: (360) 902-2062
By email: ccooper@agr.wa.gov

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>

DREISSENIDS

[\[California\] Quagga Mussel Discovery at Castaic Lake: Boating Requirements Implemented \(8/30/21\)](#)

The California Department of Water Resources (DWR) will begin implementing additional boating requirements at Castaic Lake in Los Angeles County due to the recent discovery of invasive quagga mussels.

The discovery of quagga mussels means DWR must implement measures to prevent their spread, including requiring boats to be inspected and drained upon leaving Castaic Lake and Castaic Lagoon. While mussels have not been detected to date in Castaic Lagoon, they are presumed to be present since the lagoon receives water from Castaic Lake. [\[USGS NAS\]](#)

[Minnesota]

[Zebra mussels confirmed in Smith Lake and connected lakes in Crow Wing County \(9/13/21\)](#)

The Minnesota Department of Natural Resources has confirmed zebra mussels in Smith Lake, near Garrison in Crow Wing County. Barbour Lake, Holt Lake and Seguchie Creek, connected to Smith Lake, will also be listed for zebra mussels.

The DNR received a report of zebra mussels attached to kayaks used in Smith Lake. A DNR invasive species specialist found numerous quarter-inch zebra mussels in three areas of the lake.

[Zebra mussels confirmed in Horseshoe Lake in Crow Wing County \(9/13/21\)](#)

The Minnesota Department of Natural Resources has confirmed zebra mussels in Horseshoe Lake, near the city of Crosslake in Crow Wing County.

A Crow Wing County watercraft inspector found adult zebra mussels attached to an aquatic plant that was removed from a boat and trailer at the Horseshoe Lake public access. DNR aquatic invasive species specialists found adult zebra mussels at opposite ends of the west bay of Horseshoe Lake during a follow-up search.

[Zebra mussel larvae confirmed in Rainy Lake in St. Louis County \(9/1/21\)](#)

The Minnesota Department of Natural Resources has confirmed zebra mussel larvae in Rainy Lake, near International Falls in St. Louis County. Rainy Lake straddles the Minnesota and Canada border. Around one-third of Rainy Lake is located within Voyageurs National Park. The zebra mussel larvae were found in waters outside the park boundary.

Four of five DNR water samples taken in July of 2021 contained zebra mussel larvae, suggesting a reproducing zebra mussel population in Rainy Lake. These samples followed up on a July 2020 report of a single adult zebra mussel. [\[USGS NAS\]](#)

[North Dakota]

[Zebra Mussels Discovered in Lake Elsie \(9/7/21\)](#)

The North Dakota Game and Fish Department has confirmed the presence of invasive zebra mussels in Lake Elsie, Richland County, after a local cabin owner reported adult mussels attached to a boat lift over the Labor Day weekend. Aquatic nuisance species coordinator Ben Holen said subsequent follow-up sampling found zebra mussels at various locations and life stages throughout the lake. The 390-acre lake is a popular recreation destination located a few miles southwest of Hankinson. [\[USGS NAS\]](#)

[South Dakota]

[Dreissena polymorpha \(zebra mussel\)](#) was found in Lake Mitchell. [\[USGS NAS\]](#)

OTHER AIS

[Michigan]

[Invasive New Zealand mudsnails found in Shanty Creek in Antrim County \(9/3/21\)](#)

[Nevada]

[Pimephales promelas \(Fathead Minnow\)](#) was found in Carson River, NV. [\[USGS NAS\]](#)

WATCH LIST

[Montana Wants Help From Public In Reporting Snapping Turtle Sightings West Of Divide \(5/20/21\)](#)

[First Asian giant hornet nest of 2021 found near Blaine \(8/20/21\)](#)

DFO wants people to report sightings of European Green Crabs in the Salish Sea. Sightings can be reported to AISPACIFIC@dfo-mpo.gc.ca

[What the shell is out there? Columbia Shuswap Invasive Species Society wants help documenting what kinds of shells are out there.](#)

DREISSENIID MUSSELS

[New Tools In The Fight Against Quagga Mussels \(9/13/21\)](#)

Decontamination is frustratingly time-consuming, but Utah is working to reduce time spent waiting. “We built a hot water decontamination dip tank, which is basically just a giant tank full of 110-degree Fahrenheit water. We put it down at Lake Powell, and boats can be backed down into this tank and all of their systems can be flushed with this hot water...it shrinks that

decontamination time down from an hour on some of these more complex boats down to five, ten minutes maximum,” Owens said.

[Threat of zebra, quagga mussels inspires Yukon Invasive Species Council sign campaign \(9/9/21\)](#)

On Sept. 3 at the Schwatka Lake Day Use Area, the Yukon Invasive Species Council (YISC) unveiled its Clean, Drain, Dry program. Signs outlining Clean, Drain, Dry, are popping up near boat launches in Carcross and the Kluane Lake Region, and more can be expected in other areas of the territory. Clean, Drain, Dry is recognized across North America as the best way to keep the invasive zebra and quagga mussels out of lakes and rivers.

[\[South Dakota\] Here's how Enemy Swim Lake successfully kept zebra mussels at bay this summer \(9/1/21\)](#)

Because there are boats going in and out of so many different lakes that have zebra mussels, the Enemy Swim Preservation Association advocated to the GFP to put money toward ensuring that no boats with zebra mussels would enter Enemy Swim. But GFP didn't have the money, Schreiber said.

The Enemy Swim Preservation Association then asked if people could be employed through GFP if the association found both the works and the funds. GFP agreed to that, and that led to the lake's prevention effort.

