WETLAND NEWS DIGEST

Monthly News Digest of the National Association of Wetland Managers

February 2022

Dear Wetlanders

I am thrilled to bring you the first issue of *Wetland News Digest* as the National Association of Wetland Managers, or NAWM (sounds like "nom nom").

In the Editor's Choice section, we shine the spotlight on inspiring women in science from <u>Washington</u> <u>Department of Ecology</u> and <u>Delaware Department of Natural Resources and Environmental Control</u> in honor of International Day of Women and Girls in Science (Feb 11). And it's only fitting to celebrate women in wetlands and World Wetlands Day (Feb. 2) with <u>Wetlands Sake</u>, a new woman-owned brewery in New Orleans made with locally-grown rice. Cheers!

In national policy, news continues on the effects of an unsteady definition of Waters of the U.S. (WOTUS). This month NAWM submitted comments on the revised WOTUS definition, which you'll find in <u>Editor's Choice</u>.

This issue also includes several stories highlighting many different ways we value wetlands—culturally, ecologically, and economically. A pre-publication report (forthcoming in *American Economic Review*) from <u>Resources for the Future</u> quantifies the benefits of wetlands for reducing flood damages. As you'll read in several studies, wetland plants may provide beneficial insights as we adapt to climate change and rising oceans.

My heart lightens with accounts of everyday people interacting with and appreciating wetlands in their neighborhoods and communities. Writing to you from Maine, our lakes, ponds and wetlands are all frozen over, and I enjoy the new perspective that comes from connecting with these spaces that are inaccessible by foot in other times of year. I find myself getting still and quiet as I crouch among the reeds and cattails and investigate animal tracks left behind in the snow. In contrast to the daily wave of changes our world presents, winter reminds us of our need to pause. I encourage you to find moments each day to be still and just breathe. And if it's available to you, enjoy a frozen wetland.

Audra Martin Editor, *Wetland News Digest* NAWM

Know of an interesting news story? Share it with us at <u>news@aswm.org</u> and you may see it featured in the next issue!

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Use the Ecobot Wetland Delineation App For Unparalleled Efficiency: Field and Office

Editor's Choice



Sponsor Wetland News Digest

Wetland News Digest (WND) sponsorship provides the perfect opportunity for your business to increase its visibility with members of the wetlands and water resources community and reinforce your continued commitment to wetlands in the U.S.

Information on sponsorship, can be found here.

Photo by Michele Mihalovich

NAWM Comments on Revised Definition of "WOTUS"

National Association of Wetland Mangers – February 3, 2022 The National Association of Wetland Managers submitted comments in response to the proposed rule, "Revised Definition of 'Waters of the United States'. The NAWM letter addresses the following key issue areas: 1) importance of working with states and tribes to define WOTUS; 2) importance of a durable regulatory definition of WOTUS; 3) importance of proceeding to Rule 2; 4) environmental justice concerns; 5) need to consider climate change; 6) waters included in the definition of WOTUS; 7) WOTUS tools and implementation issues; and 8) considerations for Rule 2. <u>Read the full comment</u> <u>letter</u>.

Celebrating Women and Girls in Science Day

By Stephanie May – Washington State Department of Ecology – February 11, 2022

Women and Girls in Science Day on February 11 provides an opportunity to spotlight the importance of women in science, technology, engineering, and math (STEM). While participation has significantly improved, women are still under-represented in these fields. <u>Read more</u>.

STEM Women of DNREC

Delaware Department of Natural Resources and Environmental Control – February 11, 2022

They are engineers, biologists, scientists and leaders at the Department of Natural Resources and Environmental Control. They are also women in STEM fields, who work in the science, technology, engineering and mathematics sectors. <u>Read more</u>.









Website

<u>About NAWM</u>

Publications

Science

Wetland Programs

Law & Policy

Photo by Sharon Weaver, NAWM

National News

EPA clashes with Fla. over use of Trump WOTUS rule

By Hannah Northey – E&E News Greenwire – February 4, 2022 EPA and Florida are nose to nose over the state's use of Trump-era Clean Water Act regulations for permitting. At the heart of the debate is the Trump administration's Navigable Waters Protection Rule that pulled back protections for streams and wetlands across the nation. Federal judges in Arizona and New Mexico vacated the rule and sent it back to EPA last summer, saying the Trump definition of "waters of the United States" (WOTUS) had "fundamental, substantive flaws." But Florida isn't budging. Read more.

Just as EPA Was Fixing Wetlands Rules, Along Come the Sacketts . . . Again

By David Smith, Manatt, Phelps & Phillips, LLP – JD Supra – January 27, 2022

The Idaho family that upended the Obama administration's wetlands regime in the Supreme Court is back, much to the dismay of the Biden administration. On Monday, the Supreme Court issued a surprise order agreeing to review, for a second time, the Environmental Protection Agency's (EPA) decadelong effort to regulate one family's half-acre subdivision lot in Idaho. The high court classified its grant of review as "limited" to a single question. That limited question, however, dominates the debate over the permissible breadth of regulatory review of "waters of the United States" (WOTUS), including wetlands, under the federal Clean Water Act (CWA). The case could have a sweeping impact on the breadth of permissible regulatory enforcement by the federal government. <u>Read more</u>.

