



## ***AQUATIC INVASIVE SPECIES NEWS***

10/29/21

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Penn State Arboretum

### **TRICK OR TREAT:**

#### [Snodland \(UK\) couple's shock after mitten crab appears at their door](#)

A Snodland couple were shocked when they opened their door late at night to find a crab apparently trying to get in. When Jane Byrne heard a noise she presumed it was hailstones – but was amazed to discover a blueish-grey crustacean scratching at the entrance to their May Street

house at around 10pm yesterday. Peter Byrne, 63, said: "We were watching the news. My wife thought it was hailstones, she opened the door and looked and then shrieked 'It's a crab trying to get in the door', so I grabbed the fly swatter. "The 3.5 inch-wide crab had put one claw across the threshold, as if to try and get into their home, the couple say. "You see on TV when they put a foot in the door to stop it being shut, that's almost what it was like," Mr. Byrne added. [\[Full Story\]](#)



### [Asian carp don't like Mötley Crüe](#)

Tom Heinold serves as chief of operations for the U.S. Army Corps of Engineers-Rock Island District. He's heard plenty of talk about the Asian carp and the threat to the upper Mississippi River and other Illinois waterways. Heinold says researchers recently deployed submersible speakers in the river near Keokuk, Iowa, testing a wide range of frequencies and pitches. "Believe it or not, they hate Mötley Crüe the most... That sound scares Asian carp out of their pants" [\[Full Story\]](#) [\[Ready to Ride\]](#)

## **PUBLIC COMMENT**

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### **NEW SPECIES SIGHTINGS**

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**Want to get more new species alerts?**

USGS NAS: <https://nas.er.usgs.gov/AlertSystem/default.aspx>

IMAP INVASIVES: <https://www.imapinvasives.org>

### **DREISSENIDS**

[Minnesota]

[Zebra mussels confirmed in Mahnomen Lake and East Mahnomen Lake in Crow Wing County \(10/22/21\)](#)

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The Minnesota Department of Natural Resources has confirmed a report of zebra mussels in Mahnomen Lake and East Mahnomen Lake in Crow Wing County. A landowner reported finding zebra mussels on equipment in front of their property on Mahnomen Lake. A DNR invasive species specialist immediately found numerous and abundant adult zebra mussels on a dock post.

#### [Zebra mussels confirmed in Upper South Long Lake in Crow Wing County \(10/22/21\)](#)

The Minnesota Department of Natural Resources (DNR) has confirmed a report of zebra mussels in Upper South Long Lake, near Brainerd in Crow Wing County. Five hundred feet of the Nokasippi River immediately upstream and downstream of South Long Lake will also be listed for zebra mussels. A lake service provider business informed a landowner that they may have found zebra mussels on dock equipment in Upper South Long Lake when removing it for the season. The landowner contacted the lake association, who reported it to the DNR. A DNR invasive species specialist found adult zebra mussels on dock equipment at the site of the initial report and on dock equipment on the opposite shore of the lake.

### **OTHER AIS**

#### [A 'living fossil' alligator gar is found for the first time in a Kansas river \(10/13/21\)](#)

A creature known as a "living fossil" -- the alligator gar -- has found its way to Kansas for the first time in documented history. Angler Danny Lee "Butch" Smith caught the 4.5-foot, 39.5-pound (1.37-meter, 17.92-kilogram) fish September 20 on a routine fishing trip in the Neosho River, according to the Kansas Department of Wildlife and Parks. The alligator gar's fossil records date back to nearly 100 million years ago, hence the nickname "living fossil fish." Smith has seen gar before -- longnose, shortnose and spotted gar are local to Kansas -- but nothing like this one. That's because alligator gar are not native to Kansas waters. [\[USGS NAS\]](#)

### **WATCH LIST**

#### [Washington State entomologists call for public help after possible spotted lanternfly detection \(10/27/21\)](#)

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

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

[Canada] DFO wants people to report sightings of European Green Crabs in the Salish Sea. Sightings can be reported to [AISPACIFIC@dfo-mpo.gc.ca](mailto:AISPACIFIC@dfo-mpo.gc.ca)

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

## DREISSENIID MUSSELS

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### [Tonka Bay Marina owner honored for efforts to control invasive species \(10/26/21\)](#)

Tonka Bay Marina owner Gabriel Jabbour was named one of the first-ever recipients of the Minnesota Aquatic Invasive Species Research Center's Research Partnership Award. He was the first individual award recipient at the center's annual Research & Management Showcase event on Sept 22. Jabbour is a long-time research partner and former board member of the MAISRC, which is part of the University of Minnesota. Two of Jabbour's notable projects include providing field support to zebra mussel suppression studies by using copper in Lake Minnetonka, and working toward developing anti-fouling coatings to prevent zebra mussel settlement. Jabbour and others at MAISRC returned to the lake recently alongside their partner, the United States Geological Survey, who is considering another evaluation next year to continue the projects that began in 2018.

### [\[California\] Fishermen losing hope of fishing at San Justo Reservoir again \(10/23/21\)](#)

Like many local fishermen, Jeff Contival has been waiting for San Justo Reservoir to reopen since it closed in 2008. But the 83-year-old Hollister native has begun to lose hope that he'll ever fish there again... The property where the reservoir is located— only three miles southwest of Hollister on 2265 Union Road— is 383 acres and has been closed for 13 years due to an infestation of invasive zebra mussels. These mollusks filter out the algae native species need for food, then attach to and incapacitate native mussels. "The reservoir is not likely to be open until it can be ensured that there is a complete eradication of the zebra mussels," said Jeff Cattaneo, district manager of San Benito County Water District. "And even with the plan that is in place, there is still no guarantee that that is going to work because it's still experimental."

### [\[North Dakota\] Moss balls to pontoons: Efforts to combat zebra mussels range from aquariums to lakes \(10/23/21\)](#)

Invasive zebra mussels were confirmed in two more eastern North Dakota water bodies this year, and an alert boat inspector might be the only reason it stayed out of a major fishery in the central part of the state. Concerns weren't relegated only to lakes and rivers, either -- home fish aquarium owners were asked to properly dispose of moss balls after zebra mussels were found in some product sold at pet stores in Bismarck and Fargo.