[‘The growth is just phenomenal’: Pickerel Lake dealing with year two of zebra mussels \(8/31/21\)](#)

“The population has just literally exploded,” Loveland told KELOLAND News. “They can easily be found covering rocks near the shoreline and clinging to the legs on docks and boat lifts.”

[Lake Worth Designated ‘Fully Infested’ With Zebra Mussels \(8/31/21\)](#)

The Texas Parks and Wildlife Department has designated Lake Worth in Tarrant County on the Trinity River basin as "infested" with invasive zebra mussels.

According to TPWD, infested status signifies that there is an established, reproducing population of zebra mussels in the lake. The designation is a result of recent sampling efforts, TPWD said. "This finding that Lake Worth is fully infested is not unexpected," Raphael Brock, TPWD Inland Fisheries Dallas-Fort Worth Biologist, said. "There are two infested reservoirs upstream that can send zebra mussel larvae downstream to Lake Worth during high water events such as we've seen this spring to then settle in the lake. It is important for boaters to step up and follow TPWD guidelines and regulations to limit further spread to other reservoirs in the DFW area and other parts of the state."

[Mussel-fouled Boat Intercepted En Route to Kalispell \(8/31/21\)](#)

A partnership between the McCone Conservation District and Montana Fish, Wildlife and Parks (FWP) to combat the spread of aquatic invasive species paid off last week when inspectors along Montana’s Hi-Line intercepted a mussel-fouled boat traveling from Lake Erie to Kalispell. The detection occurred Aug. 26 when watercraft inspectors at the Nashua station, located on U.S. Highway 2, inspected an outboard motorboat with mussels on the transducer, gimbal and other areas of the transom. The motorboat is the 50th mussel-fouled vessel intercepted in the state this year, surpassing the total number of 35 mussel-fouled boats intercepted in 2020.

[Health of Manitoba waterways just as crucial election topic as economy, says advocate \(8/27/21\)](#)

An organization advocating for the health of Lake Winnipeg hopes that when federal candidates come calling and seeking votes in the coming days and weeks, that Manitobans make it clear that the health of the environment and of this province's largest lake are topics that must be top-of-mind.

Morrison, A.L., Thelen, M.A., Howe, S.E. et al. Impacts of zebra mussels (*Dreissena polymorpha*) on isotopic niche size and niche overlap among fish species in a mesotrophic lake. *Biol Invasions* 23, 2985–3002 (2021). <https://doi.org/10.1007/s10530-021-02553-0>

BOAT INSPECTION/DECON/TECH NEWS

[Zebra mussels intercepted by Saskatchewan Environment near Manitoba border \(9/16/18\)](#)

Saskatchewan Environment officials said swift action by inspectors and conservation officers prevented zebra mussels from entering the province. The ministry said a boat contaminated with invasive zebra mussels was intercepted on Aug. 30 at a watercraft inspection station by Moosomin near the Manitoba border.

[AIS Inspectors Encounter Unusual Situation At Wibaux \(9/9/21\)](#)

Watercraft inspectors at the Wibaux inspection station intercepted a motorboat entering Montana with mussels attached. The Wibaux inspection station, located on the Montana-North Dakota border on Interstate 94, has intercepted 12 of the 54 mussels boats intercepted so far this year. This boat was unique in how the mussels were attached to the boat... The motorboat that Wibaux inspectors encountered on Sept. 6 had just pulled out of Lake Lida in Minnesota that morning after two days on the water. A close check by inspectors found tiny mussels that were hydrostatically clinging to the motor, transom and hull rather than attached with byssal threads. The hydrostatic process allows water molecules to bond surfaces together, in this case mussels and the motorboat, and maintain that bond after the water has dried. It's presumed that invasive mussels were floating near the Lake Lida boat ramp and were able to cling to the boat as it was loaded onto the trailer.

[\[Utah\] 9,938 Boats Inspected for Quagga Mussels During Labor Day Weekend \(9/9/21\)](#)

Law enforcement officers and technicians with the Utah Division of Wildlife Resources and other agencies had a busy weekend working to inspect and decontaminate boats across the state to prevent invasive quagga mussels in Lake Powell from spreading to other Utah waterbodies. Statewide, Aquatic Invasive Species technicians with the DWR, Utah State Parks, Arizona Game and Fish Department, and the National Park Service inspected 9,938 boats and performed 161 decontaminations from Friday to Monday. Of those total numbers, 1,093 of the boat inspections and 51 of the decontaminations took place at stations in the Lake Powell area.

[\[Wyoming\] Wyoming Invasive Species Check Stations Begin To Close As Boating Season Winds Down \(9/7/21\)](#)

The Wyoming Game and Fish Department said on Tuesday that aquatic invasive species (AIS) check stations are beginning to close or reduce hours as boating season winds down.

“Check stations throughout the state will start to close or reduce their hours beginning this month,” Game and Fish said. “However, it is a requirement that any watercraft transported into Wyoming from March 1 through Nov. 30 must undergo a mandatory inspection by an authorized inspector prior to launching.”

[\[Montana\] The record-breaking mussel-fouled boating season winding down \(9/2/21\)](#)

Among that 50 tally are four mussel-fouled watercraft that were found this summer at the Flathead Nation managed inspection station at Ravalli. Despite that or because of that it’s been a good season at the Flathead Nation stations at Thompson Falls and Ravalli. The Ravalli station has conducted more than 15,000 inspections and Thompson Falls station nearly 4,000

BALLAST WATER/BIOFOULING

[Marine Safety Center issues Ballast Water Management System Type Approval Certificate to Jiangsu Nanji Machinery Co., Ltd. \(9/13/21\)](#)

The Coast Guard Marine Safety Center issued the 44th U.S. Coast Guard Ballast Water Management System Type Approval Certificate to Jiangsu Nanji Machinery Co., Ltd. after a detailed review of the manufacturer’s type approval application determined the system met the requirements of 46 CFR 162.060.