Inside Stephen Breyer's Clean Water Act legacy

By Panela King, Hannah Northey – E&E News Greenwire – January 18, 2022

Halfway through a November 2019 argument in a blockbuster Clean Water Act case, Justice Stephen Breyer had an idea. For nearly 30 minutes, the Supreme Court had been grappling with a complicated question: Does pollution that flows through groundwater on its way to navigable waters require a federal permit? A lower court had said that it does — at least in the case of wastewater that had moved from a sewage facility in Maui County, Hawaii, traveled a short distance through porous lava rock and spewed into the Pacific Ocean. The case, *County of Maui v. Hawaii Wildlife Fund*, had then advanced to the Supreme Court, where some legal observers expected the five-member conservative majority to substantially limit the reach of the Clean Water Act. But in the midst of the argument, Breyer, a member of the court's liberal wing, conceived of a test that eventually proved palatable to some of his Republican-appointed colleagues. <u>Read more</u>.

Major Wetland Non-Profit's New Name, Logo Reflect Expanded Mission



The Association of State Wetland Managers' (ASWM) Board of Directors is excited to announce a new chapter in the history of ASWM. After two years of hard work with a professional facilitator, the Board voted on December 9, 2021, to change the name of the Association of State Wetland Managers to the National Association of Wetland Managers (NAWM).

"This is an exciting time for the Association, and we feel this change better reflects the work of the organization, and is more inclusive in serving the membership", says Mark Biddle, Board Chair. "The Board of Directors fully endorses the rebranding and looks forward to supporting the National Association of Wetland Managers as it continues to grow and add value to the wetland community."

The Association's membership was consulted regarding the potential name change and responded with overwhelming support. In fact, 89.6% of the respondents were in support of the name change (only 2.31% were opposed). When asked to approve the name change in the Association's constitution, 98% of the membership who voted approved the change. The Association's new logo retains the frog but has changed to a circle to reflect a more inclusive mission moving forward.

"The intention behind the change was to let our community of practice (which includes not only states, but also tribes, local agencies, federal agencies, private consultants, non-profits, universities, and more), know that everyone has a seat at our roundtable, in particular our tribal colleagues," explained Marla Stelk, Executive Director. "NAWM will continue to robustly support state wetland programs and be a voice for state wetland programs in federal policy decisions and elsewhere. However, we feel that our impact will be greatly magnified by providing a framework for all wetland managers to collaborate, learn from each other, and improve our collective efforts to protect, restore and manage our critical wetland resources."

The NAWM is an independent 501(c)(3) nonpartisan organization whose mission is to build capacity for state and tribal members and foster collaboration among the wetland community of practice by encouraging the application of sound science to wetland management and policy, promoting the protection and restoration of wetlands and related aquatic resources, and providing training and education for members and the general public.



National Association of Wetland Managers Annual State/Tribal/Federal Coordination Meeting

Protecting Waters in a Time of Rapid Change

National Conservation Training Center Shepherdstown, WV

We invite you to join us for **NAWM's Annual State/Tribal/Federal Coordination Meeting**, to be held at the National Conservation Training Center (NCTC) from **August 15-19**, **2022**. The purpose of this annual meeting is to support state and tribal wetland program managers, and other wetland professionals as they respond to challenges in the coming year. Although we are currently scheduled to be at the NCTC, we will be monitoring the COVID-19 pandemic very closely and will follow all federal guidelines and mandates related to the pandemic. If circumstances require it, we will shift the meeting to a fully virtual format.

August 15-19, 20

CALL FOR ABSTRACTS – OPENS MARCH 23

All abstracts must address wetland-related issues relevant to the agenda topics for the 2022 Annual State/Tribal/Federal Coordination Meeting

JON A. KUSLER STUDENT SCHOLARSHIP AWARD – OPENS MARCH 23

The Jon A. Kusler Student Scholarship Award competition opens Wednesday, March 23, 2022. The Award will fund all expenses for one or more students studying wetland science, law or policy (either undergraduate or graduate level) to attend NAWM's annual State/Tribal/Federal Coordination meeting.

STATE/TRIBAL SCHOLARSHIPS – OPENS MAY 2

A limited number of scholarships are available to assist those in need to cover registration costs to attend NAWM's Annual State/Tribal/Federal Coordination Meeting. Our intent is to support as many people as possible with the limited amount of funding that we have. If you are able to cove some of your registration costs, that will enable more of our colleagues to attend.

SPONSORSHIP OPPORTUNITY - NOW OPEN

Sponsor Benefits: Sponsors are invited to attend and interact with meeting participants throughout the four-day meeting. In the past, this meeting has been attended by approximately 135 engaged inperson participants. All sponsors receive prominent logo placement on all meeting materials and the option to have an exhibitor table at the meeting. Sponsor logos will appear on the Annual State/Tribal/Federal Coordination Meeting event website, meeting program and conference communications (including social media).

MORE INFORMATION IS AVAILABLE HERE

State and Tribal News



NAWM Webinars

New and Recorded Webinars & Trainings

View a Complete List of Webinars Here

Sign Up to Receive Information on Upcoming NAWM Webinars Here

Photo by Marla Stelk, NAWM

CA: Salk scientists study value of wetlands ahead of Love Your Wetlands Day

By Bree Steffen – Spectrum News 1 – February 4, 2022 Most people picture gorgeous beaches when they think of Southern California, but there are some that have discovered the beauty of wetlands. Scientists are taking that beauty and studying it to help protect the world. Nature has always been an escape for Jackie Kim. Places such as the Kendall-Frost Marsh Reserve helped her family during the pandemic. Their nature journals became a way to cope during lockdown. <u>Read more</u>.

FL: US announces historic \$1.1 billion investment for Everglades rehabilitation

RTL Today – January 20, 2022

The plan to restore the Florida Everglades, the largest wetlands in the United States, will receive a federal investment of \$1.1 billion to protect the region against the effects of climate change, the White House said Wednesday. "The Administration is making the largest single investment in the Everglades in US history," the White House said in a statement. The money, which comes from already approved funds in President Joe Biden's \$1.2 trillion infrastructure package passed by Congress in November, will be spent by the US Army Corps of Engineers. "The iconic American landscape provides drinking water supply for over 8 million Floridians, supports the state's \$90 billion tourism economy, and is home to dozens of endangered or threatened species," the White House said. <u>Read more</u>.