### [Why Were So Many Species of Mussels Just Declared Extinct? \(10/10/21\)](#)

North America's native mussels are also battling invaders. To illustrate the point during our Zoom call, Hern reached into a cabinet and pulled out a six-inch fragile papershell mussel that had been overrun by an armada of tiny striped zebra mussels. Death had frozen the "zebs" and their host in an eerie tableau. Hern could tell by the placement of two holes that despite everything, the fragile papershell had managed to poke its siphons through the cluster to eat and breathe.

### [12 years after landmark infestation, North Texas officials' fight against zebra mussels continues \(10/9/21\)](#)

It has been 12 years since a zebra mussel infestation was first identified in Texas, but the fight against their spread continues.

The invasive mollusk species made its first known infestation in Lake Texoma in 2009 and has since spread to Lake Lewisville, Lake Grapevine and Lake Ray Roberts. North Texas reservoirs such as Lake Ray Hubbard have been categorized by parks officials as “suspect,” meaning juvenile mussels or larvae were found once in the water.

## **BOAT INSPECTION/DECON/TECH NEWS**

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### [Lake Tahoe boaters bring record invasive species in 2021 \(10/25/21\)](#)

Inspectors protecting Lake Tahoe stopped a record number of boaters carrying invasive mussel species in 2021... Despite hurdles from COVID-19, hazardous air quality and evacuations from the Caldor Fire, Lake Tahoe’s Watercraft Inspection Program had a successful season. The organization says there have been no new invasive species detected in the Lake Tahoe Region.

### [\[Colorado\] Closure in Place for Taylor Park Reservoir Boat Inspection Station \(10/23/21\)](#)

The Grand Mesa, Uncompahgre and Gunnison (GMUG) National Forests issued a Forest Order prohibiting motorized watercraft which contains a bilge system and/or a ballast on Taylor Park Reservoir, with the exception of when official Aquatic Nuisance Species (ANS) watercraft inspectors are operating. Colorado Parks and Wildlife closed the ANS inspection station at the Taylor Park Marina Sunday, Oct. 17, 2021.

### [Manitobans reminded to comply with aquatic invasive species requirements \(10/19/21\)](#)

Manitoba Agriculture and Resource Development is reminding boaters, anglers and other water users to remain vigilant as the open-water season ends, and to make sure they properly inspect and remove aquatic invasive species (AIS) before they transport their watercraft and water-related equipment.

### [\[California\] Boat Registration and Mussel Fee Stickers Now Offered Separately](#)

Starting September 2021, the purchase of a Mussel Fee sticker is now a separate transaction from your vessel registration and renewal. Vessel owners may purchase the Mussel Fee Sticker directly from DMV's website at [dmv.ca.gov/musselfee](http://dmv.ca.gov/musselfee) or through their local DMV field office. Vessel owners will no longer have the option to buy it via telephone, mail, or third-party vendor. Refer to DBW's Mussel Fee Sticker Insert for more information about this process.

## **BALLAST WATER/BIOFOULING**

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### [Marine Safety Center issues Ballast Water Management System Type Approval Certificate to Hyundai Heavy Industries Co., Ltd. \(10/27/21\)](#)

The Coast Guard Marine Safety Center issued the 45th U.S. Coast Guard Ballast Water Management System Type Approval Certificate to Hyundai Heavy Industries 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 HiBallast NF BWMS consists of electrolysis treatment during uptake and neutralization at discharge. This approval covers models with maximum treatment rated capacities between 75 m3/h and 10,000 m3/h.

### [California adopts federal ballast water discharge standards \(10/15/21\)](#)

The Commission has adopted regulatory amendments that will implement the federal ballast water discharge standards for vessels arriving at California ports, among other provisions. These changes will become effective on January 1, 2022. The adopted regulations amend sections 2291, 2292, 2293, 2294, 2295, 2296, and 2297 of Article 4.7 of Title 2, Division 3, Chapter 1 of the California Code of Regulations (CCR).

### [\[Australia\] Marine authorities on alert after invasive Asian green mussel found in Cairns \(10/11/21\)](#)

Biosecurity authorities are undertaking investigations after a single, mature Asian green mussel was found on a boat moored in Trinity Inlet. The mussel (*Perna viridis*) is an invasive and prohibited pest, which is poisonous to humans if eaten and capable of out-competing native marine life. The vessel is understood to have been moored in the inlet since 2013.

## MARINE

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### [Invasive crabs are wreaking havoc on Maine's coast \(10/26/21\)](#)

For the past few years, the Gulf of Maine Research Institute has spearheaded a citizen science project where students identify and catalogue two invasive crab species — the European green crab and the Asian shore crab — along with native crabs. Recently, students from Kennebunk High School counted the most crabs that the institute has ever seen in one area. The record-setting numbers are indicative of an exploding invasive crab population, which wreaks havoc on Maine's fisheries and coastal ecosystems by eating their way through local shellfish and outcompeting native species. By enlisting local students to help count the populations, scientists are collecting more data and also inspiring the next generation of environmental activists.

### [It came from the \(Red\) Sea! Invasive fish spur creative responses in Cyprus \(10/8/21\)](#)

Blue and white fishing boats cluster in a busy harbor in Cyprus, their decks covered in ropes, baskets, and fishing nets. Fishers in sun-bleached caps sluice down the decks as cats forage for scraps in the shade – a typical Mediterranean scene. What is much less typical is the catch these boats are pulling up from the ocean depths.

Cypriot fishers are snagging fish from the Indian Ocean and Red Sea in place of calamari, sardines, and other traditional staples of beachside tavernas. Around 800 exotic species of marine life, from fish to urchins, have entered the Mediterranean through the Suez Canal, posing acute challenges for the Cypriot fishing industry.

### [A New Ecological Threat: Coral Smothering alga Spreads in Papahānaumokuākea \(10/6/21\)](#)

*Chondria tumulosa* is a newly-identified, fast-growing species of alga recently discovered in Papahānaumokuākea Marine National Monument (Monument) that is posing a major threat to the Monument's ocean ecosystem. It acts like highly invasive algae with the potential to overgrow entire reefs. The discovery of the outbreak in the Monument first occurred just south of Midway Atoll, at Pearl and Hermes Atoll (Manawai) during a NOAA cruise in 2019. On that expedition, researchers expected to see the typical brilliant colors from stony corals. Instead, they saw mats of the red alga stretching for the length of football fields, smothering native corals. Not

only were colorful corals not in sight; none of the usual grazing fishes, such as parrotfish, were nearby.

