



# Wetland News Digest

## Editor's Note

As we wrap up 2022, all of us at the National Association of Wetland Managers would like to thank you for being a part of our wetland family. The past year has been full of ups and downs, as most years are, although we know for many, the past year has been particularly challenging. We hope that in some small way, your subscription to *Wetland News Digest* has helped you feel connected to the broader wetland community.

In [Editor's Choice](#) this month, I have highlighted stories about how communities, states, federal agencies, and our elected officials are addressing the climate crisis. Together, using all our tools in the toolbox, we can make headway on this critical issue. In [National News](#), you will find funding opportunities with NFWF and FEMA. And we have multiple reports available in our [Resources & Publications](#) section, including the announcement regarding the new tribal wetland program guide that EPA just published (with a little help from NAWM!).

Best wishes to all of you for a healthy and joyful holiday season and New Year!

Best regards,

Marla Stelk  
Editor, *Wetland News Digest*  
NAWM



Photo Credit: USFWS

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Photo Credit: Laura Burchill,  
NAWM

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# Editor's Choice

## Upper Colorado River states announce voluntary cutback program

By Zack Budryk – The Hill – December 15, 2022

Four states in the upper basin of the Colorado River this week announced a program through the Upper Colorado River Basin Commission to temporarily conserve water from the over-leveraged river as the West weathers a historic drought. The plan, unveiled by representatives of Colorado, New Mexico, Utah and Wyoming Wednesday, would subsidize users of river water to voluntarily cut back on their use. The pilot program would pay participating users at least \$150 per acre-foot of water conserved. [Read more.](#)

## NASA Scientists Map Global Salt Marsh Losses and Their Carbon Impact

By Kathryn Cawdrey – NASA – December 7, 2022

According to a new NASA-led study, the world has lost 561 square miles (1,453 square kilometers) of salt marshes over the past 20 years. In a recent research paper, scientists described the first consistent global accounting of salt marsh locations and changes. The work also allowed them to start estimating the amount of carbon dioxide — a greenhouse gas — emitted into the atmosphere as marshland is degraded or lost. [Read more.](#)

## Members look ahead as climate panel wraps up work

By Rachel Frazin and Zack Budryk – The Hill – December 14, 2022

Members of the House Select Committee on the Climate Crisis say more remains to be done as the panel wraps up its work ahead of the new Congress. We'll also look at the U.S. consumer safety board as it considers restrictions on gas stoves, and a western pine species will receive endangered species protections. [Read more.](#)



**National Association of Wetland Managers**  
**Annual State/Tribal/Federal Coordination Meeting**  
**Protecting and Restoring Wetlands for People and Wildlife**



**May 2 - 4, 2023**  
\*Optional field trip on May 5th.

**Arbor Day Farm's Lied Lodge**  
**Nebraska City, NE**

Image by Mariah Lundgren /  
Platte Basin Timelapse

[www.nawm.org](http://www.nawm.org)

[Visit the meeting website for more information.](#)

# National News

## 'Keystone' mountain pine of US West earns endangered species protections

By Sharon Udasin – The Hill – December 14, 2022

The U.S. Fish and Wildlife Service (FWS) announced on Wednesday that it would be listing the whitebark pine as a threatened species under the Endangered Species Act (ESA). "Extending ESA protections to whitebark pine is critical to not only the tree itself, but also the numerous plants, animals, and watersheds that it supports," Matt Hogan, an FWS regional director, said in a statement. [Read more.](#)

## NFWF, NOAA Announce Record \$136 Million for Coastal Resilience

Association of State Floodplain Managers – December 7, 2022

NOAA and the National Fish and Wildlife Foundation (NFWF) announced a record investment in projects that will help communities prepare for increasing coastal flooding and more intense storms, while improving thousands of acres of coastal habitats. The funding, in collaboration with the Department of Defense and private sector partners, provides more than \$136 million to support 88 natural infrastructure projects in 29 states and U.S. territories. [Read more.](#)

## NFWF Announces \$1 Million in Grants from ConocoPhillips SPIRIT of Conservation Program

NFWF – November 17, 2022

The National Fish and Wildlife Foundation (NFWF), in partnership with ConocoPhillips and the U.S. Fish and Wildlife Service, today announced \$1 million in grants that will identify, restore and protect key bird habitats across nine states. The grants will leverage nearly \$7.9 million in matching contributions for a total conservation impact of \$8.9 million. The six projects announced today will conserve habitat in Alaska, South Dakota, Texas and Wyoming and will collect bird data in an additional five states including Colorado, Kansas, Montana, New Mexico and North Dakota, as well as parts of Canada and Mexico, covering a large area of the Central Flyway. [Read more.](#)



## Climate change yields uncertain future for Great Lakes water levels

By Danielle Kaeding – WPR – December 13, 2022

Scientists say communities around the Great Lakes should prepare for swings in high and low water levels to boost their resilience in the face of climate change. A multi-agency panel of scientists discussed the uncertainty surrounding the effects of climate change on the Great Lakes Monday during the American Geophysical Union's fall meeting in Chicago [Read more.](#)

Photo Credit: Sharon Weaver, NAWM

## FEMA Announces FY22 BRIC and FMA Notice of Funding Opportunities

FEMA – August 12, 2022

FEMA announced the FY22 Notice of Funding Opportunities (NOFO) for the Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) programs. The funding level for BRIC has increased to \$2.3 billion for FY22, with FMA funding increasing to \$800 million. BRIC's non-financial Direct Technical Assistance program will also increase to at least 40 communities (from 20) for the FY22 cycle. The application period closes on **January 27, 2023**. [Learn more here](#).

## Request for Information: Framing the National Nature Assessment

Federal Register – October 31, 2022

The US Global Change Research Program (USGCRP) is seeking input from the public to help inform the framing, development, and use of the National Nature Assessment. The USGCRP welcomes comments on the definition of nature, what questions the assessment can help answer, potential audiences and engagement processes, trends and projections, and relevant information sources. Comments are due **March 31, 2023**. More information on how to respond to this request, including guiding questions, [can be found here](#).