GA: 11th Circuit asked to revive case against developer that filled in Georgia wetland

By Kayla Goggin – Courthouse News Service – February 11, 2022 The 11th Circuit appeared poised on Friday to give two Georgia environmental conservation groups another chance to pursue allegations of Clean Water Act violations against a real estate developer they say landscaped over a wetland without proper permits. Attorney John Brunini of Butler Snow found a highly receptive audience in the three-judge panel as he argued via Zoom conference that a Georgia federal judge made a mistake when he tossed out the groups' claims based on a lack of legal standing. <u>Read more</u>.

Chippewa Tribe: How Giving Legal Rights to an Indigenous Food Could Stop a Pipeline

By Eamon Whalen – MotherJones – February 9, 2022

In 2018, Frank Bibeau, a member of and attorney for the White Earth band of Anishinaabe—the largest of the six federally recognized Indigenous reservations that make up the Minnesota Chippewa Tribe—had an idea. By that point, for the better part of a decade, Bibeau had been part of organizing efforts to stop the construction of Line 3. A pipeline set to transport tar-sands crude oil from Alberta, Canada, across 330 miles of northern Minnesota to Superior, Wisconsin, Line 3 was planned as a replacement for an older pipeline. But the new Line 3 would carry double the oil, enough to produce the carbon emissions equivalent to the yearly output of 50 coal power plants. After years of dutifully participating in the state's regulatory processes around Line 3, Bibeau was coming to realize in 2018 that he'd have to find a new strategy that went above and beyond the usual legal tactics used by environmentalists. <u>Read more</u>.

NY: A renewed push to protect wetlands —Gov. Hochul proposal would strengthen protections

By Zachary Matson – Adirondack Explorer – February 8, 2022

Scientists refer to the large peat bogs in the northwestern Adirondacks, some well over 1,000 acres in size, as "charismatic" due to their critical habitat, vast expanse and rare nature. The peatlands provide some bird species habitat at their southernmost range and are showing early signs of climate change as many of those bird species retreat to higher altitudes and more northern climes. Warming weather has disrupted the food cycles the birds rely on. While scientists have documented a bird decline in the bogs over more than a decade, the same research has shown that the strongest wetlands ecosystems are those best preserved in size and scale. Now, environmentalists across New York hope to strengthen wetlands protections and preserve as much of the important ecosystem as possible. A proposal in Gov. Kathy Hochul's budget would strengthen protections for over 1 million acres statewide and improve the public maps that specify their locations. It would also grant the Department of Environmental Conservation commissioner a wide berth to designate wetlands of special importance worthy of protection. <u>Read more</u>.

TX: Urban Golf Course-Turned-Wetland Cuts Storm and Flood Impacts

NOAA Office for Coastal Management

When fierce storms bear down on the Texas community of Clear Lake, a reclaimed urban wetland, transformed from an abandoned golf course, performs exactly as it should—acting as a sponge to keep floodwaters away from area homes. The 200-acre wetland and green space, named <u>Exploration Green</u>, protects this land from commercial development. It was supported by the Texas General Land Office's Coastal Management Program through a grant from NOAA's Office for Coastal Management. <u>Read more</u>.

WV: WVDEP receives wetland program development grant from U.S. EPA

Contact: Terry Fletcher – West Virginia Department of Environmental Protection – February 2, 2022 In honor of World Wetlands Day, the West Virginia Department of Environmental Program (WVDEP) is announcing it has received a wetland program development grant of \$322,702 from the U.S. Environmental Protection Agency (EPA). The grant will allow the WVDEP to update wetland mapping for 23 counties in West Virginia and develop public outreach programs to encourage community involvement in citizen science and wetland protection. <u>Read more</u>.

NAWM Welcomes New Project Manager Portia Osborne



Portia Osborne is a Project Manager at the National Association of Wetland Managers, where she provides program support including managing and implementing individual projects, coordinating overall project schedules, tracking project deadlines and outputs, delivering workshops and trainings, facilitating and coordinating various work groups, and moderating webinars. Portia has a decade of experience working as a biologist and project manager in environmental consulting in Texas and Maine. During that time, she conducted natural resource assessments, wetland delineations, conditional and functional assessments of aquatic resources, and threatened and endangered species habitat assessments. She prepared state and federal-level permit applications for transportation, oil and gas, and renewable energy projects located across the country including permit applications under Section 404 of the Clean Water Act in ten different U.S. Army

Corps of Engineers (USACE) districts. Portia also wrote Biological Assessments for consultation under the Endangered Species Act (ESA), as well as portions of National Environmental Policy Act (NEPA) documents for multiple Environmental Assessments and two Environmental Impact Statements. Portia earned her MS in Ecology and BS in Environmental Biology from the State University of New York College of Environmental Science and Forestry (SUNY-ESF).

STUDENTS DON'T MISS THIS GREAT OPPORTUNITY!

The National Association of Wetland Managers (NAWM) and the <u>Society of Wetland Scientists</u> (SWS) have an exciting new opportunity for students to get memberships to both organizations for the price of one! Any student who joins either organization in 2022 will receive a free, complimentary membership to the other organization. To take advantage of this opportunity, all you have to do is purchase a student membership to one organization, and the other membership will be provided to you for free. For more information, please contact Laura Burchill, NAWM's Office Manager, at laura@aswm.org or by calling our office at 207-892-3399.