The treatment principle of the Nanji NiBallast BWMS consists of filtration during uptake and in-tank deoxygenation. This approval covers 15 models with maximum treatment rated capacities between 100 m³/h and 4,000 m³/h.

[Ballast water regulations could lead to significant costs for shipowners without thorough forward planning \(9/9/21\)](#)

Global ballast water regulations have been introduced to address serious economic, ecological and human problems caused by invasive species transported across the world via ships’ ballast water. As these regulations are maturing, Ballast Water Management Systems (BWMS) are becoming a legal prerequisite to global trade.

Both the IMO and USCG provide clear standards for treatment that must be met. This standard is utilised by classification societies as they certify BWMS, providing shipowners clarity on the exact specification of the system they must install to be compliant. On paper, this makes ballast water simple for shipowners.

[New ballast-water regulations applauded \(9/9/21\)](#)

... Now Canada has gone one step further. New regulations require the installation of a ballast water management system that treats the water to reduce the number of invasive species. Vessels entering and leaving Canada will be required to have a system installed by 2024, and by 2030 all Canadian vessels that do not travel internationally, other than to US Great Lake ports, will have to comply. Additionally, with the exception of vessels originating from American waters in the

Great Lakes, vessels entering Canadian freshwater bodies must also continue to exchange their ballast water at sea.

The federal Ministry of Transport estimates the regulations will slow the spread of invasive species within Canadian lake ports by 82% by 2030. Between now and 2044, the regulations are expected to stop the introduction of 34 species, including five that could cause serious damage.

[Clean ship hulls have huge environmental benefits \(9/7/21\)](#)

According to the International Maritime Organization (IMO) maritime transport is responsible for nearly 3% of global greenhouse gas emissions. If shipping were a country, it would be the sixth largest polluter in the world, the World Economic Forum says. The buildup of marine life along ship hulls also means that some non-indigenous and invasive species can hitch rides from one environment to the next. That can cause irreversible damage as those species become dominant in their new environments and upend biodiversity. That's no small matter. The IMO calls it "one of the greatest threats to the world's freshwater, coastal and marine ecosystems."

Runa A. Skarbø, Bellona's senior adviser for shipping and maritime issues, is proposing a program to do something about this. It's called the Clean Hull Initiative (CHI), and in cooperation with Jotun, a Norwegian hull coating producer, Bellona will work to develop an industry-wide standard for proactive hull cleaning.

"Fighting biofouling on ship's hulls can – in addition to reducing negative environmental consequences – also save around 9 percent of the global fuel consumption and thereby also greenhouse gas emissions from shipping," says Skarbø.

MARINE

[Flipping the "Genetic Paradox of Invasions" \(9/14/21\)](#)

A new study led by Carolyn Tepolt, an associate scientist of biology at Woods Hole Oceanographic Institution, is investigating the adaptive mechanisms of the green crab along the west coast of North America, where it has shown extensive dispersal in the last decade despite minimal genetic diversity. The [study was published recently in Molecular Ecology](#) and is a collaboration between WHOI, the University of California at Davis, Portland State University, and the Smithsonian Environmental Research Center. "Invasive species like these are generally unwelcome. Green crabs can compete with native species, rip up eelgrass 'nurseries', and eat small shellfish before they have a chance to be harvested. Green crabs can be an ecological menace and an economic burden," Tepolt said. "In this study, we found that one of the world's most serious marine invasive species has evolved specific genetic variation that likely helps it adapt to new environments really quickly, even when it's lost a lot of genetic diversity overall."

AQUACULTURE

The National Sea Grant Law Center (NSGLC) is excited to announce the publication of [Volume 11:1 of the Sea Grant Law & Policy Journal](#). This Special Edition of the Journal is the culmination of the NSGLC's recent project on offshore aquaculture. In 2019, the NSGLC received funding to plan and convene a collaborative learning workshop with legal scholars, federal Executive agency staff, Congressional staff, industry representatives, and academics to

tackle the uncertainty surrounding security of tenure for offshore aquaculture operations. The “Exploring Options to Authorize Offshore Aquaculture” virtual workshop consisted of two 3-hour workshop sessions held over the course of two days, May 12-13, 2020.

[Activists dish out \\$100,000 for anti-aquaculture election campaign \(9/6/21\)](#)

As land-based salmon farmers around the world face a financial bloodbath, activists push federal election candidates to support the immediate transition of maritime aquaculture operations in BC to onshore tanks.

Related: [Party leaders ignore hot air from anti-aquaculture activists \(9/13/21\)](#)

[‘Save the Bay’ flotilla demonstrates against fish farm \(8/30/21\)](#)

More than 125 boats participated in a weekend protest against plans for an aquaculture operation in waters near Acadia National Park. Commercial and recreational vessels comprised the “Save the Bay” flotilla that motored around Frenchman Bay on Sunday. Some people on land also participated by holding signs stating their opposition. American Aquafarms has proposed raising 66 million pounds of Atlantic salmon annually at a pair of 15-pen sites off the coast of Gouldsboro in Frenchman Bay.

[The Environmentalist Case for Fish Farms \(8/29/21\)](#)

While we expand fish farming, we should be extremely wary of creating an environmentally destructive feedlot industry in the ocean. Radical new advances in technologies and marine cultivation methods make it possible to correct existing problems so that aquaculture can grow sustainably.