## AQUACULTURE

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### [New Fisheries Minister no fan of salmon farms in BC's oceans \(10/26/21\)](#)

Despite her record as being opposed to open-net salmon farms in BC's oceans, the aquaculture industry says it will work with Joyce Murray, Canada's new Minister of Fisheries and Oceans, to achieve the next level of sustainable seafood production

### [Mowi blames Canadian government for BC hatchery closure \(10/26/21\)](#)

Mowi Canada West today announced the temporary shutdown of its Dalrymple salmon hatchery near Sayward, British Columbia. It said the decision was a direct result of the Liberal Government's decision on December 17 last year to cancel 19 salmon farming licences in the Discovery Islands. 22 hours ago

### [Federal court hearing on B.C.'s Discovery Island fish farm phase-out underway; Opposing arguments from aquaculture companies and environmental organizations being heard \(10/20/21\)](#)

This week, the Federal Court of Canada is hearing whether to uphold a previous ministerial order to phase out open pen salmon farms in the Discovery Islands.

### [Opinion: Dr Adam Hughes asks: What does "sustainable investment" in the Blue Economy mean for fish farming? \(10/20/21\)](#)

If the marine economy were a country, its GDP would rank about 7th globally in line with France or California... There has been significant debate, however, as to whether all sectors of the marine economy are sustainable – and questions over what “sustainability” actually means in the context of the Blue Economy. There has been significant debate, however, as to whether all sectors of the marine economy are sustainable – and questions over what “sustainability” actually means in the context of the Blue Economy. The term “Blue Economy” emerged from the Rio+20 talks and was defined as recognising the ocean space and resources as an essential component of global economic growth and prosperity; although it makes the distinction that the Blue Economy is a conscious de-coupling of socio-economic development from environmental degradation

### [Fishy fear mongering dominates new anti-salmon farm campaign \(10/18/21\)](#)

Fearing science will drown out their fear mongering, BC's anti-salmon farm activists are launching a new campaign to decimate the province's aquaculture industry, a world leader in sustainable seafood production.

Using a litany of false assertions, the group has roped in the Wilderness Tourism Association of BC (WTABC) saying the lack of definitive action to remove the open-net fish farms is putting the long term economic viability of the province's multi-billion-dollar tourism industry at risk.

### [Aquaculture propels First Nations, tribal communities towards 'self-reliance' \(10/14/21\)](#)

Tribal communities across the Pacific Northwest are diversifying into aquaculture to provide economic opportunities and food security for their people.

“As we work to restore salmon populations in Puget Sound, tribes are finding creative ways to feed their members and become more self-sufficient,” said Todd Myers, Environmental Director of Washington Policy Center.

“Tribes have the local control and flexibility that allows them to follow good science to manage aquaculture that is sustainable and provides healthy food,” he said.

## FISH

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### [American Shad in the Columbia River: Past, Present, Future \(10/22/21\)](#)

We generally lack basic information on the many potential ecological interactions between shad and native species.

### [An Undesired Invasive Reef Fish May Soon Increase Hawai‘i Food Security \(10/27/21\)](#)

For the project, Conservation International (CI) Hawai‘i is teaming up with Chef Hui to bring collaborative action among local fishers, chefs, and restaurants. They will work with the State of Hawai‘i Division of Aquatic Resources (DAR) and others to develop a market for the underutilized and largely undesired ta‘ape. To that end, CI Hawai‘i and Chef Hui have formed the Sustainable Seafood Council, a network of Hawai‘i-based chefs. The council will identify and promote opportunities to improve business practices along the seafood supply chain. They are also creating new recipes for ta‘ape for the public to try at home or in restaurants.

### [Local divers win Lionfish Harvest challenge, invasive fish population shrinking \(10/7/21\)](#)

“We’re so lucky the State of Florida is incentivizing us to do something we would all probably do anyways,” said Bowman. “We would all still go scuba diving, we would all still hunt fish. The State of Florida is giving us extra and added reasons to do something we all love.” ... Both divers say the fish population was lower this year than most.

Arthur R. Cooper, Dana M. Infante, Jesse R. O’Hanley, Hao Yu, Thomas M. Neeson, Kyle J. Brumm. 2021. Prioritizing native migratory fish passage restoration while limiting the spread of invasive species: A case study in the Upper Mississippi River. *Science of The Total Environment*. <https://doi.org/10.1016/j.scitotenv.2021.148317>

J. Beaulieu, D. Trépanier-Leroux, J. M. Fischer, M. H. Olson, S. Thibodeau, S. Humphries, D. J. Fraser & A. M. Derry (2021) Rotenone for exotic trout eradication: nontarget impacts on aquatic communities in a mountain lake, *Lake and Reservoir Management*, 37:3, 323-338, [DOI: 10.1080/10402381.2021.1912864](https://doi.org/10.1080/10402381.2021.1912864)

## AQUATIC PLANTS

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### [‘Botanical nightmare.’ How to spend more time fishing and less fighting aquatic weeds \(10/10/21\)](#)

A major frustration continues to be the constant presence of so-called “seaweed” (mainly Eurasian milfoil and curled leaf pondweed) ... Last week, when a fish checker at the Snyder Street launch asked, “How long did you fish?” I answered, “Five hours on the water, but put me down for an hour after you deduct the amount of time spent cleaning gear.” What has caused the botanical nightmare? The abundance of aquatic vegetation in the Columbia and Snake River has increased over time as silt is deposited and trapped in slow-moving reservoirs behind dams. Aquatic plants, including native pondweed and invasive milfoil, have taken root and spread. Plant fragments break loose after the spring and summer growth period, float downstream, and fill the water column.

### [Aquatic Invasive Species in Lake Tahoe \(10/9/21\)](#)

A couple of Aquatic Invasive Species (AIS) are growing rapidly in Lake Tahoe with most of them being found in the Tahoe Keys area.

The good news is scientists, volunteers and residents are collaborating to gain control of these weeds.