NAWM Membership Benefits

Join Here Rates Increase Spring of 2022



NAWM supports and works with you to advance the field of wetland management, building your expertise while cultivating future wetland scientists & practitioners.

NAWM serves its members by:

- building capacity for state and tribal wetland programs,
- fostering collaboration among the wetland community of practice,
- encouraging the application of sound science to wetland management and policy,
- promoting the protection and restoration of wetlands and related aquatic resources, and
- providing training and education for members and the public.

Training & Professional Development — Update or refresh your knowledge

- Access to NAWM Online Trainings earning free Certificates of Completion. This growing library features two mini-courses with a total of 27 modules totaling nearly 30 hours of available training.
- Discounted registration at NAWM's Annual State/Tribal/Federal Coordination Meeting.
- Special NAWM Member discounts for select non-NAWM wetland trainings and courses.

Education & Resources — Stay current on the latest tools and advances in the field, policy and legal issues from the Hill, and applied wetland science with exclusive online information



- Complementary subscription to NAWM publications—the pulse on wetland happenings across the nation—delivered to your inbox.
 - ✓ Wetland News NAWM's Member Newsletter (6 issues per year)
 - ✓ Insider's Edition Weekly e-news
- Complementary registration to 8+ NAWM Members' Webinars and exclusive on-demand access to recordings.
- Members receive complementary Certificates of Participation for any NAWM webinar (a savings of \$25 each).
- Coming Soon Access to a Members-only Federal Policy Tracking Tool to quickly sort through the dynamic landscape of wetland-related federal policy, such as WOTUS, CWA 401 and 404, among others.

Enhance Your Network – with the wetland community of practice

- Access to a national network of 1,300 wetland professionals including members from state and tribal wetland programs, federal agencies, the private sector and universities
- Coming Soon Participate in Members-only Discussion Forums on a range of topics
- Submit wetland-related job notices to appear on the NAWM Job Board and Insider's Edition
- Corporate group memberships (10+ people) include logo with live link on NAWM's website

Impact & Leadership — Take an active role in the Association and advance the field



- Opportunities for involvement in NAWM Committees
- Eligible to join the Board of Directors
- Voting rights in Board of Directors elections and all issues brought to a member vote
- Coming Soon Student mentorship program

Special NAWM Member Discount to Non-NAWM Select Wetland Training and Courses

Eagle Hill Institute Online Seminars

NAWM Members receive a 20% discount on Eagle Hill Institute tuition and accommodations. Examples include:

- Seminar: Wetland Identification, Delineation and Ecology July 10-16, 2022
- Online Seminar: The Genus Quercus: Ecology, Evolution, and Global Distribution March 21, 23, 25, 2022
- See a complete list of their Seminars/Workshops here.

Login Here for more information and to get code.

Swamp School Training Courses

NAWM Members receive a 10% discount on Swamp School Courses. Examples include:

- Standard Wetland Delineation Training [Classroom/Field] – April 25-28, 2022, Aliquippa, PA
- Online: Stream Restoration Courses
- See a complete list of their training courses here

Login Here for more information and to get code.

Duncan & Duncan Wetland and Endangered Species Training (D&D West)

NAWM Members receive a 15% discount on all courses.

- Wetland Delineation Overview (Coastal Plain or Eastern Mountains/Piedmont) – offered June 28, 2022, Charleston, SC and October 18, 2022, Atlanta, GA
- See a complete list of their Courses here

Login Here for more information and to get code.

Welcome Member!

As a member you have access to the following benefits:

Insider's Edition

Wetland News (ASWM's membership newsletter)

• Past Issues of Wetland News

Members' Webinar Series

Past Members' Webinar Recordings

Special ASWM Member Discount for Non-ASWM Wetland Trainings & Courses

NEW: ASWM Members' Training Series Online Training Program to earn Certificates of Completion (towards CEUs)

For other membership benefits, click here.

Renew your ASWM Membership



Wetland Science News



Wetland Events

Wildwood Park <u>Wetlands Festival</u> April 23, 2022 Harrisburg, PA

"Ding" Darling Wildlife Society <u>33rd Annual "Ding"</u> <u>Darling Day</u> April 24, 2022 Fort Myers, FL

Indiana Dunes Birding Festival May 12-15, 2022 Porter, IN

See Calendar of Events Below

Photo by James Treacy, ESS Group, Inc.

How Mapping Beaver Wetlands Can Chart a Path to a Better Water Future

By Kara Stevens and Peter Skidmore – Walton Family Foundation – February 9, 2022

At a time when climate change increasingly threatens water resources across the American West, what can we do to secure a future of sustainability rather than scarcity? One promising way forward: Look to nature-based solutions from the past. In the 16th century, long before Europeans settled the continent, the North American beaver was the continent's most diligent and effective water manager. <u>Read more</u>.

Chloride removal capacity and salinity tolerance in wetland plants

By Maria Schück and Maria Greger – ScienceDirect – April 15, 2022 Deicing with sodium chloride maintains safe roads in the winter, but results in <u>stormwater</u> runoff with high chloride (CI⁻) content that causes various downstream problems. Chloride-rich water risks contaminating groundwater, shortening the lifespan of concrete and metal constructions, and being toxic to aquatic organisms. Current stormwater treatment methods are unable to remove CI⁻, but <u>wetland</u> plants with high chloride uptake capacity have potential to decrease CI⁻ concentrations in water. The aim was to identify suitable <u>plant species</u> for removing CI⁻ from water for future studies on phytodesalination of water, by comparing 34 wetland plant species native to Sweden in a short-term screening. <u>Read full paper</u>.