## HOT TOPICS WEBINAR

### Advancing the Integration of Clean Water Act Programs with Natural Hazard Mitigation Planning & Implementation

Tuesday, January 17, 2023 - 3:00 p.m. - 4:00 p.m. EST

#### Presenters



**Marla Stelk**  
National Association of  
Wetland Managers



**Ellie Flaherty**  
U.S. Environmental  
Protection Agency



**Jenna Moran**  
Association of State  
Floodplain Managers

[Register](#)

[More Information](#)

# TRIBAL WETLAND PROGRAMS WEBINARS

## Developing Your Tribal Wetland Program

Thursday, February 16, 2023 - 3:00 p.m.-4:30 p.m. EST

### Presenters



**Rick Gitar**  
Fond du Lac  
Reservation - Office of  
Water Protection



**Blair Libby**  
Confederated Salish and  
Kootenai Tribes

[Register](#)

[More Information](#)



## Monitoring and Assessment Data Collection and Applications for Tribal Wetland Programs

Thursday, April 20, 2023 - 3:00 p.m.-4:30 p.m. EST

## Geospatial Mapping Tools and Techniques for Tribal Wetland Programs

Thursday, June 15, 2023 - 3:00 p.m.-4:30 p.m. EST

## Education and Outreach Efforts to Support Tribal Wetland Programs

Tuesday, September 21, 2023 - 3:00 p.m.-4:30 p.m. EST

## Approaches to Sustainable Funding for Tribal Wetland Programs

Thursday, November 2, 2023 - 3:00 p.m.-4:30 p.m. EST

[More information and registration is available here.](#)

A Certificate of Attendance to be used toward Continuing Education Credits is available when participating in NAWM's live webinars. All NAWM members receive free Certificates of Attendance for webinars. Non-Members who request a certificate will be charged a processing fee of \$25.00. You will have up to 60 days to retrieve your certificate. Certificates are not available for viewing recorded webinars. [More information can be found here.](#) Membership information can be [found here.](#)

# State and Tribal News

## **AK: Water Mission to Gauge Alaskan Rivers on Front Lines of Climate Change**

ENN Environmental News Network – December 12, 2022

The upcoming Surface Water and Ocean Topography mission will provide a trove of data on Earth's water resources, even in remote locations. Alaska serves as a case study. While Alaska straddles the Arctic Circle and is covered by vast expanses of frozen land, the state also has a lot of liquid water. In fact, Alaska holds about 40% of U.S. surface water resources. This includes more than 12,000 rivers, thousands more streams and creeks, and hundreds of thousands of lakes. [Read more.](#)

## **AK: Uncertainty for Alaskan Salmon as Mining Companies Dig In**

By Becki Robins – Undark – November 9, 2022

Wild Alaskan Salmon are a gold standard for American seafood. The long journey from the river to the ocean and back builds the muscle mass that gives the fish their distinct texture and flavor, and the clean rivers of the north produce seafood with very low levels of mercury and other contaminants. Indigenous communities have been harvesting salmon in Northwestern North America for more than 10,000 years and some still depend on subsistence fishing for survival. In southeastern Alaska, salmon fishing and processing adds an annual total of about \$70 million to the local economy. But 21st-century salmon face many stressors, including habitat loss, climate change, and overfishing. As a result, salmon populations are declining across the United States. [Read more.](#)

## **CA: Audubon Society to restore Oceanside lagoon wetlands**

By Phil Diehl – The San Diego Union-Tribune – November 27, 2022

The Buena Vista Audubon Society has taken the first steps to restore native plants and expand the wetlands on property it owns along the Buena Vista Lagoon near the society's nature center on South Coast Highway in Oceanside. The group purchased the 3.5 acres on the northern shore of the lagoon, between South Coast Highway and the railroad, in January 2016 with \$1.5 million raised largely through community donations. As recently as 2008, an 82-room hotel was proposed for the site. However, the state Coastal Commission denied the development because of wetlands issues. [Read more.](#)

## **CA: California Rangeland Trust to purchase 4k acres for conservation easement near Hollister**

BenitoLink – November 25, 2022

At its Nov. 15, 2022 quarterly meeting, the Wildlife Conservation Board (WCB) approved approximately \$24.46 million in grants to help restore and protect fish and wildlife habitat throughout California, including \$650,000 to the California Rangeland Trust to acquire a conservation easement over approximately 4,503 acres for the protection and preservation of threatened and endangered species habitat, rangelands and grasslands, and habitat linkages located near Hollister. According to the news release, some of the 16 approved projects will benefit fish and wildlife, including some endangered species, while others will provide public access to important natural resources. [Read more.](#)

***State and Tribal news continued on page 8.***

## NAWM MEMBERS' WEBINAR RECORDING

### Navigating the Future: Where is the Clean Water Act Heading?

Held November 8, 2022

#### Presenters:



**Julia Anastasio**  
Executive Director &  
General Counsel  
Association of  
Clean Water  
Administrators



**Donna Downing**  
Senior Legal Policy Advisor  
National Association of  
Wetland Managers



**Pat Parenteau**  
Professor of  
Law Emeritus at  
Vermont Law and  
Graduate School



**Mark Ryan**  
Litigator and former EPA  
Region 10 Attorney

Members' please login to your Members' Portal and go to Video Library. Contact Laura at [laura@nawm.org](mailto:laura@nawm.org) or (207) 892-3399, if you need assistance logging in. If you are not currently a member, [join here](#).

## WETLAND MAPPING CONSORTIUM WEBINAR RECORDING

### NWI Updates: What's New at the National Wetlands Inventory Program

Held November 1, 2022

#### Presenters:



**Jane Harner**  
U.S. Fish and  
Wildlife Service  
National Wetlands  
Inventory



**Herb Bergquist**  
U.S. Fish and  
Wildlife Service  
National Wetlands  
Inventory

[VIEW RECORDING](#)

## **CA: California files suit over 'forever chemicals' in water**

By Cara Murez – PHYS.org – November 11, 2022

The state of California is suing several companies for their role in manufacturing “forever chemicals.” The lawsuit filed Thursday also claims that the companies, including 3M and DuPont, covered up the harm their products, commonly known as PFAS, were causing to the state’s environment and to people. [Read more.](#)

## **CO: Debate ignites over town of Silverton’s plans to construct homes and road over wetlands**

By Megan K. Olsen – The Durango Herald – November 15, 2022

Several residents pleaded for the preservation of wetlands that may be threatened by the construction of a road and new homes at a meeting Monday in Silverton. Resident Jackie Kerwin, along with many other townspeople in attendance, asked Silverton’s Board of Trustees to pause plans for a housing development until the wetlands issue can be sorted out. [Read more.](#)

