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Please send comments and news stories to [news@aswm.org](mailto:news@aswm.org).

Thank you for your continued interest.



All photos by Jeanne Christie, ASWM

## EDITOR'S NOTE

### Jim Gosselink: A Genius, a Gentleman, and a Friend

It is with great sadness that we share the news of Dr. James Gordon Gosselink's passing. Dr. Gosselink, age 83, passed away on January 18, 2015, in Austin, Texas. Jim was an Emeritus Professor at Louisiana State University's Coastal Ecology Institute, where he served as a faculty member, as well as serving as the Chair of the Department of Oceanography and Coastal Sciences, for 26 years. He was a leader in wetlands ecology for more than 40 years as a scientist and a scholar. In 2001, Dr. Gosselink was awarded the National Wetlands Award for Science Research. Dr. Gosselink authored and co-authored more than 100 scientific contributions on wetlands ecology, in addition to collaborating with many federal agencies responsible for managing wetlands in the U.S. He also co-authored one of the most widely read books on wetlands ecology, *Wetlands*, now in its 5th edition.

Dr. William Mitsch, who co-authored the book *Wetlands* with James, recalled his old friend and shared some interesting tidbits about Jim's life with us. For one, in the early 1970's, Jim collaborated with Gene Odum and eventually published a little report called "The Value of the Tidal Marsh" (Gosselink et al., 1974). This report was far ahead of its time and one of the first to place economic values on wetlands.

And not many people know that Jim was a member of the National Wetlands Policy Forum that wrote "Protecting America's Wetlands: An Action Agenda" (NWPF, 1988), the document that introduced "no net loss" to our wetland management vocabulary. Bill explained the significance of this, saying, "Knowing Jim's ability to bring consensus, I suspect to this day that if Jim had not been there, we would not have that policy in our Federal government today. That was his style, making significant contributions to wetland science and management and university research and teaching, including a long tenure as a department chair of Oceanography at Louisiana State University, but doing it quietly and effectively."

We all know that sometimes our efforts seem to go unnoticed and/or unappreciated by the masses. Certainly, those of us who work in the field of wetland science, management and policy understand we're a relatively small professional niche. But Jim's life provides us with an example of how much an impact we can and do make – quietly and effectively. Just by getting up every day and going to work and doing our best to protect and wisely manage our wetland resources, we are making the future a brighter place for our families, our friends, and the various creatures that share our planetary home. Thank you, Jim, for your positive example and for all your good work. We will try to follow in your footsteps.

Marla J. Stelk, Editor  
Wetland Breaking News



## EDITOR'S CHOICE

### **A New Way to Tame Rivers is Better for Humans and Salmon**

By Joachim Pestinger – The Seattle Times Opinion – February 19, 2015

When the rain-swollen waters of the Puyallup River rose rapidly this winter, the town of Orting braced itself for flooding. In 2006, and again in 2009, the river topped its levees and sent people fleeing from homes, businesses and schools in cities all the way to the Port of Tacoma. But this time, something different happened. The river found new man-made

channels created when the old levees were torn out and replaced with new earthen berms set farther back. The river had room to spread out, slow down, and it stayed within the levees, leaving Orting safe and dry. Taming Western Washington rivers such as the Puyallup is not easy nor cheap, but new management strategies can save millions of dollars in property losses and damage, create critical salmon habitat and add valuable public open space. For full opinion, [click here](#).

### **Arctic marine emissions to increase vastly over next decade: report**

By Bob Weber – Guelph Mercury.com – February 18, 2015

A U.S. study has found that emissions from ships that cause both climate change and acid rain could increase in the Western Arctic by almost 600 per cent over the next decade. "All of those pollutants have climate and health implications," said co-author Alyson Azzara. "The fact that it's growing that much, that rapidly, is the focus." For full story, [click here](#).

### **Scientists look at role of wetlands in battle against climate change**

PHYS.org – February 16, 2015

The role rainforests play through storing carbon in the battle against climate change is well understood, but Deakin University scientists now believe the humble swamp, or freshwater wetland, could be up to 50 times more effective. A team of Deakin researchers from Deakin's Centre for Integrative Ecology within the School of Life and Environmental Sciences are now undertaking an Australian-first study to investigate how wetland areas could help us to win the battle against climate change. For full story, [click here](#).

### **Voluntary plan to reduce fertilizers not enough to shrink Gulf's 'Dead Zone', new study says**

By Mark Schleifstein – NOAL.com The Times-Picayune – February 3, 2015

Major voluntary strategies used on Midwest farmland to curb fertilizers that feed the annual low oxygen "Dead Zone" in the Gulf of Mexico don't remove enough nutrients to succeed, according to a new, peer reviewed scientific study. But combining those strategies with new techniques, including strategically restoring wetlands in some Midwest locations, could reduce nitrogen runoff from farmlands by 45 percent, said the study published in the [Journal of the American Water Resources Association](#). For full story, [click here](#).

### **USDA Accepting Applications for Conservation Stewardship Program**

New Jersey Nursery and Landscape Association – January 28, 2015

The U.S. Department of Agriculture will make \$100 million available nationally this year through the Conservation Stewardship Program (CSP). Although applications are accepted all year, farmers and forest landowners should submit applications by Feb. 27, 2015 to ensure they are considered for this year's funding. Applications received after that date will be considered for future funding. This year's investment may result in the enrollment of up to 7.7 million acres in the program by private landowners across the country. For more information, [click here](#). Contact: Barbara Phillips, Public Affairs Specialist, <mailto:barbara.phillips@nj.usda.gov> or 732-537-6044. For more on technical and financial assistance available through conservation programs, [click here](#) or contact a local [USDA service center](#).

## **Obama administration will plan for rising seas in all federal projects**

By Juliet Eilperin – The Washington Post – January 30, 2015

President Obama issued an executive order Friday directing federal agencies to adopt stricter building and siting standards to reflect scientific projections that future flooding will be more frequent and intense due to climate change. The order represents a major shift for the federal government: while the Federal Emergency Management Administration published a memo three years ago saying it would take global warming into account when preparing for more severe storms, most agencies continue to rely on historic data rather than future projections for building projects. For full story, [click here](#).

## **EPA Awards \$1 Million in Grants to Protect and Restore America's Wetlands**

Contact: Robert Daguillard – U.S. EPA – January 27, 2015

EPA is awarding \$1 million in grants to strengthen the capacity of states and tribes to protect and restore wetlands. Our Nation's wetlands provide a variety of ecosystem services including climate change mitigation through carbon sequestration and climate change adaptation by protecting shorelines from extreme weather events and sea level rise. The National Wetland Program Development Grants provide interstate agencies, intertribal consortia, and non-profit organizations with funding to develop and refine comprehensive state, tribal, and local wetland programs. All six proposed projects are linked to environmental results and include wetland restoration and training such as the "Living Shoreline Academy." For full news release, [click here](#).

## **NOAA Fisheries Releases Draft Climate Science Strategy for Public Comment**

Contact: Roer Griffis – NOAA Office of Science and Technology

The NOAA Fisheries draft Climate Science Strategy is designed to increase the production, delivery, and use of climate-related information to inform management and use of marine resources. The draft Strategy is one component of a proactive approach to collect and provide information on changing climate and ocean conditions to stakeholders. It responds to existing mandates such as the President's National Climate Action Plan and the National Fish, Wildlife, and Plants Climate Adaptation Strategy that call for increased information to better prepare for and respond to climate-related impacts. The Strategy identifies seven steps to increase the production and use of climate-related information; proposes actions to address common needs across regions and agency mandates; and aims to help reduce impacts and increase resilience of marine resources and the communities that depend on them. Written comments must be submitted on or before March 31, 2015. For more information and to provide comments, [click here](#).

## **2015 U.S. Ramsar Wetlands Photo Contest!**

Environmental Law Institute

The Environmental Law Institute (ELI), U.S. Environmental Protection Agency (EPA), and the U.S. National Ramsar Committee (USNRC) are pleased to announce the 2015 U.S. Ramsar Wetlands Photo Contest. The contest will be administered in conjunction with the 2015 National Wetlands Awards (NWA) program. The contest reflects the commitment of ELI, EPA, and USNRC to engage the public in the protection and restoration of wetlands habitats. The photographs will be used to help raise awareness of Ramsar NWA, and the importance of wetland protection throughout the country. The winning photographs will be announced and displayed at the National Wetlands Awards ceremony on May 21, 2015 in Washington, DC. Deadline to submit entries is April 24, 2015 at 11:59p.m. For more information, [click here](#) or go [directly here](#).

## **Natural Floodplain Functions Alliance (NFFA) Webinar – March 3, 2015**

NFFA Webinar: EPA Adaptation Workbook: Lessons Learned in San Juan Bay, Puerto Rico will be held on March 3, 2015 at 3:00 p.m. ET. Presented by Michael Craghan, Climate Ready Estuaries Program, U.S. EPA. For more information, [click here](#). To register, [click here](#).

## **ASWM's Members' Webinar: Monitoring Results from the Big Spring Run Aquatic Ecosystem Restoration Project and Prospects for Addressing Watershed Impairments Related to Legacy Sediment – February 25, 2015**

Members' Webinar: How Monitoring Results from the Big Spring Run Aquatic Ecosystem Restoration Project and Prospects for Addressing Watershed Impairments Related to Legacy Sediment will be held on

February 25, 2015 at 3:00 p.m.-4:30 p.m. ET. Presented by Karen Jeff Hartranft, Pennsylvania Department of Environmental Protection. For more information, [click here](#).

### **ASWM's Wetland Restoration Webinar: Pacific Coast Wetland Restoration – March 17, 2015**

Wetland Restoration Webinar: Pacific Coast Wetland Restoration will be held on March 17, 2015 at 3:00 p.m. ET. Presented by Charles ("Si") Simenstad, University of Washington and John Callaway, University of San Francisco. For more information, [click here](#). To register, [click here](#).

### **Wetland Mapping Consortium (WMC): ASWM Winter Meeting Workshop – March 25, 2015**

*(Mapping sessions available for remote participants – registration links will be provided soon.)*

#### **WMC Workshop: “Accessing, Analyzing and Communicating Digital Wetland Data to Stakeholders for Decision-making”**

Wetlands Spatial Data 101: How to Access Data on NWI Mapper and Other Resources – Mitch Bergeson, USFWS, National Standards Support Team

2:00 p.m.-2:30 p.m. Communicating Digital Wetland Data to Stakeholders: What to do With the Data Once You Have It – Andy Robertson, Saint Mary's University

2:30 p.m.-3:00 p.m. Available Wetland Data for Analysis at Different Spatial and Temporal Scales – Megan Lang, University of Maryland

For more information, [click here](#).



## **NATIONAL NEWS**

### **America's heartland risks ag economic disruptions as climate change advances, report says**

High Plains/Midwest Ag Journal – February 16, 2015  
The Midwestern U.S. faces potential disruptions to its agricultural economy, and dangerous levels of heat in many of its largest cities, if climate change continues unabated, according to a new report released Jan. 23 by the Risky Business Project. “Heat in the Heartland: Climate Change and Economic Risk in the Midwest” details how extreme heat—the signature impact of a changing climate—could transform the Midwest’s economy. For full story, [click here](#).