Underwater 'breathing' plants could be key to stress-resistant crops

Nagoya University – ScienceDaily – February 6, 2022 Wetland plants have a high tolerance against flooding due to the formation of 'lysigenous aerenchyma,' air channels that help transfer gases to the submerged roots. These channels also help the plant withstand drought and nutrient deficiency. Now, scientists investigate the underlying mechanism of aerenchyma formation to understand the phenomenon better, opening doors to the development of crops that are resilient against extreme weather changes. <u>Read full study</u>.

Coastal wetlands can become too salty for some resident plants

By Alison Bosman - Earth.com - January 27, 2022

Rising sea levels introduce salt water into coastal wetlands, and this has effects that can be seen well above the high-tide level. Although these effects have been studied for coastal salt <u>marshes</u> with their salt-tolerant plant communities, the same cannot be said for coastal wetlands that lie further inland and are characterized by the presence of fresh water. <u>Read more</u>.

Climate Change or Habitat Loss? New Study Weighs Which Influences Birds More

By Spoorthy Raman – Audubon – January 21, 2022

In 1900, on Christmas Day, 27 birders in 25 locations across the United States donned winter gear and binoculars, then stepped outside to list all the birds they could see in 24 hours. They didn't know it then, but they were launching what would become the world's longest-running community science project on birds. Much has changed since that first count: Global temperatures have risen by 1 degree Celsius, or 1.8 degrees Fahrenheit, the U.S. population has more than quadrupled, and 64 percent of the world's wetlands have been destroyed. <u>Read more</u>.



NAWM's Online Trainings

We updated our library! Two popular webinar series are now available for anytime, anywhere learning. The **Beaver-Related Restoration Training Series** contains six modules developed with the Bureau of Land Management and with guidance from a national workgroup of beaver restoration experts. The **Compensatory Mitigation Training Series** contains nine modules developed with the U.S. Army Corps of Engineers. Each online module is accompanied by an optional knowledge assessment quiz which, upon successful completion, may be submitted to the accrediting organization of choice to potentially receive continuing education units/credits (CEUs).

As a benefit of **<u>NAWM Membership</u>**, members Log In to view the modules and take the knowledge-based quizzes. Non-members also have access to the modules via the Online Training pages. The quizzes and certificates have processing fees per module.

The next step in updating our Online Training library is scheduled maintenance on our <u>Hydric Soils Online Training Series</u>. The videos and supporting materials are offline and expected to return on Thursday, March 3rd.

Resources and Publications



Visit NAWM on Social Media



World Wetlands Day- global view: Nature Can Help Solve Crises, with Investment: Joint Report

SDG Knowledge Hub – February 3, 2022

The UN Environment Programme (UNEP) released a report on the 'state of finance for nature,' finding an investment gap of USD 165 billion per year from G20 countries for nature-based solutions, in order to meet currently agreed global targets by 2050. The biodiversity and climate finance gaps are emphasized in the draft post-2020 global biodiversity framework and the 2021 Glasgow Climate Pact. <u>Read more</u>. <u>Read the report</u>.

Wetlands, Flooding, and the Clean Water Act

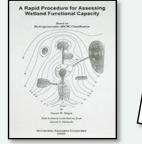
By Charles A. Taylor and Hannah Druckenmiller – Resources for the Future – Working Paper January 24, 2022

In 2020, the EPA narrowed the definition of 'Waters of the United States', significantly limiting wetland protection under the Clean Water Act. Current policy debates center on the uncertainty around wetland benefits. We estimate the value of wetlands for flood mitigation across the US using detailed flood claims and land use data. We find the average hectare of wetland lost between 2001 and 2016 cost society \$1,840 annually, and over \$8,000 in developed areas. We document significant spatial heterogeneity in wetland benefits, with implications for flood insurance policy and the 50% of 'isolated' wetlands at risk of losing federal protection. Download the working paper.

NAWM Wetland Publications We have limited quantities of NAWM publications available.

Only pay for shipping cost.







See a List of Publications Here

Photo by Sharon Weaver, NAWM

NAWM'S WETLAND JOBS BOARD

Regional Biologist

Ducks Unlimited Rancho Cordova, CA ID 1391

Summer Land Management Internship

4 openings Mississippi Valley Conservancy La Crosse, WI Open until filled

Postdoctoral Research Associate -

Applied Ecology William & Mary's VIMS/SMS Williamsburg, VA Review begins February 16, 2022

Biologist U.S. Army Corps of Engineers Davidson County, TX Apply by February 24, 2022

Ecologist U.S. Geological Survey Baton Rouge, LA; Lafayette, LA Apply by February 25, 2022

Environmental Scientist

CA State Water Resources Control Board Sacramento, CA Apply by March 2, 2022

Lead River Ambassador - Seasonal SuAsCo River Stewardship Council Boston, MA Apply by March 14, 2022

Seasonal Wetland Field Technician

(Posted 2/10/22) Delaware Department of Natural Resources and Environmental Control Dover, DE Apply by April 3, 2022

Environmental Consultant

Florida Department of Environmental Protection Tallahassee, FL Apply by February 23, 2022

Visit the NAWM Jobs Board Here

GRANT OPPORTUNITIES

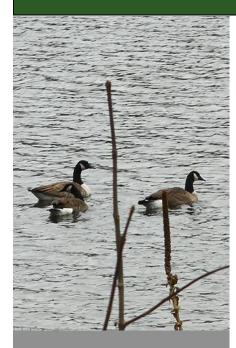
NAWCA 2023-1 US Standard Grants

U.S. Fish and Wildlife Service Search No.: F23AS00002 Apply by February 25, 2022

CREP Mini-Grant Program 2022 PACD Apply by February 25, 2022

Huyck Preserve and Biological Research Station Research Grants Rensselaerville, NY Apply by February 25, 2022





Donate to NAWM

Help Support Wetlands

Donate Here

Photo by Sharon Weaver, NAWM

Potpourri

UW-Madison: Researchers create online game that lets players reimagine land use based on real science

WIS Politics - February 3, 2022

UW-Madison researchers teamed with New England conservation nonprofit Mass Audubon to create an online learning game that lets players model how different zoning choices would affect the environment, jobs, housing and other real-world factors for any location in the contiguous U.S. Built using a variety of state and federal data sets, the free game, known as iPlan, lets players simulate different land-use scenarios and see the changing effects on their community, for good or bad or in between. <u>Read more</u>.