## **DE: What does sustainable aquaculture look like in Delaware’s Rehoboth Bay?**

By Zoë Read – WHY? – November 2, 2022

Mark Casey stood at the wheel of a small boat and pointed toward lines of rope above the water. Beneath them are growing oysters, which are natural water filters. “They’re hanging under these lines, they’re eating the algae and they’re putting back into the system clean water,” said the Rehoboth-area oyster farmer. “And if you come to my house where the nursery is ... the water on the outside is green-green, and the water after it goes past the oysters is crystal clear like the Caribbean.” Casey is working with The Delaware Center for Inland Bays and researchers at Delaware State University, who are recording species diversity and water quality around the three-acre oyster farm in the Rehoboth Bay, in Delaware. [Read more.](#)

## **FL: Audubon clears Naples’ Corkscrew Swamp of 1,000 acres of invasive willow**

By Tom Bayles – WLRN – November 29, 2022

Fifteen years ago, there was no noticeable problem with invasive Carolina willows at Audubon’s Corkscrew Swamp Sanctuary. That changed. Corkscrew’s marshes and prairies, once dominated by diverse grasses and sedges that provide critical habitat for a range of wildlife species from the tiny least killifish to the threatened wood stork, were becoming smaller and fewer as the thirsty Carolina willow and other woody shrubs replaced the prairies taking advantage of altered seasonal water conditions that allowed them more water and a lack of wildfire to burn them away. The Carolina willow, almost by itself, has expanded the definition of “invasive species” to include particularly aggressive plants that are native to Florida, not just faraway exotics. [Read more.](#)

## **KS: Federal data: Kansas oil spill biggest in Keystone history**

By John Hanna, Ryan J. Foley and Heather Hollingsworth – AP News – December 9, 2022

A ruptured pipe dumped enough oil this week into a northeastern Kansas creek to nearly fill an Olympic-sized swimming pool, becoming the largest onshore crude pipeline spill in nine years and surpassing all the previous ones on the same pipeline system combined, according to federal data [Read more.](#)



## **LA: Bob Marshall: Neptune Pass is helping build wetlands. Should the Corps shut it down?**

By Bob Marshall – Nola.com – November 28, 2022

Suppose your boat was sinking and a passing craft tossed you a lifeline. How would you feel if the Coast Guard came along and cut the line? That's pretty much how Richie Blank feels about a coming decision by the U.S. Army Corps of Engineers that could dramatically reduce or shut off Neptune Pass. This natural opening in the eastern bank of the Mississippi River across from Buras has grown from little more than a ditch into a diversion researchers say could build more than 3,000 acres of new wetlands in the next few years. [Read more.](#)

## **LA: Mitigation bank buy-in required for St. Francisville to move on with plans for sewage treatment plan**

By James Minton – The Advocate – November 25, 2022

The town of St. Francisville has moved another step closer to building a new sewage treatment plant, obtaining a formal notice of how much the project will affect wetlands in the area. Engineer Bianca Hillhouse told the mayor and Board of Aldermen Nov. 22 that the U.S. Army Corps of Engineers has determined that the project will affect only 0.3 of an acre deemed as wetlands. To mitigate the damage, the town will be required to pay into one of about 15 "mitigation banks" the Corps recognizes for the purpose of buying and preserving wetlands in other areas. [Read more.](#)

## **LA: Satellites help scientists track dramatic wetlands loss in Louisiana**

By Sally Younger, NASA – PHYS.org – November 8, 2022

New research uses NASA satellite observations and advanced computing to chronicle wetlands lost (and found) around the globe. From Lake Pontchartrain to the Texas border, Louisiana has lost enough wetlands since the mid-1950s to cover the entire state of Rhode Island. Using a first-of-its kind model, researchers quantified those wetlands losses at nearly 21 square miles (54 square kilometers) per year since the early 1980s. In the new study published in the Journal of Geophysical Research: Biogeosciences, scientists used the NASA/USGS Landsat satellite record to track shoreline changes across Louisiana from 1984 to 2020. Some of those wetlands were submerged by rising seas; others were disrupted by oil and gas infrastructure and hurricanes. But the primary driver of losses was coastal and river engineering, which can have positive or negative effects depending on how it is implemented. [Read more.](#)

## **ME: Maine's Decades-Old Flood Maps Don't Always Factor in Sea Rise and Climate Change**

By Kate Cough – The Main Monitor – December 11, 2022

As Congress looks to reauthorize the chronically-underfunded National Flood Insurance Program next week, much of Maine is operating with flood maps that are decades old, if they exist at all. And the new maps that are being drawn are not designed for a changing climate. They don't account for sea level rise or the kind of extreme rainfall events that are becoming increasingly common in Maine and elsewhere around the country. [Read more.](#)

## **MI: Broad support cited for expanding Michigan wetlands**

By Lester Graham – Michigan Radio Bridge Michigan – October 31, 2022

It draws attention when politicians of different parties, hunters, conservationists and environmentalists align around the same issue. Republican and Democratic state legislators, the Michigan United Conservation Clubs, Ducks Unlimited and Audubon-Great Lakes all gathered at the Pointe Mouillee State Game Area in Monroe and Wayne counties last Thursday to talk about the importance of expanding wetlands. They want to use \$30 million in American Rescue Plan Act money for wetlands in areas that drain into Lake Erie and the Saginaw Bay of Lake Huron, waterways where nutrient-laden agricultural runoff has fueled major pollution. Wetlands can help because they filter out nutrients from manure spread on farm fields as well as other fertilizers that can lead to toxic cyanobacterial blooms, commonly called algal blooms. [Read more.](#)

## **MS: Environmental groups sue DOT over Mississippi road project**

By Michael Goldberg – AP News – November 18, 2022

A group of environmental and racial justice organizations filed a federal lawsuit on Thursday against the U.S. Department of Transportation and its secretary, Pete Buttigieg, seeking to halt a Gulf Coast road project that the group says will harm the environment near historic Black neighborhoods in north Gulfport. The suit, which argues that the DOT violated the National Environmental Policy Act, was filed in the U.S. District Court for the Southern District of Mississippi. It argues that a proposed road connecting Gulfport's north and south sides would exacerbate flooding problems in neighborhoods surrounding a large wetland area. [Read more.](#)