### **A 'megadrought' will grip U.S. in the coming decades, NASA researchers say**

By Darryl Fears – The Washington Post – February 12, 2015 – Video

The long and severe drought in the U.S. Southwest pales in comparison with what’s coming: a “megadrought” that will grip that region and the central Plains later this century and probably stay there for decades, a new study says. Thirty-five years from now, if the current pace of climate change continues unabated, those areas of the country will experience a weather shift that will linger for as long as three decades, according to the study, released Thursday. Researchers from NASA and Cornell and Columbia universities warned of major water shortages and conditions that dry out vegetation, which can lead to monster wildfires in southern Arizona and parts of California. For full story and to view video, [click here](#).

### **New York-New Jersey harbors see 'substantial progress' after decades of pollution, group says**

By S. P. Sullivan – NJ.com – February 10, 2015

The shared waters of New Jersey and New York’s harbors, long battered by industry and neglect, have “advanced considerably” over the last five years, according to a report released Monday. The New York-

New Jersey harbor has seen more than \$1 billion in federal, state and local investment in improving the region's waterways since 2009, the report says, but does lag in key areas, including the removal of harmful contaminated sediment and the restoration of natural resources like oyster beds. For full story, [click here](#).

### **Clean Water Act Interpretive Rule for 404(f)(1)(A) Withdrawal**

Contact: Ms. Stacey M. Jensen – U.S. Army Corps of Engineers – February 4, 2015

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Army (U.S. Army) are announcing the withdrawal of an interpretive rule addressing the exemption from permitting provided under section 404(f)(1)(A) of the Clean Water Act (CWA). The agencies want to make clear that the statutory exemption of 404(f)(1)(A) still remains available for use when applicable for discharges of dredged and/or fill material associated with normal farming, silviculture, and ranching activities that are part of an established operation. Further, that do not have as their purpose bringing an area of waters of the United States into a use, which it was not previously subject, where the flow or circulation of the waters of the United States may be impaired, or the reach of such waters be reduced (see 33 CFR 323.4 for more information). For full notice, [click here](#). For memorandum, [click here](#).

### **GOP lawmakers push EPA to rethink clean water rule**

By Chris Adams – The Olympian – February 4, 2015

In a year the Republican-controlled Congress is expected to take a significant whack at President Barack Obama's environmental agenda, GOP lawmakers on Wednesday told top environmental officials they should scrap what was once a fairly obscure proposal to define what is and isn't considered a body of water by federal law. In an unusual joint hearing involving the Senate Environment and Public Works Committee and the House Transportation and Infrastructure Committee, the Republican majority that now controls both houses of Congress showed it is intent on trying to derail the president's environmental agenda in his last two years in office. For full story, [click here](#).

### **Loving the Puget Sound to Death**

By Madeline Ostrander – The Nation – February 4, 2015 – Video

Hidden amid the pleasure boats and cargo ships that roar through the canal in northwest Seattle is one of the oldest fishing economies in North America. From midsummer to October, from early morning until after dusk, fishermen from the Suquamish Tribe zoom up and down the canal in orange waterproof overalls, tending to salmon nets that dangle across the water like strings of pearls. The tribe holds reservation land about ten miles west of the city, on the far side of Puget Sound, the 100-mile-long estuary that extends from Olympia, Washington, north to the Strait of Juan de Fuca. The Suquamish are one of more than a dozen tribes that have fishing and shellfish-harvesting rights all across this region, and their fishing traditions, which are thousands of years old, predate all of the oldest shipyard industries here. For full story, [click here](#).

### **Chesapeake Bay recovering but still under stress, report finds**

By Ian Simpson – Reuters – February 3, 2015

The ailing Chesapeake Bay is slowly recovering from pollution and overfishing but still has problems that include a drop by half in a key segment of the blue crab population, a report on the largest U.S. estuary said on Tuesday. The 2013-14 health snapshot from the Chesapeake Bay Program said the 64,000-square-mile (166,000-square-km) watershed covering six states and the District of Columbia was threatened by rising sea levels, warmer water and urban development. For full story, [click here](#).

### **Where Did the Missing Oil Go? New Study Says Some is Sitting on the Gulf**

By Inger Peterson – Ocean E-News – February 3, 2015

After 200 million gallons of crude oil spilled into the Gulf of Mexico in April 2010, the government and BP cleanup crews mysteriously had trouble locating all of it. Now, a new study led by Florida State University Professor of Oceanography Jeff Chanton finds that some 6 million to 10 million gallons are buried in the sediment on the Gulf floor, about 62 miles southeast of the Mississippi Delta. "This is going to affect the Gulf for years to come," Chanton said. "Fish will likely ingest contaminants because worms ingest the sediment, and fish eat the worms. It's a conduit for contamination into the food web." For full story, [click here](#).

## **Obama budget seeks \$50 million cut in Great Lakes restoration**

Star Tribune – February 3, 2015

President Barack Obama's proposed budget for 2016 seeks what it calls a \$50 million "modest reduction" in a multi-year program to clean up the Great Lakes. The president's spending plan released Monday requests \$250 million for the Great Lakes Restoration Initiative, down from \$300 million appropriated for this year. The program focuses on the lakes' most serious long-term ecological challenges such as invasive species, toxic pollution, degraded fish and wildlife habitat and runoff from farms and cities that causes toxic algae blooms. Obama created the program after taking office in 2009. About \$1.9 billion has been spent on about 2,000 projects region-wide. For full story, [click here](#).

## **Obama's Budget Reveals Depth and Breadth of His Climate Agenda**

By John H. Cushman, Jr. – InsideClimate News – February 2, 2015

Many of the climate-change goals were old, but some were new in President Obama's budget request to Congress, published on Monday. Familiar elements included more green-energy R&D, permanent status for tax breaks that subsidize renewable production of electricity, and yet another plea to end existing subsidies for fossil fuels. Among the novelties: new incentives for states to meet the low-carbon targets of proposed Clean Air Act regulations. For full story, [click here](#).

## **Going With the Flow**

By Julie Cohen – UC Santa Barbara The Current – January 22, 2015

Millions of Americans live in flood-prone areas. In 2012 alone, the cost of direct flood damage hit nearly half a billion dollars. However, because the factors contributing to flood risk are not fully understood, river basin management — and even the calculation of flood insurance premiums — may be misguided. A new study by UC Santa Barbara's Michael Singer and colleagues presents a paradigm shift in flood hazard analysis that could change the way such risk is assessed in the future. For full story, [click here](#).

## **The Quality of the Nation's Groundwater**

By Barbara Mahler and Jon Campbell – USGS Science Features – January 21, 2015

About 115 million people—more than one-third of the Nation's population—rely on groundwater for drinking water. As the Nation's population grows, the need for high-quality drinking-water supplies becomes even more urgent. "Through the WaterSMART initiative and the National Water-Quality Assessment Program, the Department of Interior is working to secure sustainable water supplies of sufficient quantity and quality and to identify measures needed to address climate change and future demands," said Jennifer Gimbel, Principal Deputy Assistant Secretary of the U.S. Department of the Interior. "The integrated work that USGS is doing to map groundwater availability, groundwater quality, and the potential for contamination will give us the information we need to understand natural and human effects on groundwater and to take the actions needed to protect this vital natural resource." For full blog post, [click here](#).

## **Plan targets farmers in 3 states to reduce Lake Erie algae**

By John Seewer – Seattle PI – January 18, 2015

Farmers in Ohio, Michigan and Indiana are being asked to be part of the solution in fixing the algae problem in Lake Erie. Federal officials on Friday outlined a program that will make \$17.5 million available to farmers who take steps to reduce the pollutants that wash away from the fields and help the algae thrive. First, it's a voluntary program so farmers won't be forced to take part. And it only applies to those who have land in the western Lake Erie watershed, which is mostly made up of northwestern Ohio, southeastern Michigan and northeastern Indiana. For full story, [click here](#).

## **Biden to announce water infrastructure spending push**

By Justin Sink – The Hill – January 16, 2015

Vice President Biden on Friday will announce a trio of new federal initiatives designed to spur new infrastructure spending to upgrade the nation's drinking and waste water systems. The programs, which Biden will announce following a tour of the Anacostia River Tunnel Project — a massive underground tunnel that will store storm water in an effort to clean up the capital's notoriously polluted rivers — are the latest effort in a push by the Obama administration to help facilitate local and private spending on infrastructure projects. For full story, [click here](#).

## White House Environmental Adviser to Resign

By Ben Geman – National Journal – January 13, 2015

Mike Boots, the acting chairman of the White House Council on Environmental Quality, will leave the administration in March, according to a CEQ spokesperson. His upcoming departure from CEQ, which helps coordinate federal environmental policy and oversees several climate-change initiatives, is one of two big changes coming among top White House environmental aides. For full article, [click here](#).

## Appalachian environmental groups push EPA to enforce Clean Water Act in KY, WV

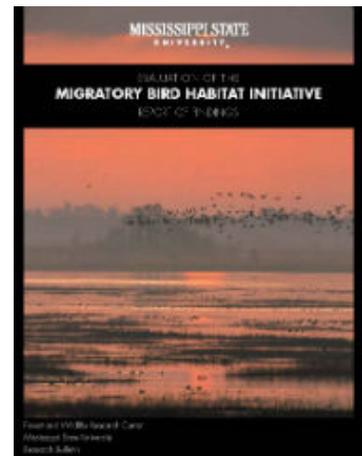
The State Journal – January 9, 2015

National and local environmental groups representing Appalachian citizens plan to push the U.S. Environmental Protection Agency in federal court to enforce clean water protections in West Virginia and Kentucky. The groups, including the Sierra Club, Kentuckians For The Commonwealth, Ohio Valley Environmental Coalition and West Virginia Highlands Conservancy, submitted separate legal actions against what they call “the documented, systematic failure of Kentucky and West Virginia to regulate harmful water pollution from mountaintop removal coal mines,” according to the Jan. 7 news release. For full story, [click here](#).

## Study says USDA effort benefits birds after 2010 Gulf oil spill

USDA NRCS

NRCS swiftly launched the Migratory Bird Habitat Initiative following the 2010 Deepwater Horizon oil spill to enable farmers to create and enhance habitat for migratory birds, providing an alternative to habitat in impacted coastal ecosystems. NRCS invested \$40 million in the initiative, which led to conservation practices implemented on more than 470,000 acres in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri and Texas. Mississippi State University completed a three-year evaluation of bird use of habitat and availability of food in rice fields, catfish ponds and wetlands managed through MBHI. The results were released in a report in fall 2014. This report includes findings that demonstrate the importance of landscape-level conservation on efforts. For full story, [click here](#). To download the report, [click here](#).