FISH

[Bighead carp DNA found in Milwaukee River for the first time \(9/10/21\)](#)

For the first time, bighead carp DNA has been found in the Milwaukee River, according to the U.S. Fish and Wildlife Service.

The genetic material, called environmental or eDNA, was detected in a water sample taken in June during routine sampling on the river.

The test result was confirmed Friday by the Service and the Wisconsin Department of Natural Resources.

[Fish barrier vs. carp DNA: What to believe? \(8/30/21\)](#)

More than \$100 million has been spent in a battle to keep Asian carp from invading the Great Lakes. It is a fight the federal government insists it is winning, due largely to its electric barrier system on the Chicago Sanitary and Ship Canal. But is the evidence that these fish-shocking machines work any more reliable than the DNA evidence indicating Asian carp may have already breached them?

AQUATIC PLANTS

Wails, C.N., Baker, K., Blackburn, R. et al. Assessing changes to ecosystem structure and function following invasion by *Spartina alterniflora* and *Phragmites australis*: a meta-analysis. *Biol Invasions* 23, 2695–2709 (2021). <https://doi.org/10.1007/s10530-021-02540-5>

FRESHWATER

[Ask Game and Fish: How will the discovery of curly pondweed and New Zealand mudsnails impact Flaming Gorge Reservoir? \(8/28/21\)](#)

It's too soon to know how the discovery of two aquatic invasive species (AIS) will impact Flaming Gorge. But the Wyoming Game and Fish Department will be monitoring the reservoir closely. When new populations of AIS are introduced to a water body, many different factors can dictate how well they establish and how they may affect that system. Water quality, temperature and substrate can influence how AIS like curly pondweed and New Zealand mudsnails will impact the reservoir and its users.

[\[Wyoming\] Goldfish found in Rock Springs ponds could be bad news for local fisheries \(8/27/21\)](#)

Releasing any aquatic pets, including goldfish, can have significant impacts on local fisheries. Goldfish are fast-growing, with mature individuals averaging about 12 inches, but can reach sizes up to 23 inches.

“This is not ideal for a fishery or for an angler seeking an outstanding fishing experience,”

Dugan said “Further, it will require additional time, sportsperson money and effort to protect the resource that could have been spent on other high-priority fisheries issues.”

Illegally-introduced species can also spread disease that can infect other fish species, including game fish like trout. Few of these diseases exist in Wyoming, but could be brought into the state through an aquarium fish that can survive a wide range of environments.

CLIMATE CHANGE

[Climate Change Is Causing an Uprising of Invasive Species — Here's Why \(9/10/21\)](#)

Not only is global warming driving plant and animal life on earth to endangerment and inevitably, extinction, but climate change also fosters an environment conducive for invasive species. That's right — countless plants and animals have started taking over regions they aren't actually native to, because of the ongoing climate crisis. But how did this happen, and why is this the case?

OTHER

[U.S. fishing group sues Biden administration over offshore wind project \(9/13/21\)](#)

A U.S. fishing group on Monday sued the Biden administration over its approval of the huge Vineyard Wind offshore wind project off the East Coast, saying the government had failed to address industry concerns about its potential safety and environmental impacts.

Mitchell, T.S., Folt, B. & Hall, J.M. Dumpsters and other anthropogenic structures as habitat for invasive African rock agama lizards in Florida. *Biol Invasions* 23, 2689–2693 (2021).

<https://doi.org/10.1007/s10530-021-02537-0>

OUTREACH AND EDUCATION

Edwards, T., Jones, C. B., Perkins, S. E., & Corcoran, P. (2021). [Passive citizen science: The role of social media in wildlife observations](#). *PloS ONE*, 16(8), e0255416.

Abstract: Citizen science plays an important role in observing the natural environment. While conventional citizen science consists of organized campaigns to observe a particular phenomenon or species there are also many ad hoc observations of the environment in social media. These data constitute a valuable resource for ‘passive citizen science’—the use of social media that are unconnected to any particular citizen science program, but represent an untapped dataset of ecological value. We explore the value of passive citizen science, by evaluating species distributions using the photo sharing site Flickr...The spatial and temporal analyses for our case studies suggest that the Flickr dataset best reflects the NBN dataset when considering a purely spatial distribution with no time constraints. The best represented species on Flickr in comparison to NBN are diurnal garden birds as around 70% of the Flickr posts for them are valid observations relative to the NBN. Passive citizen science could offer a rich source of observation data for certain taxonomic groups, and/or as a repository for dedicated projects. Our novel method of validating Flickr records is suited to verifying more extensive collections, including less well-known species, and when used in combination with citizen science projects could offer a platform for accurate identification of species and their location.

Frey M, Reaser JK (2021) Invader Detectives: EDRR in Urban Landscapes. *Management of Biological Invasions* 12(3): 495–508,

https://www.reabic.net/journals/mbi/2021/3/MBI_2021_Frey_Reaser.pdf

JOBS/GRANTS

USDA Wildlife Services Biological Science Technician (Wildlife) GS 4/5/6 in Oregon. Full time, term appointment in Lane County, OR with possibility for benefits. Applications open through **Sept. 28**. **Click here** for details.

[Southeast Coast Invasive Plant Management Team Member - AmeriCorps Eligible American Conservation Experience](#)

Columbia, South Carolina, United States Apply Now

Description

Summary: American Conservation Experience, a nonprofit Conservation Corps, in partnership with the National Park Service, is seeking one Invasive Plant Management Team Member to contribute to invasive plant management projects alongside Southeast Coast Invasive Plant Management Team (IPMT) Staff. This project will involve traveling to different parks in the Southeast Region.