## **MT: FWP receives applications for habitat leasing**

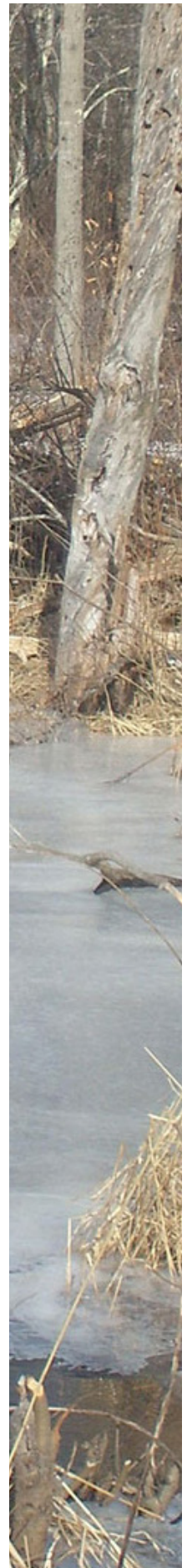
By Tom Kuglin – Independent Record – November 17, 2022

Montana Fish, Wildlife & Parks is reviewing a half dozen applications for its new habitat leasing program after the agency's first round of solicitations. Earlier this year, FWP launched an ambitious initiative to lease up to 500,000 acres of private lands in the next five years for prairie grassland wildlife habitation. Leases will also require a public access plan. [Read more.](#)

## **NE: Game and Parks receives grant to restore grassland and wetland habitat**

By Jerry Kane – Nebraskaland Magazine – November 14, 2022

The Nebraska Game and Parks Commission and its partners have received a \$4 million grant through the National Fish and Wildlife Foundation to restore grassland and wetland habitat for at-risk species. A four-year conservation project will take place in the Sandhills and adjacent areas, where wetlands and streams face alteration and channelization. Grasslands also are being encroached by eastern redcedar, which can reduce the available forage for livestock, increase wildfire risk, reduce stream flow, and degrade wildlife habitat. A voluntary, incentive-based approach will be used to improve habitat while sustaining resilient ranching communities. The goals are to build capacity, restore wetlands and streams, and remove trees using mechanical tree removal and prescribed fire. [Read more.](#)



## **NH: New Hampshire DEIJA Request for Proposals**

New Hampshire Department of Environmental Protection – October 31, 2022

The New Hampshire Department of Environmental Services Coastal Program (NHCP), Great Bay National Estuarine Research Reserve (GBNERR), and Great Bay Stewards (GBS) are seeking proposals from qualified consultants to help meaningfully center Diversity, Equity, Inclusion, Justice, and Accessibility (DEIJA) into our respective programs, procedures, and relationships. Proposals are due **December 21, 2022**. [Learn more here](#).

## **NV: New app developed to help explore 2,900-acre Wetlands Park**

By Ricardo Torres-Cortez – Las Vegas Review-Journal – November 30, 2022

Want to properly explore the Clark County Wetlands Park but intimidated by its vast 2,900 acres? There's an app for that. Clark County on Tuesday unveiled the "Wetlands Park Navigator," developed alongside the Wetlands Park Friends nonprofit, which aims to support park programs and activities. [Read more](#).

## **NM: Rio Fernando headwaters restoration nears completion**

By Geoffrey Plant – Taos News – November 15, 2022

A yearslong wetlands restoration project is wrapping up along the upper Rio Fernando de Taos in La Jara Canyon, where fire suppression, historic overgrazing, road development and forestry activity has caused the river to channelize, shrinking critical habitat for flora and fauna northeast of Taos. The La Jara Wetlands Restoration Project is a collaboration between Amigos Bravos, the New Mexico Department of Game and Fish, Carson National Forest, the Rio Fernando de Taos Collaborative, the agricultural and acequia communities, as well as The Nature Conservancy. Wetlands restoration company Watershed Artisans was contracted to implement the project across seven project areas. [Read more](#).

## **PA: Hellbender habitat slammed by pollution in Pennsylvania's Loyalsock Creek**

By Ad Crable – Bay Journal – December 8, 2022

Repeated sediment pollution incidents and accusations of destroying habitat for rare hellbenders on a Pennsylvania "river of the year" have brought criticism over natural gas operations in a scenic valley and revealed weak protections for "exceptional value" streams. With three separate incidents a month apart — one investigated only after residents complained — the state Department of Environmental Protection has cited Pennsylvania General Energy for a slew of violations that sent plumes of sediment into Loyalsock Creek in Lycoming County in the rugged northcentral part of the state. [Read more](#).

## **PA: Bentley Run Wetlands is Erie County's newest nature preserve**

By Gene Ware – GoErie – November 24, 2022

A new area of protected natural wetlands and forest in Erie County was recently announced by the Western Pennsylvania Conservancy. On Sept. 16, they announced the permanent protection of 348 acres of forest and wetlands in Union Township through a conservation easement. The property is just east of Union City, north of U.S. Route 6. The land is next to Game Land 102. This is a fantastic addition to the natural areas of northwestern Erie County. The conservation easement was purchased from 730 Texas Timberlands II, Ltd. The easement restricts future subdivision development and timber harvesting on 222 acres of forest, streams and wetlands. Sustainable timber will continue on 126 acres. [Read more](#).

## **RI: Turtle Poaching: Global Criminal Enterprise with Local Ties**

By Frank Carini – eocRI News – November 14, 2022

Rhode Island's reptiles and amphibians face pressure from numerous threats, and for many species, removal of even a single adult from the wild can lead to local extinction, according to the state's herpetologist. Since the local and/or regional future for many of these species — eastern spadefoot toad, northern leopard frog, northern diamondback terrapin, to name just a few — is in doubt, removing them from nature to keep as a pet or to sell is against the law. It's illegal to sell, purchase, or own/possess native species in any context, even if acquired through a pet store or online, according to Rhode Island law. [Read more.](#)

## **SD: Foster 8th Circuit Wetland Battle Rages**

By Todd Neeley – DTN Progressive Farmer – December 13, 2022

South Dakota farmer Arlen Foster did not have the right to seek review on a wetlands determination made on his farm, attorneys for the USDA argue in court, because he offered no new information in a review request. Foster has been fighting the USDA on its determination that a perpetual puddle caused by snow accumulation from a tree belt is a wetland, forbidding the farmer from farming the .8-acre tract of land. [Read more.](#)