Dr. Lars Anderson, a Consultant & Biologist for the Tahoe Keys Property Owners Association says "They've spread much further than they have in the past years, partly because we've got warmer winters and the plants can take off quickly in the spring."

## FRESHWATER

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### [\[Alaska\] Sun’aq Tribe applies for crayfish grant \(10/8/21\)](#)

Signal crayfish populations have continued to increase for the past 20 years in the Buskin system. There is serious concern that this invasive species will prey on young salmon in the Buskin system until salmon populations get dangerously small. [\$]

### [Team discovers invasive-native crayfish hybrids in Missouri \(10/8/21\)](#)

In a [study](#) of crayfish in the Current River in southeastern Missouri, researchers discovered—almost by chance—that the virile crayfish, *Faxonius virilis*, was interbreeding with a native crayfish, potentially altering the native's genetics, life history and ecology. Reported in the journal *Aquatic Invasions*, the study highlights the difficulty of detecting some of the consequences of biological invasions, the researchers say.

### [6 invasive species scientists fear could infiltrate Michigan next \(10/7/21\)](#)

The 32 invasive species currently on Michigan's state watchlist range from the frightening to the seemingly innocuous, with residents advised to look out for anything from gray masses resembling chewing gum to newly striped leaves.

The Department of Natural Resources defines species on its watchlist as those posing immediate and significant threats to natural resources. They're typically species either recently spotted in nearby areas or potential leaks from commercial trade.

[Crayfish and carp among the invasive species pushing lakes towards ecosystem collapse \(10/6/21\)](#)

Human activity and climate change are causing invasive non-native species to spread rapidly across the globe. Researchers have found that certain invasive species can push lake ecosystems beyond a critical 'tipping point', causing a sudden shift from healthy to degraded conditions that is difficult to reverse. Invasive fish such as Asian silver carp *Hypophthalmichthys molitrix*, and crustaceans such as American signal crayfish *Pacifastacus leniusculus*, were found to significantly reduce the abundance of other important organisms in lakes and degrade water quality. The [findings](#), published today in the journal *Global Change Biology*, also provide guidance on the best ways to manage waterbodies.

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## CLIMATE CHANGE

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[On the Klamath, Dam Removal May Come Too Late to Save the Salmon \(9/28/21\)](#)

The removal of four obsolescent hydroelectric dams on the Klamath River in the U.S. Pacific Northwest, expected in 2023 or 2024, should have been an occasion for celebration, recognizing an underdog campaign that managed to set in motion the biggest dam removal project in American history. But that was before the basin's troubles turned biblical.

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## OTHER

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[Colombia Is Finally Sterilizing Pablo Escobar's Hippos \(10/18/21\)](#)

Colombia's Regional Autonomous Corporation of the Negro and Nare Rivers (Cornare), an environmental agency, announced the sterilizations of 24 of the more than 80 hippos residing in the rivers near Escobar's former Hacienda Napoles compound last week... The move comes as the country's hippo population continues to explode, with some estimating that there could be more than 1,400 hippos by 2039. Over the past year, researchers have argued that without intervention the invasive hippos pose a significant threat to the surrounding ecosystem.

[Destructive, invasive wild pigs in Alberta have breached national park boundary for 1st time \(10/11/21\)](#)

One of the most destructive and rapidly spreading invasive species on the continent has been found for the first time in a Canadian national park. Wild pigs, which tear up landscapes and eat everything from roots to bird eggs to deer, are regularly present in Elk Island National Park — the only fully fenced national park, located about 40 kilometres east of Edmonton, says Parks Canada. "Public sightings and video sightings provided by landowners confirm that there is at least one sounder (a sow and piglets) in the region that is known to periodically come into the park," spokesperson Janelle Verbruggen said.

### [Florida Eradicates Giant African Land Snail \(10/8//21\)](#)

This week, Florida Agriculture Commissioner Nikki Fried and the Florida Department of Agriculture and Consumer Services (FDACS) Division of Plant Industry (DPI), along with the U.S. Department of Agriculture (USDA), announced the eradication of the giant African land snail (GALS) from Broward and Miami-Dade counties. This eradication announcement marks only the second time this pest has been eradicated in the world, both in South Florida. For the past 11 years, the FDACS Division of Plant Industry has worked toward eradication through multiple rounds of visual surveys and inspections, K-9 detector dog surveys and inspections, manual collection and treatment programs. In total, 168,538 snails were collected from 32 core population areas comprised of thousands of properties. The giant African land snail is a highly invasive agricultural pest, known to feed on over 500 varieties of plants. They also pose a risk to humans and animals by carrying rat lung worm, a parasite that can cause meningitis in humans. Giant African land snail is a federally regulated pest and both the USDA and DPI will continue to remain vigilant in their commitments to safeguard American agriculture through surveys, early detection, and rapid response. The public should continue to watch for the snails and report suspects to the FDACS-DPI hotline at 1-888-397-1517.

### [Officials warn of invasive mosquito species surging in SoCal that aggressively bites humans \(10/7/21\)](#)

The Aedes mosquitos are more aggressive against humans than other species in the area, and they're difficult to get rid of because their ability to reproduce exponentially, experts say. They've also triggered a warning in the San Gabriel Valley and Orange County.

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## OUTREACH AND EDUCATION

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## JOBS/GRANTS

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### [Aquatic Invasive Species Technician: Arizona \(Woods to Water Wildlife Solutions LLC\)](#)

The primary responsibility of this position is to provide roadside watercraft aquatic invasive species (AIS) inspection and decontamination services at the Topock Station along Interstate 40 (approximately 26 miles north of Lake Havasu City, AZ). Hours of operation are Friday – Monday. Work Duties Include: Inspect watercrafts for the presence of AIS (specifically quagga mussels), perform standing water decontaminations using a mobile decontamination unit, data collection/entry, and provide public outreach and education pertaining to stopping the spread of AIS. Employee will work closely with the public and may be asked to assist with other statewide projects. **Application Deadline 11/1/21**

The Wildlife Society: Internship Opportunities in Policy and Operations

Apply now for two remote-based, paid internship opportunities available at The Wildlife Society from January–June 2022. **The application deadline is Nov. 9.**

- The [Operations and Outreach Intern](#) will be an integral part of TWS' professional development program and organization unit services, helping to improve communication

and engagement among and between organization units, developing and administering professional development offerings, and leading diversity, equity and inclusion initiatives.