Start Date: October 18, 2021 (some flexibility may be available for the right candidate)

End Date: May 27, 2022 (or 32 weeks from start date)

A 32-week commitment is required

Location: The Southeast Coast Invasive Plant Management Team (SEC-IPMT) is a traveling National Park Service (NPS) team that serves 13 park units in North Carolina, South Carolina, Georgia, and Alabama. The team will visit several, not all, of these parks during the term. Congaree National Park protects the largest contiguous tract of old growth floodplain hardwood forest in the southeast.

[The Midwest Fisheries Center \(MFC\) Director located in Onalaska, Wisconsin, R3.](#)

We are excited to post this opportunity for a challenging leadership position in our R3 Fisheries Program. The Center Director has a unique role with the supervision and oversight of the LaCrosse Fish and Wildlife Conservation Office, the LaCrosse Fish Health Center, and the Whitney Genetics Laboratory all under one roof.

The MFC has a highly-skilled staff representing regional and national leadership in science technology across a rich portfolio of work, including: invasive carp management, endangered species conservation, aquatic habitat restoration, tribal assistance, disease prevention and inspection, comprehensive genetic surveillance of aquatic invasive species, and innovate outreach to youth, partners and the public. **Closes 9/24/21**

[Commission Administrator-MISC - 56630 - \(21142386\)](#)

The Conservation and Resource Development Division (CARDD) is responsible for providing technical and financial assistance to local governments, state agencies and private citizens for conservation, development, protection and management of the state's natural resources.

The Invasive Species program manager within CARDD administers the Aquatic Invasive Species grant program and leads the continuous improvement and implementation of the Montana Invasive Species Council.

Closing Date: Oct 3, 2021

GRANTS

[Scientists in Parks Internship Program - Natural Resource Stewardship](#)

Department of the Interior: National Park Service

The Scientists in Parks (SIP) Internship Program provides opportunities for college students, recent graduates, and early career professionals to complete paid internship projects designed to

apply the best available science, resource management principles, and interpretation techniques to natural resource stewardship needs in national parks.

Posted Date: Jul 20, 2021

Closing Date for Applications: Oct 01, 2021

[Now Open: FY 2022 Grant Opportunity for Marine Debris Prevention Projects](#)

The NOAA Marine Debris Program is proud to announce our FY 2022 Marine Debris Prevention notice of funding opportunity.

NOAA will fund prevention projects that actively engage and educate a target audience (such as students, teachers, industries, etc.) in hands-on programs designed to raise awareness, reduce barriers to marine debris prevention, and encourage and support changes in behaviors to ensure long-term prevention of marine debris. NOAA will also fund projects in the U.S.-Mexico and U.S.-Canada border regions, subject to additional eligibility criteria. [Full Grant information here.](#)

The Letter of Intent (LOI) submission period for prevention projects will extend from September 13 to October 29, 2021.

[Michigan Invasive Species Grant Program \(MISGP\)](#)

Grant Program Details

The Departments of Natural Resources, Environmental Quality and Agriculture and Rural Development work together to address strategic issues of prevention, detection, eradication, and control for both terrestrial and aquatic invasive species in Michigan.

Criteria:

This program is designed to address strategic issues of prevention, detection, eradication and control for both terrestrial invasive species (TIS) and aquatic invasive species (AIS) in Michigan.

Projects must support the overalls goals of the MISGP:

- Prevent new invasive species introductions.
- Strengthen statewide invasive species early detection and response network.
- Limit the dispersal of recently confirmed invasive species.
- Manage and control widespread, long-established invasive species.

Specific priorities and scoring criteria can be found in the MISGP handbook. Proposals will be recommended for funding based on a combination of scoring criteria, project type, project metrics, geographic location and available funding.

Applicant Eligibility: Local, state*, federal or tribal units of government, Non-profit organizations, Universities

*State agencies should contact the MISGP contact prior to preparing an application.

Application Process: A request for proposals will be issued September 01, 2021.

Full proposals will be due November 01, 2021

Awards anticipated in March, 2022.

Contact: Erin Campbell, 269.300.9698 CampbellE6@Michigan.gov

[Montana] [AIS Grant Cycle Open: DNRC and MISC will be accepting grant applications beginning August 1 to fund aquatic invasive species projects.](#)

NEW this cycle:

DNRC is transitioning from WebGrants to Submittables and this change will make it easier to complete and manage your application online. Grantees will be able to complete reports, send

notifications, and track and edit submissions. Click [here](#) to create an account and [here](#) to watch a video on how to get started with Submittables.

MISC has established permanent dates for the annual AIS grant cycle.

Application cycle opens: August 1

Application cycle closes: 1st Wednesday in November by 5 p.m. (11/3/21)

AIS Grant Hearings: 2nd Wednesday in January (1/12/21)

Up to \$50,000 is available per project to Montana communities or local, state, tribal, or other entities within the state and to Montana-based non-governmental entities.

AIS grants are intended to increase local capacity and involvement to address AIS issues.

Projects that address the following AIS management components are eligible and include:

- Prevention
- Early detection
- Education and outreach
- Research
- Treatment

Current state-wide priorities that have been identified and vetted with former grantees and stakeholders for the upcoming AIS grant cycle include grants related to:

- Monitoring / early detection projects to expand local capacity and involvement in multi-AIS taxa early detection efforts.
- AIS outreach projects that expand AIS awareness at the local level.
- AIS research projects including eDNA research related to dreissenid mussel early detection addressing eDNA Science Advisory Panel recommendations.

Locally-led proposals that address the state-wide priorities will receive ranking preference, however all eligible grant requests will be evaluated and considered.

Applications are due Wednesday, November 5, 2021, by 5 pm.