## **SD: Wildlife group calls Rounds' wetlands bill 'egregious,' but some farmers say it's overdue**

By Joshua Haiar – Daily Montana – November 10, 2022

A U.S. senator from South Dakota has sparked opposing reactions with legislation that could make it easier for farmers to convert wetlands into cropland. Mike Rounds, a Republican, wants to change the "Swampbuster" provision of the 1985 farm bill. Under the existing provision, farmers lose eligibility for federal farm program benefits, like crop insurance subsidies, if they convert a wetland into cropland. Landowners are also fined for converting a wetland from the time they are believed to have done so. If a farmer wants to remove water from their land but is unsure if it qualifies as a wetland, the Natural Resources Conservation Service makes the determination. Rounds' bill would establish state-level committees made up of local landowners to hear appeals from farmers who dispute the NRCS's wetland determinations. The U.S. Department of Agriculture would pay for the farmer's legal fees if an appeal is successful. [Read more.](#)

## **Congratulations to NAWM's Newly Elected Board Officers for 2023!**



**Mark Biddle**  
Chair

Delaware Dept. of  
Natural Resources and  
Environmental Control



**Samantha Vogeler**  
Vice Chair

Kentucky Dept. of  
Environmental Protection



**Amy Lounds**  
Secretary

Michigan Dept. of  
Environmental Quality



**Lauren Driscoll**  
Treasurer

Washington State  
Dept. of Ecology



## **NAWM's End of Year Campaign!**

Won't you join us in keeping this wonderful association going strong?

We are grateful for our loyal supporters and want to thank you for partnering with The National Association of Wetland Managers!

We have several ways to contribute to the future of NAWM:



### **Membership**

NAWM has a long history of blazing trails in advocating for sound wetland science and sensible water policy. By joining NAWM, your membership carries many benefits including our Members' Webinar Series, Federal Policy Tracker, opportunities for involvement on committees, and exclusive publications.

### **Donations**

Your private donations directly support NAWM's (501(c)(3) nonprofit) ability to respond to time-sensitive issues as they arise and allow us to provide information, expert analysis, and recommendations regarding the impacts of potential policy and law on wetland protection programs and efforts. You may also opt to support the Jon A. Kusler Student Scholarship.



### **Sponsorship**

Take advantage of one of NAWM's many sponsorship opportunities and reach thousands of engaged webinar audience members, publication readers, and attendees at our Annual State/Tribal/Federal Coordination Meeting.



# Join or Renew Your NAWM Membership



The National Association of Wetland Managers has a long history of blazing trails in advocating for sound wetland science and sensible water policy. By joining NAWM, your membership will allow you to enjoy the many exclusive benefits.

[Join/Renew](#)

Photo Credit: U.S. Fish and Wildlife Service

## NAWM Sponsorship Opportunities



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[NAWM Annual State/Tribal/Federal Coordination Meeting](#)

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# Wetland Science News

## How Intensive Agriculture Turned a Wild Plant into a Pervasive Weed

University of British Columbia – ENN Environmental News Network – December 12, 2022  
New research in Science is showing how the rise of modern agriculture has turned a North American native plant, common waterhemp, into a problematic agricultural weed. An international team led by researchers at the University of British Columbia (UBC) compared 187 waterhemp samples from modern farms and neighbouring wetlands with more than 100 historical samples dating as far back as 1820 that had been stored in museums across North America. [Read more.](#)

## Funding Opportunities

[Huyck Preserve Research Grants](#); Apply by February 17, 2023

[ERDC Broad Agency Announcement - Various Research and Development Topic Areas](#)

U.S. Army Corps of Engineers Research and Development Center

Apply by February 28, 2023; Search: W912HZ22BAA01

### Chesapeake Bay Trust

- [Youth Environmental Education Grant Program](#); Apply by January 13, 2023
- [Pooled Monitoring Initiative's Restoration Research Award Program](#);  
Apply by January 26, 2023
- [Anne Arundel County Watershed Restoration](#); Apply by February 28, 2023
- [Nontidal Wetlands Awards Program](#); Apply by March 23, 2023

### U.S. Fish and Wildlife Service

- [Aquatic Invasive Species Interjurisdictional Grants to the Great Lakes States and Tribes - Fiscal Year 2022 Great Lakes Restoration Initiative](#);  
Apply by December 31, 2022

### U.S. Environmental Protection Agency

- [Fiscal Year \(FY\) 2023 Request for Applications from Indian Tribes and Intertribal Consortia for Nonpoint Source Management Grants Under Clean Water Act Section 319](#); Apply by February 14, 2023
- [2023 Request for Applications: Puget Sound Action Agenda — Climate Resilient Riparian Systems Lead](#); Apply by March 31, 2023

### U.S. Fish and Wildlife Service

- [Aquatic Invasive Species Interjurisdictional Grants to the Great Lakes States and Tribes - Fiscal Year 2022 Great Lakes Restoration Initiative](#);  
Apply by December 31, 2022

Photo Credit: Laura Burchill, NAWM

# Resources and Publications

## **Climate Change and Wetlands in the Southern Great Plains: How Are Managers Dealing with an Uncertain Future?**

David W Londe, Omkar Joshi, Betsey C York, et.al. – ResearchGate – December 2022

Little guidance is available to assist wetland managers in developing climate adaptation plans. To facilitate development of recommendations for adaptation strategies, it is essential to first determine if or how wetland managers are addressing these challenges. We used an online survey to solicit feedback from wetland managers and biologists in the Southern Great Plains of North America to gain information on perceptions of wetland managers regarding climate change; assess how the effects of climate change are being addressed through management; and identify barriers to implementing climate change adaptation. The majority of wetland managers (63%) agreed they are currently experiencing effects of climate change in wetlands, and most respondents (76%) reported that changes in the timing of water availability throughout the year was the most likely impact. Managers reported using a diversity of approaches in managing for changing precipitation, with management of native and invasive plant species being the two most common practices. Lack of funding and personnel were the most commonly identified factors limiting manager's response to changing precipitation patterns. In addition, >50% of managers indicated uncertainty about the effects of climate change on wetlands as a barrier to management, which may relate to limited access to peer-reviewed science. While most of the management practices reported were short-term measures and may not reflect long-term adaptation for climate change, the fact that many managers are considering climate change in their management suggests that there is considerable opportunities to continue developing capacity for climate change adaptation in the region.