- The [Joe Burns Memorial Wildlife Policy Intern](#) will serve on TWS' government affairs team, helping advance policies that support wildlife professionals and their work of science-based conservation through research, communications and advocacy.

### [The Clackamas River Basin Council \(CRBC\): Restoration Program Manager \(full-time\)](#)

Location: Gladstone, OR

**Application review begins November 12, 2021 and remains open until filled.**

The primary duties of this position are to plan, organize, coordinate and implement watershed restoration activities in the Clackamas Basin, including instream, floodplain and riparian enhancement projects. Restoration Program Manager allocates staff and resources among several projects; may lead the work of technical staff, contractors and consultants; reviews design plans and specifications for construction of restoration projects; oversees consultant designs and permit applications for restoration projects; reviews and approves pay requests by contractors and consultants. This position may include supervision of restoration field staff.

### [The Delta Independent Science Board \(Delta ISB\) and California Sea Grant \(CASG\) are seeking two postdoctoral scholars](#)

to support the Delta ISB with its legislative mandate to provide oversight of the scientific research, monitoring, and assessment programs that support adaptive management of Sacramento-San Joaquin Delta, which is part of the largest estuarine ecosystem on the west coast of North America and is the hub of California's extensive water supply system. The Delta ISB reviews "science programs" by topical or thematic areas. Reviews normally assess the state of the science topic in general and across the Delta and make recommendations to improve the science, fill gaps, integrate or explore new ideas. A fundamental responsibility of the postdoctoral scholars will be to work with the Delta ISB on these major reviews once potential topics are identified.

Potential topics include:

- Harmful algal blooms
- Rood webs
- Restoration
- Climate
- Subsidence reversal
- Ecosystem forecasting

The postdoctoral researchers will explore what science and syntheses have been done on the topic in the Delta and other regions, and the latest scientific approaches.

Application Deadline: **Applications will be reviewed starting on November 29, 2021, and will remain open until filled.**

### [Biologist / Forest Ecologist - Environmental Management and Planning Solutions, Inc.](#)

#### [Description](#)

We are seeking an experienced mid- to senior-level biologist or forest ecologist (full-time/part-time) with knowledge of biological resource management in western states, as well as consulting or planning experience with US Forest Service, Bureau of Land Management, and other federal agencies. Having a proven track record for Section 7 Consultations under the Endangered

Species Act (ESA) and contributing to Environmental Impact Statements (EIS) and Environmental Assessments (EA) under the National Environmental Policy Act (NEPA) is highly desirable. This is a mostly office-based position with limited fieldwork, however, current (or the ability to obtain) USFWS species permits per Section 10(a)(1)(A) of the ESA could expand field opportunities. The biologist will be self-motivated, with good organizational skills and technical expertise in biological resources.

Position would be based out of one of our offices in Reno, Nevada; Portland, Oregon; Boulder, Colorado; Santa Fe, New Mexico; or Albuquerque, New Mexico. Remote work could be considered based on a candidate's experience.

Responsibilities include:

- Mid- to senior-level biologist or forest ecologist
- Managing or contributing to biological resources sections for NEPA documents
- Leading ESA Section 7 consultations
- Contributing to forest and natural resource plans
- Conducting or contributing to habitat, wetland, and species surveys (northern spotted owl, marbled murrelet, fisheries, raptors, southwestern willow flycatcher, yellow-billed cuckoo, bats, etc.)
- Interfacing and effectively coordinating with clients, regulatory agencies (e.g., state departments of wildlife, USFWS) and land management agencies (e.g., Forest Service)
- Preparing environmental specialist reports, including biological assessments, biological evaluations, wetland delineations, and special status species reports
- Assisting project managers with all aspects of managing projects from acquisition to completion
- Contributing to business development, including proposal preparation
- Holding or obtaining USFWS Section 10(a)(1)(A) species permits
- Willingness to travel (less than 20 percent) as projects require

[NOAA-NOS-ONMS-2022-2007101 FY22 Dr. Nancy Foster Scholarship Program](#)

Department of Commerce: **Closing Date for Applications: Dec 14, 2021**

The Dr. Nancy Foster Scholarship Program provides support for master's and doctoral degrees in oceanography, marine biology, maritime archaeology—these may include but are not limited to ocean and/or coastal: engineering, social science, marine education, marine stewardship, cultural anthropology, and resource management disciplines—and particularly encourages women and members of minority groups to apply.

General science priorities for the NOAA Office of National Marine Sanctuaries are stated below:

- 4) Studies focused on evaluating the condition of and impacts to living resources and ecosystems from local and regional pressures (e.g., extraction, sanctuary soundscapes and effects of ocean noise, invasive species, water quality and contamination, restoration technology and effectiveness, deep-sea habitat characterization and monitoring, connectivity);

GRANTS

## [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 overall 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](mailto: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::[lodman@mt.gov](mailto:lodman@mt.gov), [scriswell@mt.gov](mailto:scriswell@mt.gov)

### [Montana: Noxious Weed Trust Fund Grant Program is Now Accepting Applications – Grant Applications Due January 6, 2022](#)

The Montana Department of Agriculture (MDA) announces noxious weed grant funding is now available through the 2022 Noxious Trust Fund (NWTF) Grant Program.

Established by the 1985 Montana Legislature, the NWTF grants provide funding for noxious weed research projects, development projects, state and community education, and local cooperative - landowner cost share. Funding assistance is provided to counties, local communities, researchers, and educators to assist with their efforts to solve a variety of weed problems in Montana.

In 2021, over \$2 million was awarded to organizations in 54 counties and seven tribal nations across Montana.

Applicants may apply for funding up to \$75,000 per project through [WebGrants - Montana Grants and Loans](#).

### [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 (PCMHAB). 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 PCMHAB 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. **Current Closing Date for Applications: Jan 27, 2022**

## FEDERAL/STATE/PROVINCIAL LEGISLATION, RULES, ACTIONS

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### Advocacy:

[Sportfishing Industry Lends Support for Aquatic Invasive Species Control Legislation \(10/26/21\)](#)

Yesterday, Reps. John Garamendi (D-Calif.) and Mark Amodei (R-Nev.) introduced [H.R. 5692](#), the “Stop the Spread of Invasive Mussels Act,” which would help address the growing spread of aquatic invasive species that negatively impact fisheries resources and recreational fishing opportunities.