## STATE NEWS

### AK: Federal agencies at odds over drilling plan for Alaska reserve

By Phil Taylor – E & E Publishing, LLC – January 21, 2015

What's the best way to drill for oil in a mostly untouched Alaskan tundra, home to migrating caribou, abundant waterfowl, and Native Alaskan hunting and fishing grounds? It depends on which federal agency you ask. The Bureau of Land Management, the Army Corps of Engineers, U.S. EPA and the Fish and Wildlife Service are split on how to approve

ConocoPhillips Co.'s bid to become the first oil producer in the 22.5-million-acre National Petroleum Reserve (NPR-A) in northwest Alaska. How they resolve those differences could point to how -- and to what extent -- the nation taps into a reserve believed to hold upward of a billion barrels of crude. For full story, [click here](#).

### CA: High levels of benzene found in fracking waste water

By Julie Cart – LA Times – February 11, 2015

Hoping to better understand the health effects of oil fracking, the state in 2013 ordered oil companies to test the chemical-laden waste water extracted from wells. Data culled from the first year of those tests found significant concentrations of the human carcinogen benzene in this so-called "flowback fluid." In some cases, the fracking waste liquid, which is frequently reinjected into groundwater, contained benzene

levels thousands of times greater than state and federal agencies consider safe. The testing results from hundreds of wells showed, on average, benzene levels 700 times higher than federal standards allow, according to a Times analysis of the state data. For full story, [click here](#).

### **CA: Dealing with sea level rise becomes real in Marin**

By Mark Prado – Marinij.com News – February 1, 2015

By next year work should be underway on National Park Service property at Stinson Beach to gird against rising seas that are predicted to swallow part of Marin's coast sometime this century. The threat of sea-level rise is the primary reason why the park service is planning a \$2.3 million revamp of a wastewater treatment system that serves more than 1 million people annually at various facilities along the beach and adjacent areas. For full story, [click here](#).

### **CA: New plan pitched to enhance Bolinas Lagoon**

By Mark Prado – Marinij.com News – January 25, 2015

County parks officials are eyeing restoration work to the north end of Bolinas Lagoon, one of the world's most biologically diverse bodies of water. Over the summer the Marin County Open Space District Board of Directors and its staff began looking at how to improve the north end of the lagoon. The primary focus is to rehabilitate riparian and wetland functions, and to accommodate potential rising seas for the area known as the "Bolinas Wye." All or part of the Bolinas Wye could be removed or replaced under the plan. For full story, [click here](#).

### **FL: Fireproofing chemicals found in lagoon marine life**

By Jim Waymer – Florida Today – February 18, 2015 – Video

Flame retardants and pesticide byproducts are showing up at potentially toxic levels in sharks, rays and other marine life in the Indian River Lagoon and in the ocean just off Brevard County. Little is known about the health effects of these long-lasting compounds on the marine food web or on those who eat lagoon seafood. But scientists point to their widespread presence as yet another example of the ominous effects long-term pollution is having on local waters. Among the substances a new study found in samples of shark livers are byproducts of DDT and other pesticides banned decades ago. For full story and to view video, [click here](#).

### **FL: Decline in South Florida wading birds could mean Everglades worse off**

By Jenny Staletovich — Miami Herald – January 22, 2015

A decline in small herons and egrets that nest and forage among the Everglades wetlands and tree islands could mean work to restore the troubled ecosystem is not moving fast enough. An annual survey by the South Florida Water Management District released Thursday found that in 2014, five years after a record rebound, the overall number of nests in and around refuges, wildlife sanctuaries and water conservation areas was down by 60 percent — 28 percent lower than in 2013. The drop in Everglades nests for little blue herons, tricolored herons and snowy egrets was particularly troubling: nests that numbered over 1,000 a decade ago were down to about 130 last year. For full story, [click here](#).

### **FL: Fort Lauderdale innovative Program Aims to Protect Community Against Local Flood Hazard**

Eyes on News – January 20, 2015

Building upon its leadership in the area of sustainability, the City of Fort Lauderdale has become the first municipality in Florida to approve the use of Adaptation Action Areas to fight rising seas and coastal flooding. The new policy enables Fort Lauderdale to identify portions of the City that are vulnerable to flooding and prioritize those areas for adaptation measures and infrastructure improvements. Fort Lauderdale volunteered to serve as the project's pilot community as part of an ongoing effort to protect quality of life by increasing the City's resilience to the damaging effects of climate change. The City's successful implementation of this game-changing initiative will now serve as a model for other communities throughout Florida and around the country. For full story, [click here](#).

### **IA: A closely watched fight brewing over nitrates in Iowa water**

By Maya Rao – Star Tribune – February 18, 2015

Iowa's largest water utility is threatening to sue three rural counties for allowing excess farm chemicals to contaminate drinking water, a dispute that is triggering a wider debate over the best way for Midwestern

states to stop pollution from fertilizer runoff. The Des Moines Water Works' action is being closely followed by environmental advocates and could have far-reaching implications for states like Minnesota that have battled similar threats to drinking water. For full story, [click here](#).

### **IL: Dixon Waterfowl Refuge gains additional acreage, new habitats**

The Wetlands Initiative – January 20, 2015

The Wetlands Initiative has acquired a 417-acre parcel to expand its Sue and Wes Dixon Waterfowl Refuge at Hennepin & Hopper Lakes in north-central Illinois. Restoration of the new tract will begin in fall 2015 with the goal of creating a contiguous, high-quality prairie, savanna, and woodland system within the southeastern portion of the Dixon Refuge. For full story, [click here](#).

### **LA: Coastal Master Plan could grow by \$20 billion, state planners say**

By Mark Schleifstein – NOLA.com – The Times-Picayune – January 21, 2015

The state's coastal protection and restoration Master Plan could grow by \$20 billion, based on additional projects being reviewed for the plan's 2017 revision, a senior planner with the Coastal Protection and Restoration Authority said Wednesday (January 21).

State planners have reviewed and winnowed down more than \$111 billion in additions proposed in 2014 and early this year, said Karim Belhadjali during a presentation to the CPRA's board of directors at the state Capitol. The authority also heard from staff scientists that tentative locations have been selected for building moderately large diversions of sediment and water from the lower Mississippi River into Breton Sound and Barataria Bay. The Breton diversion would be built near Port Sulphur, and the Barataria diversion would be built near Diamond, both in lower Plaquemines Parish, said Coastal Resource Scientist Kent Bollfrass. For full story, [click here](#).

### **LA: Gov. Jindal asks state Supreme Court to uphold law banning wetlands damage suit**

By Mark Schleifstein – NOLA.com-The Times-Picayune – January 9, 2015

Gov. Bobby Jindal has asked the Louisiana Supreme Court to uphold the constitutionality of a law passed to block the east bank levee authority's wetlands damages lawsuit against more than 80 oil, gas and pipeline companies. Attorney Jimmy Faircloth, who lobbied the 2014 Legislature on behalf of Act 544 for the governor's office, filed paperwork with the Supreme Court Tuesday. The filing challenges a Dec. 3 judgement by 19th Judicial District Court Judge Janice Clark that declared the law unconstitutional. For full story, [click here](#).

### **MI: EPA sets dioxin cleanup plan for floodplain**

By Tony Lascari – Midland Daily News – February 12, 2015

The U.S. Environmental Protection Agency has selected a plan to clean up dioxin contaminated properties along the Tittabawassee River floodplain and work is expected to start this year. The floodplain includes about 4,500 acres and portions of more than 700 property parcels extending along 21 miles downstream of The Dow Chemical Co.'s Michigan Operations site in Midland. Pollution came from past disposal practices and historic flooding at the site. As part of the EPA's decision, Dow is responsible for completing soil removal if properties contain contamination above site-specific cleanup levels that vary based on how the property is currently used. For full story, [click here](#).

### **MI: Michigan's bald eagles full of flame retardants**

By Brian Bienkowski – Environmental Health News – February 9, 2015

Michigan's bald eagles are among the most contaminated birds on the planet when it comes to phased-out flame retardant chemicals in their livers, according to new research. The study, published last month in the Journal of Great Lakes Research, found that the top predators in the Great Lakes are highly exposed to banned flame retardants, still widespread in the environment. Michigan's population of bald eagles is stable, but the compounds have been linked in other birds to impaired reproduction, weird behavior and development, and hormone disruption. For full story, [click here](#).

### **MN: Farmers adapt to big rains but send trouble downstream**

By Elizabeth Dunbar – Ag Week – February 4, 2015

As rains have gotten heavier, Minnesota farmers in recent years have been expanding a 150-year-old drainage system, pulling billions of gallons more water off soggy land and letting the state's corn and soybean fields thrive. They have laid thousands of additional miles of water-absorbing plastic tubes

underneath their fields and, as a result, they have pushed upward the number of bushels per acre of the crops that dominate Minnesota's agricultural landscape. They have held their own and even flourished amid the rains, increased temperatures and greater variability observed in the state. If only adapting to climate change were so simple. For full story, [click here](#).

### **MN: Minnesota struggles to slow deforestation, protect water**

By Josephine Marcotty – Star Tribune – February 1, 2015

Kathy Connell never thought she'd see it in Minnesota: deforestation. But last year she watched with dread as the pine trees surrounding her tiny vegetable farm 60 miles northwest of Brainerd were torn out and heaped into piles of slash. Now she fears what might come next — huge potato fields, aerial pesticides and contaminated drinking water. Already her neighbors are paying thousands of dollars to dig deeper wells. "To me the earth is a God-given gift," she said. "It's morally wrong to poison the water." The forests of central Minnesota — a region that has the state's highest deer densities and that protects a largely pristine but vulnerable aquifer — are being cleared at an accelerating pace, and regulators are scrambling to find a way to protect them. For full story, [click here](#).

### **NY: Plan to Protect Manhattan from Sandy 2.0 Moves Forward**

By Evan Bindelglass – NY Curbed – January 20, 2015

Last year, New York City nabbed a nice chunk of change to protect Lower Manhattan from future Hurricane Sandys, and now the city is ready to take these ideas from rendering to reality. The bulk of the funding, which was awarded by the Department of Housing and Urban Development through the Rebuild by Design competition, will go toward building the first phase of an integrated flood protection system, the framework for which was dubbed the BIG U and designed by the Bjarke Ingels Group. Renderings showed an earthen berm that would essentially double as a giant park, and the first piece would stretch from East 23rd Street to Montgomery Street. Now the city is taking this framework and turning it into an official submission to HUD, which will start the process of, you know, actually getting this thing built. Surveying of the initial site has already begun. For more information, [click here](#).

### **NC: Pig poop fouling North Carolina streams; state permitting questioned**

By Brian Bienkowski – Environmental Health News – February 18, 2015

Few people know the pig business like North Carolina's Don Webb.

Webb raised pigs in Wilson County, North Carolina, until, in the late 70s, residents told him the smell near his farms was unbearable. He tried some solutions. They didn't work. "I was riding down the road and got to thinking of my own mother and father and what would I do if one of these was their homes [near the pig farms]," Webb said in his heavy Southern drawl. "So I got out of the business." Webb, 74, soon went from pig farmer to vocal critic. Over the past few decades he's frequently done battle with the large pig farms in North Carolina over their waste management. He once took former state Sen. Wendell Murphy, owner of Murphy Farms and notorious for pushing industry-friendly laws, for a ride in his pickup truck to show him his farm's impacts. For full story, [click here](#).