[Read more.](#)

## **State of Wetlands Report**

Carolina Wetlands Association – December 2022

The Carolina Wetlands Association released a report, Carolina Wetlands Past to Present: How wetlands have changed in the Carolinas and their current condition, stressors, and threats, produced by their Science Committee. The purpose of this report is to present an overview of an important but shrinking resource – wetlands in North and South Carolina. The report establishes a baseline – as a basis for seeing future trends of wetlands in the Carolinas. [Download report.](#)

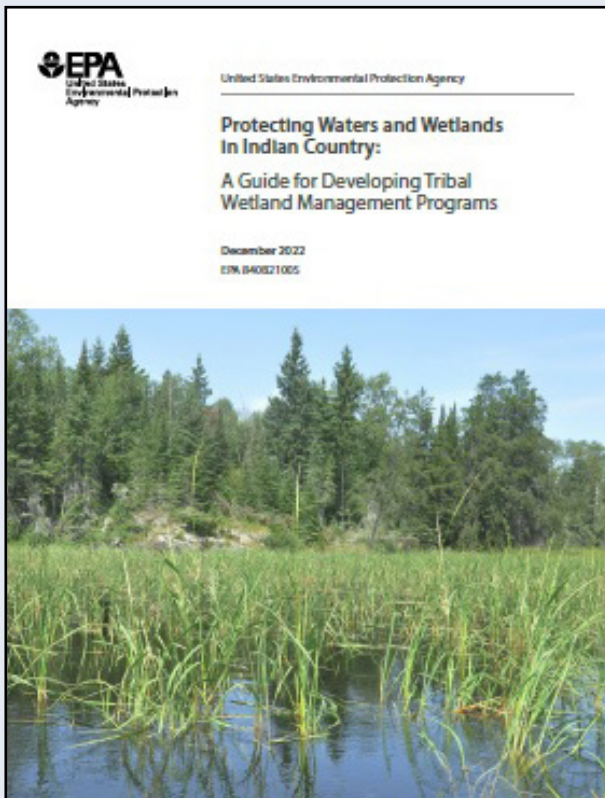
## **American Rivers' Report: The Multiple Benefits of Floodplain Easement**

American Rivers – September 2022

Floodplain easements are a land-management strategy that compensates landowners for permanently conserving flood-prone land. Floodplain easements provide multiple benefits, including storage of floodwater on the land, wildlife habitat, improved water quality and more. This report reviews the unmet demand for floodplain easements in the Upper Mississippi River Basin and makes a case for annual appropriations via a new or reformed U.S. Department of Agriculture floodplain easement program. [Read more and download report.](#)



# A Guide for Developing Tribal Wetland Management Programs



This Guide, *Protecting Waters and Wetlands in Indian Country: A Guide for Developing Tribal Wetland Management Programs* is part of the ongoing technical assistance provided by EPA's Wetlands Program to support tribes, states, territories, and local entities to build the capacity of diverse communities to increase the quantity and quality of wetlands in the U.S. by conserving and restoring wetland acreage and improving wetland condition.

EPA worked collaboratively with Tribes to establish a Tribal Roundtable with representatives from around the country to support the Guide's development and to ensure it reflects tribal needs, knowledge, and perspectives. The Guide provides a picture of various tribal governments' approaches and values surrounding wetland protection and the vital ecosystem services provided by these resources.

While each tribe has its own unique story, language, and history, all share an abiding and deep-rooted connection to the land. Wetlands and other waters play an important role in ecological functions and cultural uses for tribes. Aquatic habitats provide diverse species of plants, fish, and wildlife which are used to provide a great variety of food, fibers, and medicines. There are as many native words for water as tribes themselves.

This new Guide, which augments the National Association of Wetland Managers (NAWM) 2013 Wetland Program Plans Handbook, is designed to aid tribal leadership and tribal natural resource managers in strategic wetland resource planning and management. The Guide provides information about how to begin wetland program planning and addresses EPA's [core elements framework](#) for developing strong wetland programs, funding and other sources of support, and suggests collaboration approaches. Seventeen tribal case studies highlight the importance and some of the diversity of tribal community wetland programs, including how Indigenous Knowledge (e.g., Traditional Ecological Knowledge) and cultural values are addressed in tribal wetland programs.

[A Guide for Developing Tribal Wetland Management Programs](#) (pdf) (13.73 MB, 12/14/2022, 840-B-21-005).

## **Whales could provide a valuable carbon storage solution: study**

By Sharon Udasin – The Hill – December 15, 2022

Whales could play an invaluable role in the global effort to tackle climate change — by using their massive girth to store carbon that would otherwise be polluting the atmosphere, a new study has found. While much research on carbon storage has thus far focused on planting trees or restoring wetlands, the planet's largest animals may also be worth significant attention, according to the study published in Trends in Ecology and Evolution. [Read more.](#)

## **Hispanic Access Foundation identifies 12 Latino national parks and monuments in need of protection**

By Alan Nunez – AL DÍA – December 14, 2022

With 2022 nearing its end, Washington D.C.-based, Hispanic nonprofit, The Hispanic Access Foundation, recently released a report identifying 12 Latino national parks, sites, monuments, as well as wildlife refuges sites — calling on President Joe Biden and Congress — to prioritize for protection and preservation in the new year as they face certain climate and human-caused threats. [Read more.](#)

## **The interfaith sweet spot for environmental stewardship**

By Peter Hoogstraten, AmeriCorps – Bay Journal – December 15, 2022

Religious communities have a tremendous potential to do good when they come together. Groups who focus on their similarities rather than differences, have so much to offer in terms of making the world a better place. Stewardship of our environment is a perfect starting point from which to foster this type of interreligious dialogue. [Read more.](#)

## **How Tribes Are Reclaiming and Protecting Their Ancestral Lands From Coast to Coast**

By Chris Aadland – Audubon Magazine – Winter 2022

Since settlers arrived in the United States, tribal nations have lost nearly 99 percent of their lands through treaty cessions, forced migration, theft, and devastating government policies designed to erode Native sovereignty and culture. These wrongs coincided with the destruction of habitat and wildlife populations that tribes had long lived alongside and actively shaped in beneficial ways. [Read more.](#)