The American Sportfishing Association (ASA) supports the introduction of the bipartisan bill, commending the inclusion of provisions ensuring best management practices for inspection stations across federal agencies.

### [NAISMA supports the Recovering America's Wildlife Act of 2021 \(10/25/21\)](#)

NAISMA supports RAWA because it will provide critical resources to wildlife professionals tasked with conserving the diversity of America's native species. Invasive species pose one of the largest threats to wildlife and have contributed to the need to list more than 42 percent of the organisms currently listed under the Endangered Species Act. For example, the Channel Islands faced an ecological collapse due in part to invasive feral hog populations. A recovery program involving removing the invasive pigs successfully saved endemic island foxes; fox subspecies listed as endangered were delisted in fewer than two decades.

## **State/Province**

### **Montana Fish, Wildlife & Parks is seeking public comment on an herbicide treatment project on Nilan Reservoir**

FWP is proposing to treat a 1.15-acre area within a small bay of Nilan Reservoir with the aquatic herbicide fluridone to eradicate Eurasian watermilfoil (EWM). The proposed treatment would occur Nov. 9. EWM is a highly invasive aquatic plant; this is the first detection of EWM in this basin. Montana has limited populations of EWM so management of it is important to prevent further spread into other nearby waters. The one-time treatment will not cause any major impacts to the physical environment or human environment. The reservoir is at historic low levels so the amount of water that will need to be treated is very limited. To view the environmental assessment and to comment, visit [fwp.mt.gov/news/public-notice](http://fwp.mt.gov/news/public-notice). Public comments will be accepted **through Nov. 8, at 5 p.m.**

### [Nebraska's proposed river basin transfer could reshape Kansas resources \(10/25/21\)](#)

"Our most pressing concerns are Silver and Bighead Carp and White Perch," wrote Chris Steffen, aquatic nuisance species coordinator with the Kansas Department of Wildlife and Parks. "All three species have proven in Kansas to be incredibly detrimental to the waters they invade and are located within the Platte River near the proposed point of diversion." ... "Kansas Wildlife and Parks has been working diligently to prevent the spread and limit the impact of aquatic invasive species," Steffen wrote. "This project would undermine those efforts and place our natural resources at risk."

## **Judicial**

### [Pablo Escobar's 'cocaine hippos' are legally people, U.S. court rules \(10/26/21\)](#)

Some 100 hippos, descended from a herd smuggled into Colombia by the notorious drug kingpin Pablo Escobar, are now recognized by a U.S. court as "interested persons" following a decision this month that is believed to be the first of its kind in the United States.

The Animal Legal Defense Fund, which sought the interested persons designation for the "cocaine hippos," called the ruling by a judge in the U.S. District Court for the Southern District of Ohio a "critical milestone" in its larger effort to have the American legal system recognize "enforceable rights" for animals.

## Executive

### [White House Announces Nomination of Martha Williams as Director of the Fish and Wildlife Service \(10/22/21\)](#)

The White House today announced the intent to nominate Martha Williams as Director of the Fish and Wildlife Service. Martha has been serving as Principal Deputy Director of the Fish and Wildlife Service since January 20, 2021, exercising the delegable authority of the Director. The nomination will now be considered by the U.S. Senate...

Prior to her appointment, Martha served as the Director of the Montana Department of Fish, Wildlife and Parks from 2017 to 2020. Previously, Martha was an Assistant Professor of Law at the Blewett School of Law at the University of Montana in Missoula, Montana where she co-directed the university's Land Use and Natural Resources Clinic.

### [Fishing industry worries Biden offshore wind effort will cost jobs \(10/15/21\)](#)

The Biden administration's push to expand offshore wind development is pitting advocates for commercial fishing against the renewable energy industry. The former is concerned about potential disruptions to their business, while the latter is enthusiastic about the jobs for their industry and climate benefits that will come from expanded offshore wind.

### [Secretary Haaland Outlines Ambitious Offshore Wind Leasing Strategy \(10/13/21\)](#)

"The Interior Department is laying out an ambitious roadmap as we advance the Administration's plans to confront climate change, create good-paying jobs, and accelerate the nation's transition to a cleaner energy future," said Secretary Haaland. "This timetable provides two crucial ingredients for success: increased certainty and transparency. Together, we will meet our clean energy goals while addressing the needs of other ocean users and potentially impacted communities. We have big goals to achieve a clean energy economy and Interior is meeting the moment."

### [Interior Announces \\$4.1 Million to Fight the Brown Tree Snake on Guam \(10/14/21\)](#)

The U.S. Department of the Interior's Office of Insular Affairs (OIA) has announced \$4,095,922 million in Brown Tree Snake Control program fiscal year (FY) 2021 funding as administered through the Technical Assistance Program. An additional amount of \$1,791,421 from Coral Reef and Natural Resources FY 2021 funds was also announced earlier this year for the purpose of controlling and mitigating other invasive species in the Insular Areas besides the brown tree snake.

## Congressional

### [Rubio, Wicker, Schatz Reintroduce AQUAA Act to Advance American Aquaculture \(10/28/21\)](#)

U.S. Senators Marco Rubio (R-FL), Roger Wicker (R-MS), and Brian Schatz (D-HI) reintroduced the bipartisan Advancing the Quality and Understanding of American Aquaculture (AQUAA) Act to establish national standards for sustainable offshore aquaculture. The bill would designate the National Oceanic and Atmospheric Administration (NOAA) as the lead federal agency for marine aquaculture. The legislation would also direct NOAA to harmonize the

permitting system for offshore aquaculture for farms in federal waters, and direct the agency to lead a research and development grant program to spur innovation throughout the industry. The senators first introduced the legislation in September 2020.

[Garamendi, Amodei Introduce Bipartisan Bill to Stop the Spread of Aquatic Invasive Species \(10/25/21\)](#)

Today, Congressmen John Garamendi (D-CA03) and Mark Amodei (R-NV03) introduced the “Stop the Spread of Invasive Mussels Act” ([H.R.5692](#)).