AIS Grant Program Guidelines and application instructions can be found [here](#).

Contact us with questions: llodman@mt.gov, scriswell@mt.gov

[NOAA-NOS-NCCOS-2022-2006972](#)

[Understanding multi-stressor impacts on marine ecosystems under climate change](#)

Department of Commerce

Closing Date for Applications: Jan 18, 2022

The purpose of this document is to advise the public that NOAA/NOS/National Centers for Coastal Ocean Science (NCCOS)/Competitive Research Program (CRP) [formerly Center for Sponsored Coastal Ocean Research (CSCOR)/Coastal Ocean Program (COP)], the NOAA Climate Program Office (CPO), and the NOAA Ocean Acidification Program (OAP), in partnership with the NOAA Office of National Marine Sanctuaries (ONMS) and the NOAA Integrated Ocean Observing System (IOOS), are soliciting proposals to understand the combined impacts of multiple stressors on the function and health of marine ecosystems within the context of climate change. This information will be used to improve place-based management of marine protected areas and enable the proactive protection of these critical ecosystems under future climate scenarios. Climate change is exacerbating existing environmental stressors (e.g., hypoxia, harmful algal blooms, and ocean acidification) through changes to the fundamental drivers of ecosystems (e.g., temperature, precipitation, seasonal cycles, and biogeochemistry).

[NOAA-NOS-NCCOS-2022-2007023](#)

[Harmful Algal Bloom Control Technologies Incubator](#)

Department of Commerce

The purpose of this document is to advise the public that NOAA/NOS/National Centers for Coastal Ocean Science (NCCOS)/Competitive Research Program (CRP) [formerly Center for Sponsored Coastal Ocean Research (CSCOR)/Coastal Ocean Program (COP)] is soliciting proposals from the Cooperative Ecosystems Studies Units (CESU) to implement a 5-year Harmful Algal Bloom (HAB) Control Technologies Incubator (HCTI) under the auspices of the NCCOS/CRP Prevention, Control and Mitigation of HAB Program (PCM HAB). This funding opportunity will provide support for one award to develop and administer a national program that accelerates the development and application of HAB control approaches. To accomplish this, the main objective of the HCTI will be to fund extramural proof of concept, innovative HAB control technology projects to assess their feasibility. Promising technologies will then be encouraged to apply to relevant future PCM HAB competitive funding announcements independent from the HCTI. In addition, the other objective of the HCTI will be to provide guidance to end users and stakeholders on navigating the relevant licensing and permitting processes (e.g., National Environmental Protection Act and Federal Insecticide, Fungicide, and Rodenticide Act requirements) relevant to the applicability of proven control methods during responses to ongoing HAB events. The proposals must address how the HCTI will accomplish these two objectives. This funding opportunity is intended to support the administration of the HCTI and is not intended to directly support individual research projects or short term activities on specific local coastal HAB issues. Funding is contingent upon the availability of Fiscal Year 2022 Federal appropriations. If funds become available for this program, one project for a HCTI will be funded for approximately \$1.5M/year for 5 years, not to exceed \$7.5M over that period. If successful, the selected project may receive an additional \$7.5M for a second and final 5 year period of performance. It is anticipated that projects funded under this announcement will have a September 1, 2022 start date.

FEDERAL/STATE/PROVINCIAL LEGISLATION, RULES, ACTIONS

State/Province

[Big Island Invasive Species Committee May Have To Cut 'Critical' Programs \(9/2/21\)](#)

More pests, less money. That's the outlook for the fight against invasive species on Hawai'i Island. The Big Island Invasive Species Committee faces a budget shortfall of about \$220,000 for 2022. Springer Kaye serves as the Program Manager for BIISC. "With a smaller organization, a whole program might be run by one specialist. A quarter million dollars, that's four positions — that could be four whole programs," said Kaye. "Like our entire little fire ant education program just gone, or our entire nursery endorsement program that teaches nursery owners to recognize and not import invasive plants and plant pests — that could just be gone."

[\[Wyoming\] 'No Carrot, Just The Stick' \(9/7/21\)](#)

Wyoming Game and Fish Department staff continue to go on the offensive against aquatic invasive species with the introduction of a bill draft instituting strict liabilities for failure to comply with boat check requirements. The bill draft, which was considered for the first time by the Wyoming Legislature's Joint Travel, Recreation, Wildlife and Cultural Resources meeting Aug. 27, would make anyone who fails to have watercraft inspected at an aquatic invasive species check station strictly liable for as much as \$25,000 for damages associated with the eradication of aquatic invasive species introduced into the state's waters.

The Wyoming Game and Fish Commission may also bring a civil action to collect the damages if the individual knowingly violated the check station requirements and if an aquatic invasive species was introduced to a body of water following the individual's contact with the body of water. In addition, the draft bill states anyone asked to report to a check station by a peace officer must report to one within 48 hours. If they fail to do so, that individual will be guilty of a misdemeanor punishable by up to \$15,000 in fines or a year in prison.

Judicial

Executive

Congressional

[Recovering America's Wildlife Act Provides Opportunity to Pioneer Bipartisan Conservation \(7/28/21\)](#)

For more than a century, wildlife conservation efforts in America have been predominantly funded with user licenses and fees, putting hunters and anglers on the hook for providing a vast majority of most State's wildlife conservation programs. But as more and more Americans turn to the outdoors in the wake of COVID-19 and species become more sensitive as a result of climate change, it's clear that hunting and angling fees do not provide enough funding to make sure states are able to make meaningful progress toward conserving increasingly at-risk species and their sensitive habitats. We need a solution that shares the responsibility of conserving our wildlands while protecting the species that drive hunting and angling license demand without straining one user group more than another.