## **Building Trust Important for Farm Conservation Advisers**

By Phillip Gruber – Lancaster Farming – December 13, 2022

When Kendra Nissley put a riparian buffer on her farm, the decision was not just about trees, nutrient runoff or stream health. It was also about the people who would help her get the job done. Staff from Penn State Extension and the Dauphin County Conservation District translated the jargon-laden funding process into layman's terms, and even showed Nissley's children how to look for macroinvertebrates in the stream — a way to measure ecosystem improvements as the buffer matured. [Read more.](#)

# NAWM Jobs Board

## **Tenure-Track Assistant Professor Position in Environmental Science - Global Change**

Lafayette, LA; Apply by January 15, 2023

## **Beaver Conflict Resolution Specialist**

Livingston, MT; Apply by January 27, 2023

## **Environmental Specialist**

Mooresville, NC; Apply by December 29, 2022

[Visit the NAWM Jobs Board](#)

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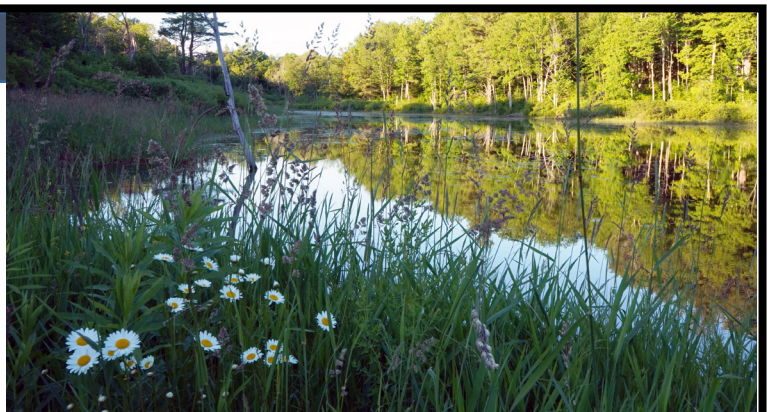


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## Wetland Photos

We are always looking for new wetland photos. If you'd like to share your wetland views in our publications and social streams, [submit your photo\(s\) here](#).



# Calendar of Events

## WEBINARS

### January

|                                    |   |
|------------------------------------|---|
| January 4, 2023<br>4:00 p.m. EST   | Missouri Prairie Foundation Webinar: <a href="#">Grow Native! Master Class: Landscaping with Native Wetland Plants</a>  |
| January 11, 2023<br>10:00 a.m. EST | Society for Ecological Restoration Webinar: <a href="#">Coral Restoration - Sharing Knowledge for the Enhancement of Restoration Practices</a>  |
| January 13, 2023<br>10:30 a.m. CST | Wisconsin Wetlands Association: Wetland Coffee Break: <a href="#">Restoring wetland amphipods to revive wetland habitats</a>  |
| January 17, 2023<br>3:00 p.m. EST  | National Association of Wetland Managers Hot Topics Webinar: <a href="#">Advancing the Integration of Clean Water Act Programs with Natural Hazard Mitigation Planning &amp; Implementation</a> |
| January 26, 2023<br>1:00 p.m. EST  | Swamp School Webinar: <a href="#">2023 Wetland Status and Trends</a>  |

### February 2023

|                                    |  |
|------------------------------------|--|
| February 16, 2023<br>3:00 p.m. EST | National Association of Wetland Managers Tribal Wetland Programs Webinar: <a href="#">Developing Your Tribal Wetland Program</a> |
|------------------------------------|--|

### April 2023

|                                 |  |
|---------------------------------|--|
| April 20, 2023<br>3:00 p.m. EST | National Association of Wetland Managers Tribal Wetland Programs Webinar: <a href="#">Monitoring and Assessment Data Collection and Applications for Tribal Wetland Programs</a> |
|---------------------------------|--|

### June 2023

|                                |   |
|--------------------------------|---|
| June 15, 2023<br>3:00 p.m. EST | National Association of Wetland Managers Tribal Wetland Programs Webinar: <a href="#">Geospatial Mapping Tools and Techniques for Tribal Wetland Programs</a> |
|--------------------------------|---|

### September 2023

|                                     |   |
|-------------------------------------|---|
| September 21, 2023<br>3:00 p.m. EST | National Association of Wetland Managers Tribal Wetland Programs Webinar: <a href="#">Education and Outreach Efforts to Support Tribal Wetland Programs</a> |
|-------------------------------------|---|

### November 2023

|                                   |   |
|-----------------------------------|---|
| November 2, 2023<br>3:00 p.m. EST | National Association of Wetland Managers Tribal Wetland Programs Webinar: <a href="#">Approaches to Sustainable Funding for Tribal Wetland Programs</a> |
|-----------------------------------|---|

# CONFERENCES/EVENTS

## January 2023

January 28, 2023  
Folkston, GA

St. Marys Riverkeeper: [Paddle the Swamp 2023](#)

January 30-February 1, 2023  
Atlantic City, NJ

Partnership for the Delaware Estuary: [Delaware Estuary Science & Environmental Summit 2023](#)

## February 2023

February 2-3, 2023  
Virtual

[The Stewardship Network Conference](#)

February 2, 2023

World Wetlands Day: [Revive and restore degraded wetlands](#)

February 6, 2023  
Charleston, SC

Natural Land Institute: [Wander at the Wetland: Full Moon Snowshoe & Hike 2023](#)

February 6-9 2023  
Charleston, SC

Coastal GeoTools 2023 Conference: [Linking People, Place, Information, and Technology](#)

February 6-10, 2023  
Anchorage, AK

[Alaska Forum on the Environment 2023](#)

February 18, 2023  
Christmas, FL

[Orlando Wetland Festival](#)

February 21-23, 2023  
St. Louis, MO

Midwest Climate Collaborative: [Midwest Climate Summit](#)

February 21-23, 2023  
Stevens Point, WI

Wisconsin Wetlands Association: [Wetland Science Conference](#)

## March 2023

March 1-3, 2023  
Midland, MI

[Michigan Stormwater-Floodplain Association Conference](#)

March 1-3, 2023  
Austin, TX

[Texas Land Trust Council Conservation Conference](#)

March 9, 2023  
Washington, DC

Great Lakes Commission: [Great Lakes Day 2023](#)