This bipartisan legislation would authorize federal land management agencies to take proven, commonsense measures to prevent the proliferation of invasive species in our nation’s waterways, lakes, reservoirs, and aqueducts.

[Plan backed by Sen. Roy Blunt would mean influx of federal cash to Missouri for species protection \(10/11/21\)](#)

In budget documents for the fiscal year that begins next July, the Missouri Department of Conservation said passage of the Recovering America’s Wildlife Act in its current form would lead to more than \$20 million in extra funds each year for Missouri.

**Note: [H.R.2773](#) has 132 cosponsors, [S.2372](#) has 30 cosponsors**

[Progressives see infrastructure vote next week \(10/29/21\)](#)

House liberals are playing the long game. The progressives who bucked their president to block an infrastructure vote this week also lowered the bar for moving an even larger social benefits package at the heart of [Joe Biden's](#) domestic policy agenda. It's a two-step dance that's rankled party leaders in the near-term, but simultaneously paved the way for quicker action on both proposals — perhaps as early as next week.

## APPROPRIATIONS

[Biden, pushing \\$1.75 trillion spending bill, dealt setback on infrastructure \(11/28/21\)](#)

WASHINGTON, Oct 28 (Reuters) - U.S. President Joe Biden was dealt a setback on Thursday as the House of Representatives abandoned plans for a vote on an infrastructure bill with progressives seeking more time to consider his call for a separate \$1.75 trillion plan for climate measures, preschool and other social initiatives.

Text of the bill and report language can be found at the Committee on Rules site: [H.R. 5376 - Build Back Better Act](#)

Note: Invasive Species is mentioned on **Page 826** in the bill:

SEC. 70306. 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, \$242,500,000, to remain available until September 30, 2026, to make direct expenditures, award grants, and enter into contracts and cooperative agreements for the purposes of rebuilding and restoring units of the National Wildlife Refuge System and State wildlife management areas, including by—

- (1) addressing the threat of **invasive species**;
- (2) increasing the resiliency and capacity of habitats and infrastructure to withstand climate-induced weather events; and
- (3) reducing the amount of damage caused by climate-induced weather events.

The United States Fish and Wildlife Service may provide grants under this subsection with no cost-share requirement.

### **Invasive Species is mentioned in report language in Book 2 [PDF](#)**

**Page 1521 22)** \$50,000,000 for the Forest Health Monitoring Program of the Forest Service for activities and tactics to reduce the spread of **invasive species** on non-Federal forested land; ) \$2,250,000,000 to be used for staffing, salaries, and other workforce needs and expenses to support the development of a Civilian Climate Corps

**Page 1888:** EC. 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, 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 U.S.C. 661), through direct expenditure, contracts, grants, and cooperative agreements, 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.
- (b) ADMINISTRATIVE EXPENSES.—Of the funds provided by this section, no more than 2 percent shall be used for administrative costs to carry out this section.

### [Democratic appropriations bills would increase environmental funding by \\$6B \(10/18/21\)](#)

An appropriations bill unveiled Monday by Senate Appropriations Committee Chairman Patrick Leahy (D-Vt.) would increase funds for the Interior Department and other environmental agencies by \$6 billion compared to 2021 levels... The appropriations bill would also increase funding for environmental justice, a major stated priority of EPA Administrator Michael Regan,

from \$12 million to more than \$200 million. After an unprecedented wildfire season in the Western and Northwestern U.S., the bill would also provide \$3.845 billion for wildfire suppression, \$2.45 billion of which would go to the Wildfire Suppression Operations Reserve Fund.

[Senate Democrats release 9 spending bills \(10/18/21\)](#)

Senate Appropriations Committee Chairman Patrick Leahy (D-Vt.) Monday released the remaining nine Fiscal Year 2022 Appropriations Bills. Monday’s announcement follows months of Leahy calling for bipartisan, bicameral negotiations with the White House on topline spending and the successful, bipartisan passage of the Energy & Water, Military Construction and Veteran’s Affairs, and Agriculture and Rural Development appropriations bills out of the Committee back in August.

*Explanatory Statements* [AKA Report Language] with some of the AIS related language are below:

## NOAA

[Bill Text](#)

[Bill Summary](#)

[Explanatory Statement:](#)

**Page 49:** Aquatic Invasive Species. —The Committee directs NOAA to establish the Coastal Aquatic Invasive Species Mitigation Grant Program and Mitigation Fund, as authorized by the Vessel Incident Discharge Act of 2018 (Public Law 115–282).

## INTERIOR

[Bill Text](#)

[Explanatory Statement](#)

[Bill Summary](#)

## USFWS

**Page 28:** Aquatic Invasive Species. —The Committee recommends \$43,211,000 for aquatic invasive species activities, \$2,052,000 above the enacted level and \$2,100,000 below the budget request. Within these funds, \$5,088,000 has been provided to implement section 5(d)(2) of the Lake Tahoe Restoration Act (Public Law 106–506), an increase of \$1,000,000 above the enacted level and budget request. \$3,500,000 is provided for mussel eradication. Within the funding provided, \$1,000,000 is for research on hydrilla, eel, and milfoil invasive grasses.

**Page 29:** Non-Intrusive Zebra Mussel Elimination. —The Committee recommends \$3,500,000 for zebra mussel eradication. The Committee is aware of the environmental and economic threat posed by invasive quagga and zebra mussels.

Asian Carp. —The Committee recognizes the importance of the work conducted by the Service to combat the serious threat of Asian carp and recommends \$25,000,000 for Asian carp activities. This funding is aimed at protecting and enhancing Asian carp activities in the Great Lakes to prevent them from entering and establishing in the Great Lakes. Funding provided should also be used to control Asian carp in the Mississippi River and its Sub-basins, including the Upper Mississippi River Sub-basin; Missouri River Sub-basin; Arkansas-Red-White River Sub-basin; Lower Mississippi River Sub-basin; Tennessee Cumberland Sub-basin; and Ohio River Sub-basin, including in Kentucky Lake, Lake Barkley, and the Ohio River. The Service should consider the utility of creating a dedicated funding source to increase the intensity and geo-graphic scope of efforts to prevent entry into the Great Lakes and control in areas where Asian carp are currently located. Additionally, \$4,400,000 is provided for implementation of State Aquatic Nuisance Species management plans to help control the spread of Asian carp.