Note: [H.R.2773](#) has 113 cosponsors, [S.2372](#) has three cosponsors

APPROPRIATIONS

[Hoyer: House will vote to avoid debt default, shutdown next week \(9/17/21\)](#)

The House majority leader said Democrats will look to suspend the cap on how much money the government can borrow.

[Senate Democrats prepare to tweak House reconciliation package \(9/14/2021\)](#)

Senate Democrats on Tuesday began vocalizing the many ways in which they expect their reconciliation package to differ from the legislation House committees have been marking up, with some of the biggest disagreements occurring in the tax, health care and climate policy arenas.

[Committee Approves \\$25.6 Billion Reconciliation Measure to Fund Climate Corps, Coastal Protection, Wildfire Management, Tribal & Territorial Needs \(9/17/21\)](#)

The House Natural Resources Committee, led by Chair Raúl M. Grijalva (D-Ariz.), today approved its piece of the 10-year budget reconciliation package now before the House of Representatives. The markup, which began on Sept. 2, saw a second full day of debate and concluded in a 24-13 vote to approve the measure. All relevant documents are publicly available online through the [Committee Repository](#). The markup process saw Democrats unite behind a wide array of other popular measures, including investing billions of dollars in climate mitigation; raising billions of dollars through new fossil fuel fees and royalties on the extraction of public resources; and investing in health infrastructure for Indian Country and the U.S. Territories. After two days of votes and debate, the majority voted as a bloc to approve the final measure. Among other pieces of the measure, the Committee voted to invest:

- \$9.5 billion for coastal and Great Lakes restoration and climate resiliency projects
- \$3 billion to support the Civilian Climate Corps through the Department of the Interior
- \$2.5 billion to clean up abandoned hardrock mines
- \$2 billion for Indian water rights settlements over the next decade and \$3.7 billion each decade thereafter
- \$2 billion for Indian Health Service health facility construction, maintenance, and improvement
- \$1.15 billion for emergency drought relief
- \$1 billion for tribal climate resilience and adaptation
- \$993 million for health infrastructure in U.S. territories
- \$900 million for wildfire management
- \$500 million for tribal housing improvements
- \$500 million for a Tribal Civilian Climate Corps
- \$250 million for Salton Sea projects
- \$200 million for tribal public safety and justice
- \$225 million for climate resilience and restoration
- \$100 million for mitigating climate-induced weather events
- \$100 million for tribal wildfire management
- \$100 million for large-scale water recycling
- Hundreds of millions more for urban parks and increasing childhood outdoor access

AIS related language for NOAA and USFWS is as follows:

SEC. 70608. FUNDING FOR THE UNITED STATES FISH AND WILDLIFE SERVICE TO ADDRESS CLIMATE-INDUCED WEATHER EVENTS

(a) IN GENERAL.—In addition to amounts otherwise available, there is appropriated to the United States Fish and Wildlife Service for fiscal year 2022, out of any money in the Treasury not otherwise appropriated, \$100,000,000, to remain available until September 30, 2031, except that no amounts may be expended after September 30, 2031, through direct expenditure, contracts, grants, and cooperative agreements, for the purposes of carrying out the Fish and Wildlife Act of 1956 (16 U.S.C. 742a) and the Fish and Wildlife Coordination Act (16 13 U.S.C. 661), for the purposes of rebuilding and restoring units of the National Wildlife Refuge System, other Federal public assets, and State wildlife management areas including by addressing the threat of **invasive species**, increasing the resiliency and capacity of habitats and infrastructure to withstand weather events, or reducing the amount of damage caused by those events. None of the funds provided by this section shall be subject to cost-share requirements.

Subtitle E—NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
SEC. 70501. COASTAL AND GREAT LAKES RESTORATION AND TECHNICAL ASSISTANCE.

(a) IN GENERAL. —In addition to amounts otherwise available, there is appropriated to the National Oceanic and Atmospheric Administration for fiscal year 2022, out of any money in the Treasury not otherwise appropriated, \$9,500,000,000, to remain available until September 30, 2031, except that no amounts may be expended after September 30, 2031, through direct expenditure, contracts, grants, and cooperative agreements to provide funding and technical assistance for the purposes of restoring a marine, estuarine, coastal, or Great Lake habitat; or providing adaptation to climate change, including by protecting, restoring, or establishing ecological features that protects coastal communities from sea-level rise, coastal storms, or flooding; or designing or implementing blue carbon projects. None of the funds provided by this section shall be subject to cost share or matching requirements.

An AIS federal legislative table is posted on the web on the www.westernais.org website. Go to <https://www.westernais.org/regulations> and scroll all the way to the bottom

TRAININGS, WEBINARS, CONFERENCES AND MEETINGS

Archived Materials

The proceedings from the 2021 UERC symposium are now freely available to all via their website <https://www.uereportland.org/symposia>

Events: Webinars, Trainings, Conferences and Meetings

Watercraft Inspection Training

Level 1 Virtual Training - October 19-20, 2021 (2 days) 8am-noon PST; [[Register Here](#)]

Level 1 Virtual Training - November 2-3, 2021 (2 days) 8am-noon PST; [[Register Here](#)]

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Level 2 Virtual Training - October 19-21, 2021 (3 days) 8am-noon PST; [[Register Here](#)]

Level 2 Virtual Training - November 2-4, 2021 (3 days) 8am-noon PST; [[Register Here](#)]

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Virtual Training - January 11-13, 2022 (3 days) 9am - 5pm PST; [[Register Here](#)]

For more information go to <https://www.westernais.org/> (under the “Training” tab)
or contact

Quagga D @ (702)236-3814 or quaggadee@cox.net

Because of continued concerns due to COVID-19 upcoming meetings and events listed below may be postponed, cancelled or converted to teleconferencing events. Please check directly with the organizers of these events for the most up-to-date information.