Rice Farming to Restore Soil

By Naoki Nitta – Earth Island Journal – February 1, 2022 Staten Island sits deep in California's Sacramento-San Joaquin River Delta, one of numerous puzzle-piece-shaped isles carved from reclaimed wetland. Like much of the lowland region, the island is mostly farmland and completely encircled by several miles of levee. The shallow crater contains an expansive mosaic of fields within it, with waterways perched precariously around its outer rim. Dawit Zeleke, president of the nonprofit Conservation Farms and Ranches, runs Staten's 8,500-acre working farm. While corn and potato fields take up most of the island, towards its southern tip, grassy stalks of rice wave knee-high in flooded paddies. Along with the flocks of long-legged shorebirds and wading waterfowl, the 1,000 acres of flat, wet fields seem right at home in the swampy landscape. Rice, however, is an uncommon crop in the Delta — and for this Northern Californian farmer, an entirely new venture. Read more.



Removing Sediment to Restore Wetlands Clears Revenue Paths

By Sam Feibel – Conservation Finance Network – January 24, 2022

"My day job wasn't to take care of watersheds," said Eric Scott, Senior Vice President of Real Estate Operations for Oak Tree Development Group. But watershed restoration became part of his firm's project budget and drove up its revenue. In 2017, the real estate company began construction at Lime Spring Square, a 98-acre commercial and residential site in Lancaster, Pennsylvania. As part of the planning process, Scott and his team had to decide which Best Management Practices (BMPs) to implement to meet federal and state post-construction stormwater management requirements at the lowest cost. Persuaded by the promise of more developable land, Oak Tree opted for an innovative restoration approach called floodplain restoration. The idea was to improve the health of the site's stream—and the valley bottom in which it flows—rather than focus on upland areas. <u>Read more</u>.

Vermont flood costs could exceed \$5.2 billion

By Mary Kueser, Catherine Arnold, and Basil Waugh – Eagle Times – January 18, 2022 Property damages from flooding in Vermont are calculated to exceed \$5.2 billion over the next 100 years, new University of Vermont research finds. The most flood damages are projected along the Winooski River floodplains, which houses many of the state's most populous towns, including Burlington, Essex, Colchester, Williston and Montpelier. The findings result from a new tool developed by UVM scientists that provides the first ever comprehensive map of flood risks across Vermont's Lake Champlain basin. <u>Read more</u>.



Share Your Wetland Photos!

The National Association of Wetland Managers (NAWM) is hoping you'll share a variety of your wetland photos (wetlands, flora, fauna, and wetland friends) for NAWM to use in our social media posts and NAWM publications.

Photos should be submitted in .jpg, .png, or .pdf format.



Environmental Events

• Earth Hour – March 26

Photo by Laura Burchill, NAWM

- World Water Day March 22
- International Beaver Day April 7
- Earth Day April 22
- Save the Frogs Day April 30
- Endangered Species Day May 20
- International Day for Biological Diversity May 22

- World Environment Day June 5
- World Rivers Day September 25
- <u>World Migratory Bird Day</u> October 12
- <u>America Recycles Day</u> November 15
- World Soil Day December 5

Environmental Photo Contests – 2022

Audubon's 2022 Photography Awards Contest

Enter between January 12-March 9, 2022

2022 Grassy Waters Preserve Photography Contest

Enter between February 1-28, 2022

Earth.Org Global Wildlife & Natural World Photography

Competition 2022

Enter by April 29, 2022

Photo by Sharon Weaver, NAWM

Photo by Laura Burchill, NAWM

Calendar of Events

WEBINARS 2022

FEBRUARY 2022		
February 23, 2022 3:00 p.m4:30 p.m. ET	National Association of Wetland Managers Members' Webinar Series: <u>Coastal Wetland Migration as a climate Change Resiliency Strategy:</u> <u>Conservation Planning and Decision Making</u>	
February 26, 2022 1:00 p.m.	Coastside Land Trust Webinar: Soil Health and the San Mateo Coast	
February 28, 2022 11:00 a.m.	NISAW Webinar: U.S. Geological Survey Decision Science – Modeling and Structured Decision Making	
March 2022		
March 18, 2022 11:30 a.m. ET	Wisconsin Wetlands Association: Wetland Coffee Break Webinar: <u>Toward</u> <u>more effective invasive species management: Part 1: Emphasize system</u> <u>dynamics over community structure</u>	
March 25, 2022 11:30 a.m. ET	Wisconsin Wetlands Association: Wetland Coffee Break Webinar: <u>Toward</u> <u>more effective invasive species management: Part 2: How a system</u> <u>dynamics approach works in practice</u>	
March 30, 2022 3:00 p.m5:00 p.m. ET	National Association of Wetland Managers Members' Webinar Series: The Extent of Intermittent and Perennial Streams in North Carolina	
APRIL 2022		
April 15, 2022 11:30 a.m. ET	Wisconsin Wetlands Association: Wetland Coffee Break Webinar: Whooping crane conservation in Wisconsin	
April 27, 2022 3:00 p.m4:30 p.m. ET	National Association of Wetland Managers Members' Webinar Series: Managing Impacts to Wetlands from Solar Development	
MAY 2022		
May 18, 2022 4:00 p.m. ET	Northeast Climate Adaptation Science Center Webinar: Tribal & Indigenous-Based Climate Adaptation Priorities in the NE CASC Region	