### **NC: Criminal charges in spills to cost Duke Energy \$100 million**

By Anne Blythe and Bruce Henderson – Newsobserver.com – February 18, 2015

Criminal charges are expected to be brought against Duke Energy in the next several days that will accuse the nation's largest electric utility of multiple misdemeanor violations of the federal Clean Water Act. The charges would come a year after a Duke power plant spilled up to 39,000 tons of coal ash into the Dan River, quickly triggering state and federal investigations. For full story, [click here](#).

### **ND: Ruptured Pipeline Sends Millions of Gallons of Wastewater into N.D. Creek**

By Emily Guerin – Rock Mountain PBS I-NEWS – February 3, 2015

The pipeline that burst last month and spewed oil into the Yellowstone River in Montana made headlines. But just across the border in North Dakota another pipeline was quietly leaking a potentially more disastrous substance: wastewater from oil wells. The Blacktail Creek spill is the largest wastewater or "produced water" spill since the oil boom began in North Dakota nearly 10 years ago, and more than twice as large in volume as the Yellowstone River oil spill. And North Dakota's spill problem is getting worse. For full story, [click here](#).

## **OH: Ohio Senate OKs regulations to tackle Lake Erie pollution**

By John Seewer – WRAL.com

Ohio lawmakers approved new rules for farmers and water treatment plant operators that are designed to reduce the spread of algae blooms in Lake Erie that last year contaminated the drinking water for more than 400,000 people. The state Senate on Wednesday unanimously approved the legislation that also would move Ohio toward ending the dumping of dredged sediment in the lake. The bill, which still needs to clear the House, would be the legislature's first step toward tackling the algae since toxins from the blooms left residents around Toledo and in southeastern Michigan without water for two days in August. The blooms also have been linked to oxygen-depleted dead zones in the lake where fish can't survive. For full story, [click here](#).

## **OR: Oregon chub becomes first fish to leave endangered species list**

By Kelly House – The Oregonian – Oregon Live – February 16 2015

The Oregon chub has been to the brink and back, earning a place in history as the first fish to ever leave the endangered species list. Federal and state fish and wildlife officials will meet Tuesday in Corvallis for an "important announcement" regarding the chub, a small backwater minnow that exists only in Oregon and was driven to the brink of extinction due to habitat loss in the latter part of the last century. For full story, [click here](#).

## **OR: NOAA, EPA disapprove Oregon's coastal nonpoint pollution control program**

NOAA – January 30, 2015

NOAA and the U.S. Environmental Protection Agency have disapproved the state of Oregon's coastal nonpoint pollution control program because it does not sufficiently protect salmon streams and landslide-prone areas from logging impacts or reduce runoff from forest roads built before 1971. All coastal states that participate in the National Coastal Zone Management Program are required to develop a Coastal Nonpoint Pollution Control Program that describes how they will prevent and control polluted runoff in coastal waters. For full story, [click here](#).

## **PA: New NRDC Report Shows How Philadelphia's Greened Acre Retrofit Program is catalyzing low-cost green infrastructure retrofits on private property**

Natural Resources Defense Council – February 11, 2015

A new Issue Brief released by the Natural Resources Defense Council, [Wanted: Green Acres](#), provides a case study of Philadelphia's innovative approach to sourcing cost-effective green infrastructure retrofit opportunities on private land through the Greened Acre Retrofit Program (GARP). The new report documents the "how" and "why" of the GARP, and focuses on the elements that differentiate the new program from traditional green infrastructure subsidy programs. These include an emphasis on project aggregation, a competitive award process, and utilization of a pay-for-performance arrangement to ensure long-term maintenance of the green stormwater assets on private property. For more information, [click here](#).

## **SC: Carbon-Offset Project Protects 4,000+ Acres Of Southern Coastal Habitat**

Pollution Online – January 15, 2015

Green Assets, Inc., a leading forest carbon offset developer, has been awarded carbon offset credits for its forest conservation project of more than 4,400 acres of land owned and managed by world-renowned Brookgreen Gardens in South Carolina. The project represents South Carolina's first carbon credits to be issued through the California Air Resources Board (ARB) compliance offset program for U.S. forests. ARB offset credits are issued to projects that meet specific requirements and represent verified greenhouse gas (GHG) emission reductions or removal enhancements. Carbon credits are a component of national and international attempts to mitigate the growth in concentrations of greenhouse gases. One carbon credit is equal to one ton of carbon dioxide removed from the atmosphere. For full story, [click here](#).

## **WA: Federal Way volunteers, city, make progress on Hylebos wetlands repairs**

By Raechel Dawson – Federal Way Mirror – February 16, 2015

Months after the West Hylebos wetlands park closed because of storm damage, city parks maintenance crews and volunteers from AmeriCorps are making headway on rejuvenating one of Federal Way's beloved gems. The wetlands closed in November after a storm downed trees across the boardwalk. One large root from a tree took out a section of the boardwalk and caused safety issues for park-goers. Parks

Department staff announced plans to repair and inspect the area in November but could not determine when the park would reopen. For full story, [click here](#).

### **WI: Walker plan to freeze land purchases wins support, dismay**

Asia News – February 22, 2015

Gov. Scott Walker's strategy to freeze spending for land purchases is the most current and most aggressive attempt by the governor and the Legislature to rein in a system that has protected far more than 650,000 acres over the previous quarter-century. The conservation operate has touched each and every corner of the state, but it has come with a hefty value tag. The cost of the Knowles-Nelson Stewardship Fund has mushroomed considering that 1990, with total spending at \$641.8 million. For full story, [click here](#).

### **WI: Fitchburg appeals decision halting potential development near Waubesa wetlands**

By Byrna Godar – The Cap Times – February 16, 2015

Fitchburg has quietly appealed a decision by the Capital Area Regional Planning Commission that halted plans for development near Lake Waubesa and its wetlands. Fitchburg's proposed Northeast Neighborhood expansion would open up 985.9 acres in the northeast corner of the city for future development, but the move has spurred intense opposition from community members concerned about the potential impact on the Waubesa Wetlands. For full story, [click here](#).

### **WY: Fewer trade secrets for Wyoming fracking fluid**

By Sarah Tory – High Country News – February 11, 2015

In 2010 Wyoming became the first state to require oil and gas companies to disclose chemicals used in fracking operations. Home to the petroleum-rich Powder River Basin, proponents saw the rule as a model for other drilling-dependent states to follow. The message they hoped the regulation would convey: We can be energy-friendly and environmentally friendly too. But the rule contained a trade secrets caveat, which allowed companies to skirt the disclosure requirement if they said the chemicals were confidential business information. That exemption created a massive loophole. Now, thanks to a settlement approved Jan. 23, companies will have to do more to justify keeping fracking chemicals secret. For full story, [click here](#).



## **WETLAND SCIENCE**

### **To save their depleted species, female blue crabs go the extra mile to spawn in the bay**

By Darryl Fears – The Washington Post – February 12, 2015

Deep under the cold, dark waters of the Chesapeake Bay, the answer to whether the decimated blue crab population can survive lies buried in mud. Tens of millions of female crabs are scattered across the floor of the lower bay in southern Virginia, where the estuary pours into the Atlantic Ocean, waiting out winter for one of the most important events in their short lives. When

spring comes, they will inch closer to the ocean with billions of eggs. It's a critical time because the blue crab population is reeling, facing some of the lowest numbers in history. For full story, [click here](#).

### **Ranchers crucial to saving sage grouse – USDA**

By Scott Streater – E & E Publishing LLC – February 12, 2015

Federal partnerships with private landowners across the West have resulted in protecting millions of acres of greater sage grouse habitat, according to a new report that underscores the critical role ranchers play in ongoing efforts to save the imperiled bird. The report released today by the Agriculture Department's Natural Resources Conservation Service shows that since 2010, NRCS has spent \$296 million on programs partnering with ranchers and other private landowners that have resulted in restoring 4.4 million acres of sage grouse habitat. USDA also announced today that it plans to spend an additional \$200 million over the next four years through conservation programs funded by the farm bill to expand

restoration partnerships with working ranches and farms covering hundreds of thousands of acres across the grouse's 11-state Western range. For full story, [click here](#).

### **US launches plan to halt decline of monarch butterfly**

By Suzanne Goldenberg – The Guardian – February 9, 2015

The Obama administration and conservation groups [launched a plan on Monday](#) to halt the death spiral of the monarch butterfly. The most familiar of American butterflies, known for their extraordinary migration from Mexico through the mid-west to Canada, monarch populations have plummeted 90% over the past 20 years. Fewer than 50m butterflies made it to Mexico last winter – a fraction of the population once estimated at 1bn. For full story, [click here](#).

### **Atlantic Corals: Colorful and Vulnerable**

By James Gorman – The New York Times – February 9, 2015

A council that sets regulations for fishing off the mid-Atlantic coast will meet on Wednesday to consider protections for little known and fragile ecosystems of deep sea corals in and around 15 ocean sites. Environmental groups and sport fishermen are pushing for protection of these canyons and other sites, which run from Block Canyon off New York to Norfolk Canyon off Virginia, from squid fishing. They also are lobbying for other restrictions on fishing in a much broader zone. For full story, [click here](#).

### **Caring for sea otters offers climate bonus**

NOAA Climate.gov – February 6, 2015

You already know that sea otters are cute, lovable animals. But do you know that everybody's favorite reclining-dining marine mammal is also a climate warrior? By preying on kelp-grazing sea urchins, otters allow underwater kelp forests to do more of what forests do everywhere: suck up heat-trapping carbon dioxide via photosynthesis. In the presence of otters, urchins skulk in watery rock crevices, getting by on kelp detritus and algae growing on rocks. Without otters fishing overhead, emboldened sea urchins turn mobile and eat live kelp. Unchecked, sea urchin populations can consume enough kelp to turn forest to desert. For full story, [click here](#).

### **Climate affects how the Great Lakes grow and flow**

By Kevin Duffy – Great Lakes Echo – January 28, 2015

New climate projections suggest increases in maximum and minimum daily temperatures in the Lake Michigan basin by as much as 8 degrees by 2099. With temperatures rising, annual water flow from precipitation and runoff is expected to increase during winter and decrease in spring, especially in northern Michigan and Wisconsin. A recent report by the U.S. Geological Survey (USGS) is intended to help land managers cope with the seasonal changes resulting from climate change in the lake basin. For full story, [click here](#).

### **Climate Change Redistributes Fish Species at High Latitudes**

Point Blue – January 27, 2015

For millions of years, large parts of the marine biotas of the North Atlantic and North Pacific have been separated by harsh climate conditions in the Arctic. A new study underlines that climate change has begun to weaken this natural barrier promoting the interchange of fishes between the two oceans along with many ecological and economic consequences....The team's results based on predictive ecological modelling, shows that Arctic warming promotes the interchange of fishes between the North Atlantic and North Pacific Oceans via the Northwest and Northeast Passages as sea temperatures and productivity increase at high latitudes. For full story, [click here](#).