Invasive Species. —The Committee is aware that work is ongoing in several regions to address the threats posed by aquatic invasive species and directs the Service to continue to make available competitive grant funding for projects to eliminate these destructive, non-native species. Prioritization of Combatting Invasive Plant and Animal Species. —Invasive plant and animal species are a pervasive problem affecting communities across the Nation. Invasives, such as the Asian carp, quagga and zebra mussels, emerald ash borer, Eurasian milfoil, elodea, and the Hemlock Woolly Adelgid threaten our natural resources and wreak havoc on the communities and industries that rely upon them. Preventing invasive species from gaining a foothold in our communities and suppressing established species is of utmost importance. The Committee makes several increases to programs designed to combat invasive species before and after they become a problem. The Committee encourages the Service to support research, monitoring, mitigation, and outreach efforts in all regions.

## USGS

**Page 43** Biological Threats and Invasive Species Research Program. —The bill provides \$44,031,000 for the Biological Threats and Invasive Species Research Program, \$5,782,000 above the enacted level and \$80,000 above the budget request. Of the funds provided, the Committee recommends maintaining funding at the fiscal year 2021 enacted level of \$3,748,000 for White-nose syndrome [WNS] research. The direction found in Senate Report 116–123 is continued for WNS.

The bill provides \$11,000,000 to address Asian Carp issues in the Great Lakes and Upper Mississippi River Basin. In order to effectively control the spread of Asian

Carp, the Committee expects all six sub-basins of the Mississippi River Basin will be included in funding opportunities.

**Page 44:** The Committee notes the grave ecological threats and public nuisance posed by many invasive species and directs the Survey to prioritize research, detection, and response efforts on invasive species with extremely high impacts on natural resources, native wildlife populations, and public access and enjoyment, including Burmese Pythons in the Florida Everglades and Big Cypress Swamp, as well as Lionfish in the Gulf of Mexico, Caribbean, and South Atlantic waters.

**Page 49:** Water Resources Research Act Program. —The bill provides \$15,000,000 for the Water Resources Research Act (Public Law 88–379) Program, \$4,000,000 above the enacted level and \$4,000,000 above the budget request. The recommendation includes \$1,500,000 for research on the control and management of aquatic invasive species in the Upper Mississippi River region.

## EPA

**Page 86:** Great Lakes and Lake Champlain Invasive Species Program. — The Committee appreciates receiving the Agency’s recent plan on its previous and planned actions to implement the Great Lakes and Lake Champlain Invasive Species Program as authorized by the Vessel Incident Discharge Act (Public Law 115–282). In fiscal year 2022, the Committee expects the Agency to implement its plan expeditiously and directs the Agency to continue to use funds from the appropriate Geographic Programs to address invasive species in the Great Lakes and Lake Champlain.

An AIS federal legislative table is posted on the web on the [www.westernais.org](http://www.westernais.org) website. Go to <https://www.westernais.org/federal-provincial-regulations> and see *AIS Legislative Tracker*

# TRAININGS, WEBINARS, CONFERENCES AND MEETINGS

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## [Archived Materials](#)

The Western Regional Panel On ANS Virtual Annual Meeting was held the week of September 21-24. Many thanks to the Annual Meeting Planning team, our presenters and moderators to helping to create a successful meeting.

If you missed any presentations or would like to revisit them check out the [WRP on ANS's YouTube Channel](#) to watch

## [Events: Webinars, Trainings, Conferences and Meetings](#)

### **Watercraft Inspection Training**

Level 1 Virtual Training - January 25–26, 2022 (2 days) 8am-noon PST; [[Register Here](#)]

Level 1 Virtual Training - February 22-23, 2022 (2 days) 8am-noon PST; [[Register Here](#)]

Level 1 Virtual Training - March 22-23, 2022 (2 days) 8am-noon PST; [[Register Here](#)]

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

Level 2 Virtual Training - January 25–27, 2022 (3 days) 8am-noon PST; [[Register Here](#)]

Level 2 Virtual Training - February 22-24, 2022 (3 days) 8am-noon PST; [[Register Here](#)]

Level 2 Virtual Training - March 22-24, 2022 (3 days) 8am-noon PST; [[Register Here](#)]

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

Level 3 Virtual Training - February 8-10, 2022 8 am to 4 pm PST; [[Register Here](#)]

Level 3 Virtual Training - March 8-10, 2022 8 am to 4 pm 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](mailto:quaggadee@cox.net)

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*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.*

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## [DOI Invasive Species Training Opportunities Spreadsheet](#)

**2021**

**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

[Aquatic Nuisance Species Task Force Meeting](#)  
November 16-18, 2021; Virtual Meeting

[NAISMA Webinar: USGS and USFWS collaborative project to conduct a national horizon scan for organisms in trade](#) - November 17, 2021 - 1 p.m. CT

The focus of this project is to conduct a global horizon scan to help identify alien vertebrate species within the Organisms in Trade Pathway at greatest risk of entering the country, establishing populations, and becoming invasive in the U.S. Our work will address arrival, establishment, and impact via consideration of propagule pressure, climatic similarity to occupied range, and prior invasion history of the focal species and its relatives, respectively.

[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

[Delta Invasive Species Symposium December 15, 2021](#)

The bi-annual Symposium is a forum for Delta managers, researchers, and decision-makers to meet, share and synthesize information, and communicate best practices and lessons learned.

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This year's Symposium will focus on early detection and rapid response (EDRR) to invasive species. The virtual event will take place on December 15, 2021, from 9:00 a.m. thru 2:30 p.m. The Symposium will highlight EDRR lessons learned, current EDRR efforts across the Delta and beyond, and future challenges and solutions for EDRR work. The Symposium will consist of invited talks, a panel discussion, and an opportunity for participants to provide feedback on the draft Delta EDRR Framework being developed by the Delta Interagency Invasive Species Coordination (DIISC) Team. The Delta Interagency Invasive Species Coordination (DIISC) Team plans and facilitates the biannual Symposium.  
Dec 15, 2021 09:00 AM in Pacific Time (US and Canada)

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## 2022

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### 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 Paula Hotaling for further information @ [PHotaling@psmfc.org](mailto: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

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