MEETINGS 2022		
	FEBRUARY 2022	
February 23-25, 2022 Hybrid: Grand Junction, CO and Virtual	RiversEdge Wests: <u>Riparian Restoration Conference</u>	
March 2022		
March 1-12, 2022 Virtual	Massachusetts Association of Conservation Commissions (MACC): Annual Conference Week	
March 2, 2022 Virtual	University of Washington Botanic Gardens: <u>2022 Washington</u> Botanical Symposium	
March 8-10, 2022 Baltimore, MD	Beaver Institute: BeaverCON Conference	
March 9, 2022 Virtual	Connecticut Association of Wetland Scientist Annual Meeting	
March 16-18, 2022 Cleveland, OH	International Association of Great Lakes Research: <u>State of Lake Erie</u> <u>Conference</u>	
March 16-18, 2022 Gettysburg, PA	Pennsylvania Land Conservation Conference	
March 22-23, 2022 Virtual	Coastal Quest Conference: Accelerating Solutions for a Resilient Coast	
March 24-26, 2022 Cambridge, OH	Ohio Wetlands Association: Vernal Poolooza Science Conference	
March 25, 2022 Virtual	Soil and Water Conservation Society: Southern New England Chapter: 2022 Winter Conference: Soil Carbon Storage: <u>Combating Climate</u> <u>Change from the Ground Up</u>	
	APRIL 2022	
April 6-8, 2022 Stevens Point, WI	University of Wisconsin: 2022 Wisconsin Lakes and Rivers Convention: Protecting What We Love for the Future	
April 9, 2022 9:00a.m12:00p.m. Accokeek, MD	Alice Ferguson Foundation: <u>34th Annual Potomac River Cleanup</u> - FREE	
April 12, 2022 Virtual	University of Washington Botanic Gardens and the Northwest Chapter of the Society for Ecological Restoration: <u>2022 Ecological Restoration</u> <u>Symposium: Unprecedented Times: Addressing Modern Challenges</u>	
April 18-22, 2022 Oostende, Belgium	22 nd International Conference on Aquatic Invasive Species	
April 22-24, 2022 Albany, NY	Eagle Hill Institute: Northeast Natural History Conference	

April 23, 2022 Harrisburg, PA	Wildwood Park: Wetlands Festival			
April 23, 2022 Menasha, WI	Heckrodt Wetland Reserve: Mayhem in the Mud!			
April 24, 2022 Fort Myers, FL	"Ding" Darling Wildlife Society: <u>33rd Annual "Ding" Darling Day</u>			
April 26-29, 2022 St. Petersburg, FL	Center for Watershed Protection National Conference			
MAY 2022				
May 2-6, 2022 Boise, ID/Virtual	National Mitigation & Ecosystem Banking Conference: Invest in the Environment Discover Ecological Solutions			
May 12-15, 2022 Porter, IN	Indiana Dunes Birding Festival			
May 15-19, 2022 Orlando, FL	Association of State Floodplain Managers Conference			
May 16-18, 2022 Southern California	2022 Southwestern Tribal Climate Change Summit: Exploring the Fire Within Us			
May 16-20 Grand Rapids, MI	International Association for Great Lakes Research (IAGLR) IAGLR22: 65th Annual Conference on Great Lakes Research: <u>Joint Aquatic</u> <u>Sciences Meeting 2022</u>			
May 21, 2022 Stone Harbor, NJ	The Wetlands Institute: Spring Shorebird and Horseshoe Crab Festival			
May 24-26, 2022 Muskegon, MI	Michigan Department of Environment, Great Lakes, and Energy: U.S. Great Lakes Areas of Concern Conference			
	JUNE 2022			
June 4-7, 2022 Washington, DC	River Network: River Rally			
June 7-8, 2022 Washington, DC	River Network and American Rivers: <u>Action Day for Clean Water and</u> <u>Rivers</u>			
June 8, 2022 San Francisco, CA	Aquarium of the Bay: <u>World Ocean Day - Awareness to Action Climate</u> Summit			
June 24-28, 2022 Cleveland, OH	American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists Joint Meeting: <u>Evolution 2022</u>			



JULY 2022		
July 16-21, 2022 Reno, NV	North American Congress for Conservation Biology: <u>Restoring</u> <u>Connections and Building Resilience in a Changed World</u>	
July 31-August 3, 2022 Denver, CO	Soil and Water Conservation Society 77 th International Annual Conference: <u>Elevating Conservation to New Heights</u>	
AUGUST 2022		
August 14-19, 2022 Montreal, Quebec, Canada	Ecological Society of America Annual Meeting: <u>A Change is Gonna</u> <u>Come</u> Deadlines: <u>Important Dates</u>	
August 29-September 1, 2022 St. Paul, MN	Institute for Tribal Environmental Professionals: <u>National Tribal &</u> Indigenous Climate Conference	
SEPTEMBER 2022		
September 6-9, 2022 Duluth, MN	Natural Areas Association: Natural Areas Conference	
September 21-22, 2022 Port Aransas, TX	University of Texas Marine Science Institute: <u>Texas Bays and</u> <u>Estuaries Meeting</u>	
Остовек 2022		
October 10-14, 2022 Albuquerque, NM	Southwest Climate Adaptation Science Center: Southwest Adaptation Forum	
October 24-26, 2022 Traverse City, MI	International Association for Great Lakes Research: <u>State of Lake</u> <u>Michigan Conference</u>	
October 25-27, 2022 Green Bay, WI	Midwest Invasive Plant Network: Upper Midwest Invasive Species Conference	
NOVEMBER 2022		
November 7-10, 2022 Ft. Myers, FL	North American Invasive Species Management Association 30 th Annual Conference	