### **Senate finally admits climate change is real**

By Ryan Gorman – AOL.com – January 22, 2015 – Video

The U.S. Senate has finally admitted climate change is real -- but with a caveat. Senators voted 98-1 Wednesday in support of legislation approving the controversial Keystone XL pipeline that included an amendment also forced the politicians to concede climate change is "not a hoax." Democrats forced the additional language into the bill as they continue to oppose the pipeline on grounds it will accelerate climate change. The amendment asked lawmakers to acknowledge "that climate change is real and not a hoax," a direct shot at Senator James Inhofe (R-OK). Inhofe infamously called climate change "a hoax"

only last year but surprisingly supported the amendment. "Climate is changing," Inhofe reportedly said just before the vote was tallied, "and climate has always changed." For full story and to view video, [click here](#).

### **The words we use matter in climate change adaptation**

By Amy Freitag – Southern Fried Science – January 17, 2015

In 2012, North Carolina outlawed climate change, receiving major press as the face of conservative climate policy. The intent of the law was to stop planning processes from basing their decisions on modeled climate change scenarios of the future, which would halt large investments in coastal development. But the letter of the law actually outlawed the sea from rising, and the new legislation met the American public as the face of many public jokes making North Carolinians look quite naive about the future changes in our ecosystem. The immediate response of state agencies was to follow the letter of the law and remove the phrase "climate change" from their websites, reports, and other public-facing documents. For full story, [click here](#).

### **It's official: 2014 was the hottest year**

By Joby Warrick and Chris Mooney – The Washington Post – January 16, 2015 – Video

Planet Earth set an ominous record last year as global temperatures rose to the highest level since modern measurements began, scientists said Friday in a report that heightened concerns about humanity's growing toll on the natural systems that sustain life. The year 2014 was declared the hottest year in a joint announcement by NASA and the National Oceanic and Atmospheric Administration, based on separate analyses of weather records dating back to 1880, when Rutherford B. Hayes occupied the White House. For full story and to view video, [click here](#).

### **Ocean Life Faces Mass Extinction, Broad Study Says**

By Carl Zimmer – The New York Times – January 15, 2015

A team of scientists, in a groundbreaking analysis of data from hundreds of sources, has concluded that humans are on the verge of causing unprecedented damage to the oceans and the animals living in them. "We may be sitting on a precipice of a major extinction event," said Douglas J. McCauley, an ecologist at the University of California, Santa Barbara, and an author of the new research, which was published on Thursday in the journal *Science*. But there is still time to avert catastrophe, Dr. McCauley and his colleagues also found. Compared with the continents, the oceans are mostly intact, still wild enough to bounce back to ecological health. For full story, [click here](#).

### **Sportsmen's Organizations Applaud EPA's Final Science Report**

By Lacey McCormick – National Wildlife Federation – January 15, 2015

After years of study, the Environmental Protection Agency (EPA) has released a final science report entitled, [Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence](#). This report scientifically documents the connection between smaller wetlands and streams to larger waters, incorporating the recommendations of two dozen of the nation's leading hydrologists and biologists. For full article and to download the report, [click here](#).

### **New Research May Solve Puzzle in Sea Level's Rise**

By Justin Gillis – The New York Times – January 14, 2015

A team of researchers reported Wednesday that the ocean did not rise quite as much as previously believed in the 20th century. They proposed a seemingly tiny adjustment that could make a big difference in scientific understanding of the looming problem of sea-level rise. For full story, [click here](#).

### **Study: Earth's fresh-water resources at risk**

By Tom Henry – The Blade – January 11, 2015

Although western Lake Erie has become an international poster child for noxious algae, a new study suggests that many of the world's much smaller, cleaner, and calmer bodies of water are likewise in trouble if greater efforts are not undertaken to keep farm fertilizers and other nutrients out of them. The study's lead author, Dartmouth College biology professor Kathryn Cottingham, said that's more evidence of how climate change, population growth, and poor land-use practices are putting the Earth's dwindling freshwater resources at risk. For full story, [click here](#).

## Getting to the bottom of Lake Erie's water quality woes

By Madeline Fisher – American Society of Agronomy – December 15, 2014

Reading this summer's media coverage of Lake Erie's water quality woes, you might conclude that the lake's harmful algal blooms (HABs) would stop if farmers simply fertilized less. But as anyone who knows the complexities of natural and managed systems can tell you, silver bullet solutions don't exist—no matter how much government officials and the public may want them in the wake of Toledo's drinking water crisis in early August. For one thing, the agricultural community is well aware that the load of dissolved reactive phosphorus—the main fuel for HABs—has been rising in Lake Erie since the late 1990s, even as total phosphorus has held steady or declined. What's still not clear is exactly why. For full story, [click here](#).

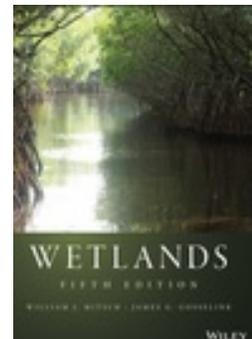


## RESOURCES & PUBLICATIONS

### Wetlands, 5th Edition

By William J. Mitsch and James G. Gosselink, – Wiley – March 2015

For nearly three decades, *Wetlands* has been the premier text on wetlands for students and professionals worldwide. This comprehensive volume represents the current state of knowledge in wetland science, management, and restoration. In this Fifth Edition, substantial revisions and updates bring the book into alignment with the way wetland science and management is practiced today. For more information and to order *Wetlands*, [click here](#).



## Getting to Green: Paying for Green Infrastructure, Finance Options and Resources for Local Decision-Makers

U.S. Environmental Protection Agency – December 2014

[Getting to Green: Paying for Green Infrastructure, Finance Options and Resources for Local Decision-Makers](#) summarizes various funding sources that can be used to support stormwater management programs or finance individual projects. Each type of funding source is illustrated by several municipal programs and contains a list of additional resources. A comparative matrix is included which describes the advantages and disadvantages of the various funding sources. To download this report, [click here](#).

## Coastal Stormwater Management through Green Infrastructure: A Handbook for Municipalities

U.S. Environmental Protection Agency – December 2014

[Coastal Stormwater Management through Green Infrastructure: A Handbook for Municipalities](#) is designed to assist coastal municipalities within the Massachusetts Bay and Cape Cod Bay areas to incorporate green infrastructure into their stormwater management planning. The Handbook can also be applied more broadly by municipal infrastructure and resource managers located in other States. The document presents the following process for green infrastructure planning: 1) watershed assessment, 2) site identification and prioritization, 3) site planning, 4) selecting appropriate green infrastructure practices, 5) developing conceptual plans, and 6) effective plan review. To download the report, [click here](#).



## POTPOURRI

### Geoengineering won't solve climate change: Our view

USA Today Opinion – February 15, 2015

Efforts to reduce emissions of climate-disrupting greenhouse gases are moving at a pace that is, well, glacial. Human activity continues to spew tens of billions of tons of carbon dioxide into the air every year. And even though a bone-chilling cold snap has the eastern U.S. shivering this week, the globe as a whole continues to warm at a scary pace. So it's not surprising that some scientists, economists and politicians have begun to discuss a Plan B. For full opinion, [click here](#).

### Big Bang May Never Happened, Universe Has No Beginning or End: Study

Gadgets NDTV – February 12, 2015

The Big Bang never happened and our universe may have no beginning and no end, suggests a new theory by physicists, including one of Indian-origin. The theory applies quantum correction terms to complement Einstein's theory of general relativity and may also account for dark matter and dark energy. The widely accepted age of the universe, as estimated by general relativity, is 13.8 billion years. In the beginning, everything in existence is thought to have occupied a single infinitely dense point, or singularity. Only after this point began to expand in a "Big Bang" did the universe officially begin. Although the Big Bang singularity arises directly and unavoidably from the mathematics of general relativity, some scientists see it as problematic because the math can explain only what happened immediately after - not at or before - the singularity, 'Phys.org' reported. For full story, [click here](#).

### Great Lakes Restoration Initiative Great Lakes Fish Monitoring and Surveillance Program Request for Application

U.S. Environmental Protection Agency – February 9, 2015

EPA is soliciting applications for a cooperative agreement for a project to complete chemical analysis in support of the Great Lakes Fish Monitoring and Surveillance Program. Application deadline is April 17, 2015. This Request for Applications (RFA) solicits applications from eligible entities for a cooperative agreement to support the Great Lakes Fish Monitoring and Surveillance Program (GLFMSP) pursuant to the [Great Lakes Restoration Initiative Action Plan II](#). The GLFMSP is a long-term monitoring and surveillance program that has been in continuous operation since 1970. The GLFMSP measures the concentrations of legacy and emerging chemicals in Great Lakes whole fish tissue. These measurements are used to track the effectiveness of toxic reduction efforts, track environmental trends, and inform programs that issue health information on chemicals of concern. For more information on the GLFMSP, please [go here](#).

### Climate Change Economics: Treading Water

By Laura Parker – National Geographic – February 2015

Frank Behrens, a gregarious pitchman for a Dutch development company that sees profit, not loss, in climate change, cuts the engine on our 22-foot Hurricane runabout. We drift through brackish water toward the middle of privately owned Maule Lake in North Miami Beach. The lake, like so many others in Florida, began as a rock quarry. More recently, as if to underscore the impermanence of South Florida's geography, more than one developer has toyed with partially filling in the lake to build condos. For full article, [click here](#).

### Lessons Learned from the Great American Adaptation Road Trip

Georgetown Climate Center – January 26, 2015

After visiting more than 30 communities across the U.S. that are preparing for climate change, two enterprising young authors identify six big lessons from ongoing adaptation work in a new report recently released by the Georgetown Climate Center. Over the course of 103 days, authors Allie Goldstein and Kirsten Howard traveled 17,358 miles and interviewed more than 150 people, from shellfish farmers on the Olympic Peninsula to city planners in Baltimore. The road trippers have already published 34 stories about the work that communities are doing to prepare for climate change. The lessons found in the new report, "The Great American Adaptation Road Trip," explain why these communities have had success

implementing their projects and what is needed to prompt climate change preparation in more places across the country. For full story, [click here](#).

## Meeting two degree climate target means 80 per cent of worlds' coal is unburnable, study says

By Roz Pidcock – The Carbon Brief – January 7, 2015

More than 80 per cent of the world's known coal reserves need to stay in the ground to avoid dangerous climate change, according to new research. Thirty per cent of known oil and 50 per cent of gas reserves are unburnable and drilling in the Arctic is out of the question if we're to stay below two degrees, the new research notes. That vast amounts of fossil fuels must go unused if we're to keep warming in check isn't a new idea. What's novel about today's paper is that it pinpoints how much fuel is unburnable in specific regions of the world, from Canadian tar sands to the oil-rich Middle East. For full blog post, [click here](#).