2021

September

[Minnesota Aquatic Invasive Species Research Center Showcase](#) September 22, 2021; Virtual Event [Register Here](#) [Session Descriptions here](#) [Agenda here](#)

[North American Invasive Species Management Association Annual Conference](#) September 27-30, 2021; Missoula, Montana (with online options) The only invasive species management conference to... Bridge geographic divides between West and East, North and South, land and water, Connect science to action through research, policy, and outreach initiatives and opportunities across North America. cohosted by Montana Invasive Species Council

October

[Mississippi River Basin Panel Meeting](#) October 5-7, 2021; This year's coordination meeting will be held at Reelfoot Lake State Park near Tiptonville in northwest Tennessee. Location: Ellington Hall Auditorium, Reelfoot Lake State Park, 2595 Hwy 21 E Tiptonville, TN 38079

The Invasive Species Council of BC is pleased to host the [2021 Invasive Species Research Conference: Turning Science into Action](#) October 6-7, 2021

[World Fisheries Congress](#) 11-15 October, 2021 Adelaide, Australia

[Save the date: WALPA is heading to the Tri-Cities this fall!](#) WALPA is returning to the east side in 2021 to host its 34th annual conference in Richland from October 20-22. Please join us at the newly remodeled Holiday Inn Richland on the Columbia River. This year's theme, "It Takes a Village," was chosen to highlight collaborative efforts to understand, protect, and restore our lakes. Stay tuned for the call for abstracts, registration, and hotel reservation information. We are looking forward to seeing you in Richland!

[The Invasive Species Cook-off, Corvallis, OR.](#)

New Date: Sunday, Oct. 24, 4-8 pm

Join IAE friends, staff and supporters in celebrating native species by taking a bite out of some of those invaders to our native ecosystems. This year we will gather safely and outdoors at Common Fields Food Cart Pod & Tap Room in downtown Corvallis for some live music from Corvallis's own Space Neighbors, kid entertainment, and a food cart invasive species dish competition. Join us!

[Pacific Northwest Citizen Science Summit:](#)

The Washington State University Forest Health Watch Program, Western Invasives Network, The River Mile Network and Washington Invasive Species Council have partnered to convene the first-ever Pacific Northwest Citizen Science Summit. The overall objective of the summit is to connect citizen science practitioners and managers for the purpose of creating partnerships and synergies between projects. By working together, we will be more effective than working alone. The event will be held between 9:00 a.m. and 12:00 p.m. Pacific Standard Time on October 26th and October 27th, 2021 via Zoom webinar.

November

[Alaska Invasive Species Workshop](#) November 3-4, 2021; Anchorage, Alaska and virtual

AFS has changed the dates for the 151st [AFS Annual Meeting](#) in Baltimore to November 6-10, 2021, from the original date of August 8-12. Please note that this is a Saturday to Wednesday meeting schedule rather than the traditional Sunday to Thursday. This change is being made with the desire to safely host an in-person meeting and to celebrate our 150th anniversary, albeit one year late. The meeting will also include remote participation options and AFS will transition to a full virtual option should the COVID-19 situation make that the appropriate and safe choice.

New deadlines will be provided soon for symposium and abstract submissions. Please check the meeting website for updates.

Valuing Water: Economics, Ecology, & Culture 41st International Symposium of the [North American Lake Management Society](#) November 15–18, 2021 • Oklahoma City, Oklahoma

[Innovations in Invasive Species Management Conference and Training](#)

We welcome everyone back to the Gaylord Opryland Resort and Convention Center in Nashville, TN for the 4th annual 2021 Innovations in Invasive Species Conference.

When: November 29th through December 2nd, 2021

December

[Northeast ANS Regional Panel Fall Meeting](#) December 3, 2021 and December 8, 2021;
Virtual Meeting

2022

January

The next meeting of the 100th Meridian Initiative Columbia River Basin AIS Team will be Tuesday, January 11 and Wednesday, January 12, 2022. Contact Paul Hotaling for further information @ PHotaling@psmfc.org. See <https://www.westernais.org/coordination> for past meeting minutes and presentations.

February

[2022 Midwest Fish and Wildlife Conference](#), February 13-16, Des Moines IA

[National Invasive Species Awareness Week](#)

February 28, 2022 – March 4, 2022

April

April 18-22 ICAIS Oostende Belgium: The [International Conference on Aquatic Invasive Species \(ICAIS\)](#) is the most comprehensive international forum to address new and emerging issues related to aquatic invasive species in freshwater, marine and estuarine environments. ICAIS provides an international platform for the presentation of aquatic invasive species research that pertains to species biology, risk assessment, prevention, management and control methods, ecological and ecosystem impacts and restoration, outreach and policy.

May

Mark your calendars for the [Joint Aquatic Sciences Meeting](#) in Grand Rapids, Michigan, May 14-20, 2022. The meeting will be held at the DeVos Place convention center and it is organized by the Consortium of Aquatic Science Societies (CASS).

[11th International Conference on Marine Bioinvasions](#) May 15-19, 2022; Annapolis, Maryland

TO UNSUBSCRIBE/SUBSCRIBE to the *AIS NEWS* email sphillips@psmfc.org. *AIS NEWS* was compiled by Robyn Draheim and Stephen Phillips. Past issues of *AIS NEWS* can be found @ <http://www.westernais.org/> under the “News” tab.