Photo by Sharon Weaver, NAWM

TRAINING/WORKSHOPS 2022			
FEBRUARY 2022			
February 21-24, 2022 Raleigh, NC	Swamp School Course: <u>Standard Wetland Delineation Training</u> (Classroom/Field)		
March 2022			
March 7, 2022 Online – 16 weeks	Swamp School Course: <u>Certified Wetland Hydrologist</u> Also offered in June, September, and December 2022		
March 7, 2022 Online – 16 weeks	Swamp School Course: <u>Certified Wetland Botanist</u> Also offered in May, July, and September		
March 21-22, 2022 Online	EUCI Course: Endangered Species Act, Wetlands, and Stormwater Regulatory Compliance for Energy & Utilities		
March 25, 2022 Virtual	Massachusetts Association of Conservation Commissions (MACC) Training Program: <u>Riparian Communities</u>		
	APRIL 2022		
April 25-28, 2022 Aliquippa, PA	Swamp School Course: <u>Standard Wetland Delineation Training</u> (Classroom/Field)		
April 25-28, 2022 Online – 14 Weeks	Swamp School Course: <u>Stream Restoration Level V – Stream</u> <u>Monitoring and Departure Assessment</u>		
	MAY 2022		
May 3-4, 2022 8:30 a.m3:30 p.m. EDT Online	Rutgers Office of Continuing Professional Education Course: Vegetation Identification for Wetland Delineation: North		
May 7-8, 2022 Troutdale, VA	Blue Ridge Discovery Center: Vernal Pond Restoration Workshop		
May 9, 11, 13, and 16, 2022 10:00 a.m4:00 p.m. EDT Online	Rutgers Office of Continuing Professional Education Course: Wetland Construction: Principles, Planning, and Design		
May 11-12, 2022 8:15 a.m12:15 p.m. EDT Online	Rutgers Office of Continuing Professional Education Course: Restoration Ecology		
May 16-20, 2022 St. Michaels, MD	Environmental Concern Course: Basic Wetland Delineation		

JUNE 2022		
June 1-2, 2022 8:30 a.m4:00 p.m. EDT Online	Rutgers Office of Continuing Professional Education Course: <u>Hydric</u> Soils	
June 13-15, 2022 St. Michaels, MD	Environmental Concern Course: Wetland Plant ID	
June 16, 2022 Virtual June 20, 2022 Field Trip	Rutgers Office of Continuing Professional Education Course: Methodology for Delineating Wetlands	
SEPTEMBER 2022		
September 12-16, 2022 St. Michaels, MD	Environmental Concern Course: Basic Wetland Delineation	
OCTOBER 2022		
October 10-12 St. Michaels, MD	Environmental Concern Course: Evaluating Hydric Soils in the Field	
DECEMBER 2022		
December 5-7, 2022 St. Michaels, MD	Environmental Concern Course: Winter Woody Plant ID	



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- FL: US announces historic \$1.1 billion investment for Everglades rehabilitation
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- NY: A renewed push to protect wetlands -Gov. Hochul proposal would strengthen protections
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- Wetlands, Flooding, and the Clean Water Act

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- Rice Farming to Restore Soil
- Removing Sediment to Restore Wetlands Clears Revenue Paths
- Vermont flood costs could exceed \$5.2 billion

CALENDAR OF EVENTS

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February 2022

- National Association of Wetland Managers Members' Webinar Series: Coastal Wetland Migration as a climate Change Resiliency Strategy: Conservation Planning and Decision Making
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- Heckrodt Wetland Reserve: Mayhem in the Mud!
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- River Network: River Rally
- River Network and American Rivers: Action Day for Clean Water and Rivers
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August 2022

- Ecological Society of America Annual Meeting: A Change is Gonna Come
- Institute for Tribal Environmental Professionals: National Tribal & Indigenous Climate Conference

September 2022

- Natural Areas Association: Natural Areas Conference
- University of Texas Marine Science Institute: Texas Bays and Estuaries Meeting

October 2022

- Southwest Climate Adaptation Science Center; Southwest Adaptation Forum
- International Association for Great Lakes Research: State of Lake Michigan Conference
- Midwest Invasive Plant Network: Upper Midwest Invasive Species Conference

November 2022

• North American Invasive Species Management Association 30th Annual Conference

TRAININGS/WORKSHOPS

February 2022

Swamp School Course: Standard Wetland Delineation Training (Classroom/Field)

March 2022

- Swamp School Course: Certified Wetland Hydrologist
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- Swamp School Course: Stream Restoration Level V Stream Monitoring and Departure Assessment

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- Environmental Concern Course: Basic Wetland Delineation

June 2022

- Rutgers Office of Continuing Professional Education Course: Hydric Soils
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- Rutgers Office of Continuing Professional Education Course: Methodology for Delineating Wetlands

September 2022

Environmental Concern Course: Basic Wetland Delineation

October 2022

Environmental Concern Course: Evaluating Hydric Soils in the Field

December 2022

Environmental Concern Course: Winter Woody Plant ID





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 fifteen 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 <u>news@aswm.org</u>.

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Send your news items, events, comments, corrections, or suggestions to news@aswm.org





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