## CALENDAR OF EVENTS

### WEBINARS, MEETINGS, TRAINING, SPECIAL EVENTS

| WEBINAR   |   |
|---|---|
| <a href="#">FEBRUARY 2015</a>                               |   |
| February 25, 2015<br>3:00 p.m.-4:30 p.m. ET                 | <a href="#">ASWM's Members' Webinar: Monitoring Results from the Big Spring Run Aquatic Ecosystem Restoration Project and Prospects for Addressing Watershed Impairments Related to Legacy Sediment</a><br>Presented by Jeff Hartranft, Pennsylvania Department of Environmental Protection |
| February 25, 2015<br>11:00 am-12:00 noon                    | California Landscape Conservation Cooperative webinar: <a href="#">Impacts of Climate Change on Waterbirds of the Central Valley</a> .<br>Speakers Dr. Joe Fleskes and Elliott Matchett, USGS Western Ecological Research   |
| February 25, 2015 at 2 pm<br>EST / 11 am PST / 7 pm<br>GMT. | Webinar: <a href="#">Application of the Sea-Level Affecting Marshes Model (SLAMM) to New York and Connecticut</a> by Amy Polaczyk of Warren Pinnacle. To register, <a href="#">click here</a> .   |
| <a href="#">MARCH 2015</a>                                  |   |
| March 3, 2015<br>3:00 p.m. EST                              | <a href="#">NFFA Webinar: EPA Adaptation Workbook: Lessons Learned in San Juan Bay, Puerto Rico</a> . Presented by Michael Craghan, Climate Ready Estuaries Program, U.S. EPA   |
| March 4, 2015<br>1:00 p.m.-2:00 p.m. EST                    | Ecosystem-Based Management Tools Network webinar: <a href="#">Estimating Blue Carbon Storage in Texas Coastal Wetlands</a>  |
| March 9, 2015<br>5:30 p.m.-6:30 p.m.                        | Ecological Landscape Alliance Webinar: <a href="#">Water Conservation: Landscape Design Strategies</a>  |
| March 10 and 12, 2015<br>2:00pm EDT                         | Forester University presents Surface Water Master Class Series webinar: <a href="#">Hydrology 101, Part I</a><br><br><a href="#">Hydrology 101, Part II</a> will be held on April 28 and 30, 2015.  |
| March 12, 2015<br>1pm EDT                                   | Webinar: <a href="#">Climate-Smart Adaptation: Vulnerability Assessment Results and Next Steps for the North-central California Coast and Ocean</a> by Sara Hutto, Ocean Climate Specialist, Gulf of the Farallones National Marine Sanctuary   |

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| March 17, 2015<br>3:00 p.m. ET                   | <a href="#">ASWM's Wetland Restoration Webinar: Pacific Coast Wetland Restoration</a> . Presented by Charles ("Si") Simenstad, University of Washington and John Callaway, University of San Francisco   |
| March 18, 2015<br>1:00 p.m.-2:30 p.m. EST        | The Center for Watershed Protection Webinar: <a href="#">The Runoff Reduction Method &amp; Its Applications</a> . For more information, <a href="#">click here</a> . To register, <a href="#">click here</a> .   |
| March 23 and<br>March 25, 2015                   | Floodplain Management Association Webnar: <a href="#">Hydraulics for Non-Engineers</a>   |
| March 25, 2015                                   | Wetland Mapping Consortium (WMC): ASWM Winter Meeting Workshop – WMC Workshop: “ <a href="#">Accessing, Analyzing and Communicating Digital Wetland Data to Stakeholders for Decision-making</a> ”   |
| <b><a href="#">APRIL 2015</a></b>                |  |
| April 21, 2015<br>3:00 pm eastern                | Association of State Wetland Managers Restoration webinar: <a href="#">Vernal Pool Restoration – How to Restore the Landscape</a> presented by Mick Micacchion, Midwest Biodiversity Institute; Christina M. Schaefer, Schaefer Ecological Solutions; and Aram J.K. Calhoun, The University of Maine |
| April 28 and 30, 2015<br>2:00pm EDT              | Forester University presents Surface Water Master Class Series webinar: <a href="#">Hydrology 101, Part II</a>   |
| April 30, 2015<br>3:00 p.m.                      | Association of State Wetland Managers Members' Wetland Webinar: <a href="#">Findings from a 2014 Study of Massachusetts Wetland Replication Projects</a> (Replication Measures, Success and an Interesting Finding About Vegetation)   |
| <b>MEETINGS</b>                                  |  |
| <b><a href="#">FEBRUARY 2015</a></b>             |  |
| February 25-26, 2015<br>Toronto, Ontario, Canada | International Conference on <a href="#">Water Management Modeling</a> . Abstract <a href="#">deadline</a> is February 3, 2015  |
| February 26, 2015<br>Naples, Florida             | The Bernard and Susan Master, 2015 Moonlight on the Marsh Distinguished Lecture Series presents <a href="#">Restoring the World's Rivers and Watersheds With Echohydrology</a> . For a complete list of lecture series, <a href="#">click here</a> .   |
| February 28, 2015<br>Worcester, Massachusetts    | Massachusetts Association of Conservation Commissions: <a href="#">Annual Environmental Conference</a>   |
| <b><a href="#">MARCH 2015</a></b>                |  |
| March 5-6, 2015<br>Oconomowoc, Wisconsin         | Wisconsin Section of the American Water Resources Association (AWRA): <a href="#">Wisconsin Water Resources and Agriculture</a>  |
| March 6, 2015<br>East Lansing, Michigan          | Michigan Chapter of the Soil and Water Conservation Society Seminar: <a href="#">A Matter of Balance: Feeding our Crops and Protecting our Water in a Changing Climate</a>   |
| March 10-12, 2015<br>Ft. Collins, Colorado       | High Altitude Revegetation Committee and Central Rockies Chapter of the Society for Ecological Restoration joint 2015 Conference and Workshop: <a href="#">The High Altitude Restoration Science &amp; Practice</a>  |

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| March 10-12, 2015<br>Ottawa, Ontario, Canada                     | Canadian Water Network (CWR): <a href="#">Connecting Water Resources 2015 - From Knowledge to Action</a>  |
| March 11-12, 2015<br>Toledo, Ohio                                | U.S. Environmental Protection Agency will be hosting the <a href="#">2015 Great Lakes Areas of Concern Conference</a>   |
| March 12, 2015<br>Naples, Florida                                | The Bernard and Susan Master, 2015 Moonlight on the Marsh Distinguished Lecture Series presents <a href="#">Preventing Coastal Dead Zones from a Distance</a> For a complete list of lecture series, <a href="#">click here</a> . |
| March 12-13, 2015<br>Denver, Colorado                            | 2015 Annual Land Use Conference: <a href="#">Western Places/Western Spaces: Building Fair and Resilient Communities</a>   |
| March 14, 2015<br>Willoughby Hills, Ohio                         | Ohio Wetlands Association: <a href="#">Vernal Pool Workshop</a><br>this workshop will also be held on March 28, 2015.   |
| March 15 - 18, 2015<br>Portland, Oregon                          | American Water Works Association <a href="#">Sustainable Water Management Conference</a>  |
| March 19, 2015<br>Southbury, Connecticut                         | 2015 Annual Meeting of the <a href="#">Connecticut Association of Wetland Scientists</a> :  |
| March 21, 2015<br>Worcester, Massachusetts                       | Massachusetts Land Trust Coalition 25th Massachusetts Land Conservation Conference: <a href="#">Gaining Ground: Conserving Our Common Wealth</a>  |
| March 24-26, 2015<br>Las Cruces, New Mexico                      | Climate Prediction Applications Science Workshop: <a href="#">Climate and Drought Information for Food Resilience, Agriculture, and Water Resources</a>   |
| March 25, 2015<br>Chelmsford, Massachusetts                      | New England Interstate Water Pollution Control Commission (NEIWPCC): <a href="#">Stormwater Utility Workshop</a>  |
| March 25-27, 2015<br>Berkeley, California                        | UC Berkeley, in partnership with the National Park Service and National Geographic Society: <a href="#">Science for Parks, Parks for Science: The Next Century</a>  |
| March 26-28, 2015<br>University of Delaware,<br>Newark, Delaware | Society for Ecological Restoration Mid-Atlantic Chapter Annual Conference: <a href="#">Working Together to Ecologically Restore the Mid-Atlantic Region</a>   |
| March 28, 2015<br>Delaware, Ohio                                 | Ohio Wetlands Association: <a href="#">Vernal Pool Workshop</a>   |
| March 28-29, 2015<br>Indiana University<br>Bloomington, Indiana  | <a href="#">2015 Midwest Ecology and Evolution Conference</a>   |
| March 30-April 1, 2015<br>Los Angeles, California                | 2015 American Water Resources Association (AWRA) Spring Specialty Conference on <a href="#">Water for Urban Areas</a>   |
| March 30-April 2, 2015<br>North Charleston,<br>South Carolina    | Association of State Floodplain Managers: <a href="#">Coastal GeoTools Conference</a>   |
| <b><a href="#">APRIL 2015</a></b>                                |   |
| April 1-3, 2015<br>Asheville, North Carolina                     | North Carolina State University Stream Restoration Program workshop: <a href="#">Stream Morphology Assessment</a>   |
| April 10-11, 2015<br>Vancouver, British Columbia                 | International Conference on Climate Change: <a href="#">Impacts and Responses</a>   |