March 21, 2023  
Augusta, ME

Maine Association of Wetland Scientist: [2023 Annual Meeting and Winter Conference](#)

|  |  |
|--|--|
| March 25, 2023<br>Middletown, CT           | <a href="#">Connecticut Land Conservation Council Conference</a>   |
| <b>April 2023</b>                          |  |
| April 12-13, 2023<br>Saratoga Springs, NY  | NEIWPC Annual Nonpoint Source Conference: <a href="#">Environmental Justice, Equity &amp; Climate Change</a>                       |
| April 20-21, 2023<br>Vancouver, Canada     | <a href="#">Fifteenth International Conference on Climate Change: Impacts &amp; Responses</a>                                      |
| April 24-27, 2023<br>San Diego, CA         | Center for Watershed Protection <a href="#">2023 National Watershed and Stormwater Conference</a>                                  |
| April 24-28, 2023<br>Virginia Beach, VA    | North American Lake Management Society: <a href="#">13th National Monitoring Conference: Working Together for Clean Water</a>      |
| <b>May 2023</b>                            |  |
| May 5-6, 2023<br>Thompsonville, MI         | Michigan Lakes & Streams Association 62nd Annual Conference: <a href="#">Protecting and Restoring Michigan's Lakes and Streams</a> |
| May 7-11, 2023<br>Raleigh, NC              | <a href="#">Association of State Floodplain Managers Conference</a>  |
| May 8-11, 2023<br>Jacksonville, FL/Virtual | <a href="#">National Mitigation &amp; Environmental Markets Conference: Invest in the Environment</a>                              |
| May 10-12, 2023<br>Sandusky, OH            | Ohio Stormwater Association <a href="#">2023 Ohio Stormwater Conference</a>  |
| May 22-25, 2023<br>Winter Harbor, ME       | Schoodic Institute <a href="#">2023 Spring Birds of Acadia, with Puffin Cruise</a>   |
| May 31-June 3, 2023<br>Las Vegas, NV       | <a href="#">Ducks Unlimited National Convention</a>  |
| <b>June 2023</b>                           |  |
| June 11-14, 2023<br>Tahoe City, CA         | <a href="#">2023 CUAHSI Biennial Colloquium</a>  |
| July 17-19, 2023<br>Denver, CO             | AWRA 2023 Summer Conference: <a href="#">Connecting Land &amp; Water for Healthy Communities</a>                                   |
| <b>August 2023</b>                         |  |
| August 6-11, 2023<br>Portland, OR          | <a href="#">2023 ESA Annual Meeting: For All Ecologists</a>  |

# TRAINING COURSES

## January 2023

|  |   |
|--|---|
| January 11-12, 2023<br>Basking Ridge, NJ | Rutgers Office of Continuing Professional Education Course: <a href="#">Identification of Wetland Plants in Winter</a>                        |
| January 11-12, 2023<br>Online            | Rutgers Office of Continuing Professional Education Course: <a href="#">Ecological Evaluation</a>   |
| January 16, 2023<br>(Twelve Weeks)       | Swamp School Course: <a href="#">Endangered Species Act Consultation Training</a>   |
| January 23-26, 2023<br>San Diego, CA     | Richard Chinn Environmental Training, Inc. Course: <a href="#">Wetland Delineation Training</a> . Other dates offered.                        |
| January 25-26, 2023<br>San Diego, CA     | Richard Chinn Environmental Training, Inc. Course: <a href="#">Regional Supplement Wetland Delineation Training</a> .<br>Other dates offered. |

## February 2023

|  |  |
|--|--|
| February 1-2, 2023<br>Online                   | Rutgers Office of Continuing Professional Education Course: <a href="#">Introduction to Wetland Identification</a>                 |
| February 13, 14, 16, 17, 2023<br>Online        | Rutgers Office of Continuing Professional Education Course: <a href="#">Wetland Construction: Principles, Planning, and Design</a> |
| February 16-17, 2023<br>Atlanta, GA - Piedmont | Duncan & Duncan West Course: <a href="#">Advanced Hydric Soils, Atypical Wetlands, and Hydrology</a> . Other dates offered.        |
| February 21-24, 2023<br>San Diego, CA          | Wetland Training Institute, Inc. Course: <a href="#">Federal Wetland / Waters Regulatory Policy</a>                                |
| February 22-24, 2023<br>Virtual                | Northwest Environmental Training Center Course: <a href="#">Wetlands: Science and Regulatory Management</a> . Other dates offered. |
| February 27-March 2, 2023<br>E. Angier, NC     | Swamp School Course: <a href="#">Standard Wetland Delineation Training</a><br>Other dates offered.                                 |

## March 2023

|                                 |  |
|---------------------------------|--|
| March 1, 2023<br>Online         | University of Wisconsin La Crosses Course: <a href="#">Critical Methods in Wetland Delineation</a>           |
| March 7, 2023<br>Portsmouth, NH | University of Washington Botanic Gardens Course: <a href="#">Soaking It All In: Understanding Soil Water</a> |

|   |  |
|---|--|
| March 24-31, 2023<br>Portsmouth, NH         | University of New Hampshire Course: <a href="#">Winter Plant Identification for Wetland Boundary Determination</a>   |
| March 27-31, 2023<br>Atlanta, GA - Piedmont | Duncan & Duncan West Course: <a href="#">Basic Wetland Delineation</a><br>Other dates offered.                       |
| <b>April 2023</b>                           |  |
| April 19-21, 2023<br>Folsom, CA             | Wetland Training Institute, Inc. Course: <a href="#">Plant Identification for Central and/or Southern California</a> |
| <b>May 2023</b>                             |  |
| May 8, 2023<br>San Diego, CA                | Wetland Training Institute, Inc. Course: <a href="#">Beginners Plant ID for Wetland Delineation</a>                  |







Photo Credit: Laura Burchill, NAWM

## ***Wetland News Digest***

The National Association of Wetland Managers' *Wetland News Digest* (WND) is a monthly compilation of wetland-related stories and announcements submitted by readers and gleaned from listservs, press releases and news sources from throughout the United States. WND chronicles the legislative, national, state and tribal news relevant to wetland science, policy, practice and law. It also links to new publications, tools and resources available to wetland professionals as well as events and training opportunities for those working in water resources and related fields. *Wetland News Digest* (formerly "Wetland Breaking News") has been published for over twenty years and NAWM has been a nationally recognized resource for information on wetland science and policy since 1983.

The items presented in *Wetland News Digest* do not necessarily reflect the views of the editor or of the National Association of Wetland Managers. Send your news items, comments, corrections, or suggestions to [news@nawm.org](mailto:news@nawm.org).

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