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| April 23-30, 2015<br>Nairobi, Kenya             | International Institute for Environment and Development: <a href="#">9th annual International Conference on Community-Based Adaptation</a>                       |
| April 26-30, 2015<br>Traverse City, Michigan    | NatureServe network's annual conference: <a href="#">Biodiversity Without Boundaries 2015</a>  |
| April 27–29, 2015<br>Syracuse, New York         | New York State Floodplain and Stormwater Managers Association: <a href="#">15<sup>th</sup> Annual Meeting</a>  |
| April 28-29, 2015<br>Freeport, Maine            | NEIWPCC 26th Annual Nonpoint Source Pollution: <a href="#">The Watershed Approach: Addressing Today's Challenges with an Eye on the Future</a>                   |
| <b><a href="#">MAY 2015</a></b>                 |  |
| May 3-5, 2015<br>Chicago, Illinois              | American Society of Agricultural and Biological Engineers (ASABE): <a href="#">Climate Change Symposium - Adaptation and Mitigation</a>                          |
| May 5-8, 2015<br>Orlando, Florida               | National Mitigation & Ecosystem Banking Conference: <a href="#">Training &amp; Education, Moderated Exchanges, Networking</a>                                    |
| May 6-7, 2015<br>Castlegar, BC, Canada          | Columbia Mountains Institute of Applied Ecology: <a href="#">Regulated Rivers: Environment, Ecology, and Management Conference</a>                               |
| May 6-8, 2015<br>Asheville, NC                  | North Carolina State University Stream Restoration Program workshop: <a href="#">Natural Channel Design Principles</a>   |
| May 6-8, 2015<br>Sandusky, Ohio                 | The Tinker's Creek Watershed Partners and the Ohio Stormwater Association: <a href="#">2015 Ohio Stormwater Conference</a>                                       |
| May 12-14, 2015<br>Raleigh, North Carolina      | North Carolina State University Stream Restoration Program workshop: <a href="#">Coastal Plain Restoration Tour and Evaluation</a>                               |
| May 12-14, 2015<br>St. Louis, Missouri          | EcoAdapt: <a href="#">National Adaptation Forum</a>  |
| May 20-22, 2015<br>Fort Collins, Colorado       | North Central Climate Science Center 2015 Open Science Conference: <a href="#">Integrating research and management of change from mountains to plains</a>        |
| May 25-29, 2015<br>Burlington, Vermont          | International Association for Great Lakes Research (IAGLR): <a href="#">58th Annual Conference on Great Lakes Research</a>                                       |
| May 30, 2015<br>New London, Ohio                | Ohio Wetlands Association: <a href="#">Big Swamp Plant Identification Workshop</a>   |
| May 31-June 4, 2015<br>Providence, Rhode Island | 2015 Society of Wetland Scientists Annual Meeting: <a href="#">Changing climate. Changing wetlands</a>   |
| <b><a href="#">JUNE 2015</a></b>                |  |
| June 1-5, 2015<br>Buffalo, New York             | University at Buffalo's Summer Workshop Series in <a href="#">Stream Restoration</a>   |
| June 15-17, 2015<br>New Orleans, Louisiana      | American Water Resources Association (AWRA) Specialty Conference: <a href="#">Climate Change Adaptation</a> . <a href="#">Abstracts due</a> by February 13, 2015 |
| June 22-24 2015<br>Groningen, The Netherlands   | University of Massachusetts-Amherst: <a href="#">Fish Passage 2015</a>   |
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| <b><u>JULY 2015</u></b>                         |   |
| July 5-10, 2015<br>Portland, Oregon             | 9th Annual IALE World Congress: <a href="#">Crossing Scales, Crossing Borders: Global Approaches to Complex Challenges</a> . Call for <a href="#">presentations</a> deadline: March 1, 2015 |
| July 8-10, 2015<br>Raleigh, North Carolina      | North Carolina State University Stream Restoration Program workshop: <a href="#">Hydraulic Modeling for Stream Restoration</a>  |
| July 21-23, 2015<br>Breckenridge, Colorado      | <a href="#">Rocky Mountain Stream Restoration Conference</a>  |
| July 27-August 2, 2015<br>Nagoya Japan          | XIX INQUA Congress <a href="#">Quaternary Perspectives on Climate Change, Natural Hazards and Civilization</a>  |
| <b><u>AUGUST 2015</u></b>                       |   |
| August 2-5, 2015<br>Windsor, Ontario, Canada    | 21st International Conference on <a href="#">Environmental Indicators</a>   |
| August 9-14, 2015<br>Baltimore, Maryland        | The Ecological Society of America: <a href="#">Ecological Science at the Frontier: Celebrating ESA's Centennial</a>   |
| August 23-27, 2015<br>Manchester, England       | Society of Ecological Restoration 6th World Conference on Ecological Restoration: <a href="#">Towards Resilient Ecosystems: Restoring the Urban, the Rural and the Wild</a>                 |
| August 23-28, 2015<br>La Crosse, Wisconsin      | <a href="#">4th Biennial Symposium of the International Society for River Science</a>   |
| August 23-28, 2015<br>Stockholm, Sweden         | Stockholm International Water Institute: <a href="#">2015 World Water Week</a>  |
| August 26-28, 2015<br>San Francisco, California | U.S. Water Alliance: <a href="#">One Water Leadership Summit</a>  |
| <b><u>SEPTEMBER 2015</u></b>                    |   |
| September 23-25, 2015<br>Baltimore, Maryland    | Resource Institute, Inc.: <a href="#">Mid-Atlantic Stream Restoration Conference</a>  |
| <b><u>NOVEMBER 2015</u></b>                     |   |
| November 16-18, 2015<br>Greater Portland, Maine | Think Blue Maine Partner <a href="#">Maine Stormwater Conference</a> . Abstract deadline is Friday, March 27, 2015.   |
| <b>TRAINING</b>                                 |   |
| <b><u>MARCH 2015</u></b>                        |   |
| March 10-12, 2015<br>McClellan, California      | The Floodplain Management Association course: <a href="#">2D HEC-RAS Modeling</a>   |
| March 16-18, 2015<br>Naples, Florida            | Everglades Wetland Research Park course: <a href="#">Treatment Wetlands</a>   |
| March 17-21, 2014<br>Naples, Florida            | Everglades Wetland Research Park course: <a href="#">Wetland Delineation</a>  |
| March 23-26, 2015<br>Nashville, Tennessee       | Richard Chinn Environmental Training, Inc.: <a href="#">Wetland Delineation Training</a>  |

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| March 30-31, 2015<br>San Diego, California  | Wetland Training Institute, Inc.: <a href="#">San Diego County Vernal Pool Habitat Restoration and Flora</a>   |
| <b><a href="#">APRIL 2015</a></b>   |  |
| April 23, 2015<br>Sacramento, California  | UC Davis Extension course: <a href="#">CEQA and Climate Change: An In-Depth Update</a>   |
| April 27-30, 2015<br>Columbus, Ohio   | Midwest Biodiversity Institute: <a href="#">Wetland Delineation Course</a>   |
| <b><a href="#">MAY 2015</a></b>   |  |
| May 5-6, 2015<br>Columbus, Ohio   | Midwest Biodiversity Institute: <a href="#">Habitat Assessment Using the QHEI</a><br>This course will also be held on June 1-2, 2015   |
| May 7-8, 2015<br>Columbus, Ohio   | Midwest Biodiversity Institute: <a href="#">Primary Headwater Habitat (PHWH)</a>   |
| May 11-July 17, 2015<br>University of Louisville-<br>Speed School of<br>Engineering | Wetland Design Online Course. For more information, contact: Ify Whitfill <a href="mailto:ihwhit02@louisville.edu">ihwhit02@louisville.edu</a> ; <a href="#">go here</a> or <a href="#">go directly here</a> .   |
| May 18-22, 2015<br>Richmond, Kentucky   | Wetland Design and Restoration Techniques Field Course at Eastern Kentucky University. Undergraduate and Graduate Level, 2-Credits. Contact: <a href="mailto:stephen.richter@eku.edu">stephen.richter@eku.edu</a> or <a href="#">go here</a> for more information. |
| May 20-21, 2015<br>Columbus, Ohio   | Midwest Biodiversity Institute: <a href="#">Amphibian Index of Biotic Integrity (AmphIBI)</a>  |
| May 26-29, 2015<br>Basking Ridge, New Jersey  | Rutgers Office of Continuing Education course: <a href="#">Methodology for Delineating Wetlands</a> . Instructors: Ralph Tiner and Mallory N. Gilbert. Register by May 12, 2015 and save.  |
| May 27-28, 2015<br>Columbus, OH   | Midwest Biodiversity Institute: <a href="#">Ohio Rapid Assessment Method (ORAM)</a>  |
| <b><a href="#">JUNE 2015</a></b>  |  |
| June 1-2, 2015<br>Banner Elk, North Carolina  | North Carolina State University Stream Restoration Program course: <a href="#">Assessment and Identification of Riparian Vegetation</a>  |
| June 1-2, 2015<br>Columbus, Ohio  | Midwest Biodiversity Institute: <a href="#">Habitat Assessment Using the QHEI</a><br>This <a href="#">course</a> will also be held on May 5-6, 2015 in Columbus, Ohio.   |
| June 1-5, 2015<br>Columbus, Ohio  | Midwest Biodiversity Institute: <a href="#">Level 3 Bioassessment: Fish</a>  |
| June 15-18, 2015<br>Hastings, Michigan  | Institute of Botanical Training: <a href="#">Wetland Flora Workshop</a><br><br>Other dates: June 29-July 2, 2015 in Des Moines, Iowa and July 13-16, 2015 in Indianapolis, Indiana   |
| June 22-25, 2015<br>State College, Pennsylvania                                     | Wetland Training Institute, Inc. course: <a href="#">Planning Hydrology, Vegetation, and Soils for Constructed Wetlands</a>  |
| June 23-25, 2015<br>Columbus, Ohio  | Midwest Biodiversity Institute: <a href="#">Identification of Common Wetland Plants</a>  |

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| <b><u>JULY 2015</u></b>                 |  |
| July 6-August 14, 2015<br>SUNY-ESF      | Wetland Restoration Techniques online course at SUNY-ESF. Undergraduate and Graduate level, 3-Credits. For more information, <a href="#">go here</a> or go <a href="#">directly here</a> .   |
| July 14-15, 2015<br>LaGrange, Ohio      | Midwest Biodiversity Institute: <a href="#">Wetland Restoration</a>  |
| July 28 & 29, 2015<br>Tully, New York   | Wetland Restoration Techniques Practicum at SUNY-ESF. Undergraduate and Graduate Level, 1-Credit. . For more information, contact <a href="mailto:banevman@esf.edu">banevman@esf.edu</a> ; <a href="#">go here</a> or go <a href="#">directly here</a> .   |
| <b><u>SPECIAL EVENTS</u></b>            |  |
| April 24-25, 2015<br>Great Bend, Kansas | The <a href="#">Kansas Wetlands Education Center</a> , along with <a href="#">Kansas Department of Wildlife Parks &amp; Tourism</a> , <a href="#">The Nature Conservancy</a> , and the <a href="#">Great Bend Convention and Visitors Bureau</a> will host the <a href="#">Wings N Wetlands Birding Festival</a> |

For more wetland events, meetings, conferences, and courses nationwide, visit the [ASWM calendar](#).

## JOBS



## INDEX

### EDITOR'S NOTE

### EDITOR'S CHOICE

- A New Way to Tame Rivers is Better for Humans and Salmon
- Arctic marine emissions to increase vastly over next decade: report
- Scientists look at role of wetlands in battle against climate change
- Voluntary plan to reduce fertilizers not enough to shrink Gulf's 'Dead Zone', new study says
- USDA Accepting Applications for Conservation Stewardship Program
- Obama administration will plan for rising seas in all federal projects
- EPA Awards \$1 Million in Grants to Protect and Restore America's Wetlands
- NOAA Fisheries Releases Draft Climate Science Strategy for Public Comment
- 2015 U.S. Ramsar Wetlands Photo Contest!
- Natural Floodplain Functions Alliance (NFFA) Webinar – March 3, 2015
- ASWM's Members' Webinar: Monitoring Results from the Big Spring Run Aquatic Ecosystem Restoration Project and Prospects for Addressing Watershed Impairments Related to Legacy Sediment

- ASWM's Wetland Restoration Webinar: Pacific Coast Wetland Restoration
- WMC Workshop: "Accessing, Analyzing and Communicating Digital Wetland Data to Stakeholders for Decision-making"

## NATIONAL NEWS

- America's heartland risks ag economic disruptions as climate change advances, report says
- A 'megadrought' will grip U.S. in the coming decades, NASA researchers say
- New York-New Jersey harbors see 'substantial progress' after decades of pollution, group says
- Clean Water Act Interpretive Rule for 404(f)(1)(A) Withdrawal
- GOP lawmakers push EPA to rethink clean water rule
- Loving the Puget Sound to Death
- Chesapeake Bay recovering but still under stress, report finds
- Where Did the Missing Oil Go? New Study Says Some is Sitting on the Gulf
- Obama budget seeks \$50 million cut in Great Lakes restoration
- Obama's Budget Reveals Depth and Breadth of His Climate Agenda
- Going With the Flow
- The Quality of the Nation's Groundwater
- Plan targets farmers in 3 states to reduce Lake Erie algae
- Biden to announce water infrastructure spending push
- White House Environmental Adviser to Resign
- Appalachian environmental groups push EPA to enforce Clean Water Act in KY,WV
- Study says USDA effort benefits birds after 2010 Gulf oil spill

## STATES NEWS

- AK: Federal agencies at odds over drilling plan for Alaska reserve
- CA: High levels of benzene found in fracking waste water
- CA: Dealing with sea level rise becomes real in Marin
- CA: New plan pitched to enhance Bolinas Lagoon
- FL: Fireproofing chemicals found in lagoon marine life
- FL: Decline in South Florida wading birds could mean Everglades worse off
- FL: Fort Lauderdale innovative Program Aims to Protect Community Against Local Flood Hazard
- IA: A closely watched fight brewing over nitrates in Iowa water
- IL: Dixon Waterfowl Refuge gains additional acreage, new habitats
- LA: Coastal Master Plan could grow by \$20 billion, state planners say
- LA: Gov. Jindal asks state Supreme Court to uphold law banning wetlands damage suit
- MI: EPA sets dioxin cleanup plan for floodplain
- MI: Michigan's bald eagles full of flame retardants
- MN: Farmers adapt to big rains but send trouble downstream
- MN: Minnesota struggles to slow deforestation, protect water
- NY: Plan to Protect Manhattan from Sandy 2.0 Moves Forward
- NC: Pig poop fouling North Carolina streams; state permitting questioned
- NC: Criminal charges in spills to cost Duke Energy \$100 million
- ND: Ruptured Pipeline Sends Millions of Gallons of Wastewater into N.D. Creek
- OH: Ohio Senate OKs regulations to tackle Lake Erie pollution
- OR: Oregon chub becomes first fish to leave endangered species list
- OR: NOAA, EPA disapprove Oregon's coastal nonpoint pollution control program
- PA: New NRDC Report Shows How Philadelphia's Greened Acre Retrofit Program is catalyzing low-cost green infrastructure retrofits on private property
- SC: Carbon-Offset Project Protects 4,000+ Acres Of Southern Coastal Habitat
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- WI: Walker plan to freeze land purchases wins support, dismay
- WI: Fitchburg appeals decision halting potential development near Waubesa wetlands
- WY: Fewer trade secrets for Wyoming fracking fluid

## WETLAND SCIENCE

- To save their depleted species, female blue crabs go the extra mile to spawn in the bay
- Ranchers crucial to saving sage grouse – USDA
- US launches plan to halt decline of monarch butterfly
- Atlantic Corals: Colorful and Vulnerable
- Caring for sea otters offers climate bonus
- Climate affects how the Great Lakes grow and flow
- Climate Change Redistributes Fish Species at High Latitudes
- Senate finally admits climate change is real
- The words we use matter in climate change adaptation
- It's official: 2014 was the hottest year
- Ocean Life Faces Mass Extinction, Broad Study Says
- Sportsmen's Organizations Applaud EPA's Final Science Report
- New Research May Solve Puzzle in Sea Level's Rise
- Study: Earth's fresh-water resources at risk
- Getting to the bottom of Lake Erie's water quality woes

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- Getting to Green: Paying for Green Infrastructure, Finance Options and Resources for Local Decision-Makers
- Coastal Stormwater Management through Green Infrastructure: A Handbook for Municipalities

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- Geoengineering won't solve climate change: Our view
- Big Bang May Never Happened, Universe Has No Beginning or End: Study
- Great Lakes Restoration Initiative Great Lakes Fish Monitoring and Surveillance Program Request for Application
- Lessons Learned from the Great American Adaptation Road Trip
- Meeting two degree climate target means 80 per cent of worlds' coal is unburnable, study says

## WEBINARS, MEETINGS, TRAINING, SPECIAL EVENTS

### **Webinars**

- ASWM's Members' Webinar: Monitoring Results from the Big Spring Run Aquatic Ecosystem Restoration Project and Prospects for Addressing Watershed Impairments Related to Legacy Sediment
- Impacts of Climate Change on Waterbirds of the Central Valley
- Application of the Sea-Level Affecting Marshes Model (SLAMM) to New York and Connecticut
- EPA Adaptation Workbook: Lessons Learned in San Juan Bay, Puerto Rico
- Estimating Blue Carbon Storage in Texas Coastal Wetlands
- Water Conservation: Landscape Design Strategies
- Hydrology 101, Part I
- Climate-Smart Adaptation: Vulnerability Assessment Results and Next Steps for the North-central California Coast and Ocean
- ASWM's Wetland Restoration Webinar: Pacific Coast Wetland Restoration
- The Runoff Reduction Method & Its Applications
- Hydraulics for Non-Engineers
- Wetland Mapping Consortium (WMC): ASWM Winter Meeting Workshop – WMC Workshop: "Accessing, Analyzing and Communicating Digital Wetland Data to Stakeholders for Decision-making"
- Association of State Wetland Managers Restoration webinar: Vernal Pool Restoration – How to Restore the Landscape
- Hydrology 101, Part II
- Association of State Wetland Managers Members' Wetland Webinar: Findings from a 2014 Study of Massachusetts Wetland Replication Projects

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- International Conference on Water Management Modeling
- Restoring the World's Rivers and Watersheds With Ecohydrology
- Annual Environmental Conference
- Wisconsin Water Resources and Agriculture
- A Matter of Balance: Feeding our Crops and Protecting our Water in a Changing Climate
- The High Altitude Restoration Science & Practice
- Connecting Water Resources 2015 - From Knowledge to Action
- 2015 Great Lakes Areas of Concern Conference
- Preventing Coastal Dead Zones from a Distance
- Western Places/Western Spaces: Building Fair and Resilient Communities
- Vernal Pool Workshop
- Sustainable Water Management Conference
- Connecticut Association of Wetland Scientists
- Gaining Ground: Conserving Our Common Wealth
- Climate and Drought Information for Food Resilience, Agriculture, and Water Resources
- Stormwater Utility Workshop
- Science for Parks, Parks for Science: The Next Century
- Working Together to Ecologically Restore the Mid-Atlantic Region
- Ohio Wetlands Association: Vernal Pool Workshop
- 2015 Midwest Ecology and Evolution Conference
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- Coastal GeoTools Conference
- Stream Morphology Assessment
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- 9th Annual International Conference on Community-Based Adaptation
- Biodiversity Without Boundaries 2015
- New York State Floodplain and Stormwater Managers Association: 15<sup>th</sup> Annual Meeting
- The Watershed Approach: Addressing Today's Challenges with an Eye on the Future
- Climate Change Symposium - Adaptation and Mitigation
- National Mitigation & Ecosystem Banking Conference: Training & Education, Moderated Exchanges, Networking
- Regulated Rivers: Environment, Ecology, and Management Conference
- Natural Channel Design Principles
- 2015 Ohio Stormwater Conference
- Coastal Plain Restoration Tour and Evaluation
- National Adaptation Forum
- Integrating research and management of change from mountains to plains
- 58th Annual Conference on Great Lakes Research
- Big Swamp Plant Identification Workshop
- Changing climate. Changing wetlands
- University at Buffalo's Summer Workshop Series in Stream Restoration
- Specialty Conference: Climate Change Adaptation
- Fish Passage 2015
- Crossing Scales, Crossing Borders; Global Approaches to Complex Challenges
- Hydraulic Modeling for Stream Restoration
- Rocky Mountain Stream Restoration Conference
- Quaternary Perspectives on Climate Change, Natural Hazards and Civilization
- 21st International Conference on Environmental Indicators
- Ecological Science at the Frontier: Celebrating ESA's Centennial
- Towards Resilient Ecosystems: Restoring the Urban, the Rural and the Wild
- 4th Biennial Symposium of the International Society for River Science
- 2015 World Water Week
- One Water Leadership Summit
- Mid-Atlantic Stream Restoration Conference
- Think Blue Maine Partner Maine Stormwater Conference

## Training

- 2D HEC-RAS Modeling
- Treatment Wetlands
- Wetland Delineation Training
- Richard Chinn Environmental Training, Inc.: Wetland Delineation Training
- San Diego County Vernal Pool Habitat Restoration and Flora
- CEQA and Climate Change: An In-Depth Update
- Midwest Biodiversity Institute: Wetland Delineation Course
- Habitat Assessment Using the QHEI
- Primary Headwater Habitat (PHWH)
- Wetland Design Online Course
- Wetland Design and Restoration Techniques Field Course at Eastern Kentucky University
- Amphibian Index of Biotic Integrity (AmphIBI)
- Methodology for Delineating Wetlands
- Ohio Rapid Assessment Method (ORAM)
- Assessment and Identification of Riparian Vegetation
- Midwest Biodiversity Institute: Habitat Assessment Using the QHEI
- Midwest Biodiversity Institute: Level 3 Bioassessment: Fish
- Wetland Flora Workshop
- Planning Hydrology, Vegetation, and Soils for Constructed Wetlands
- Identification of Common Wetland Plants
- Wetland Restoration Techniques online course at SUNY-ESF
- Midwest Biodiversity Institute: Wetland Restoration
- Wetland Restoration Techniques Practicum at SUNY-ESF

## SPECIAL EVENTS

- Wings N Wetlands Birding Festival

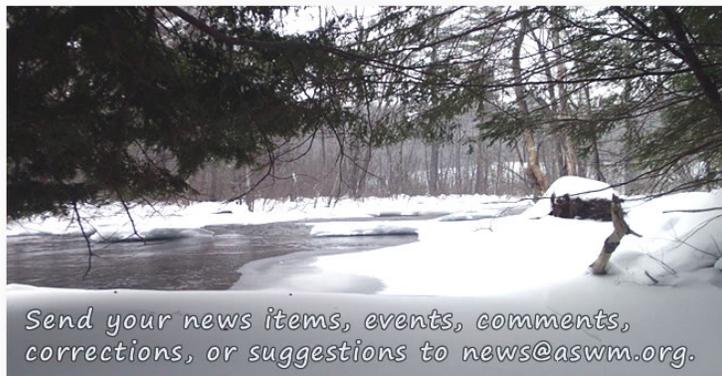


The Association of State Wetland Managers' *Wetland Breaking News* is a monthly e-newsletter. *Wetland Breaking News* is an edited compilation of wetland-related stories and announcements submitted by readers and gleaned from listservs, press releases and news sources from throughout the United States. WBN chronicles the legislative, national and state news relevant to wetland science and

policy, wetland regulations and legal analysis of Supreme court cases from the past month; it also links to new publications and resources available to wetland professionals as well as events and training opportunities for those working in water resources and related fields. *Wetland Breaking News* has been published for over ten years and ASWM has been a think-tank and source for wetland science and policy news and discussion for over 30 years.

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

**"WETLAND BREAKING NEWS"**  
Compiled and Edited by Alan Grant  
and Marla Stelk, Editors; Laura  
Burchill and Sharon Weaver,  
Assistant Editors. Executive Director:  
Jeanne Christie. Association of  
State Wetland Managers, 32  
Tandberg Trail, Ste. 2A, Windham,  
ME 04062. Telephone: 207-892-  
3399  
Fax: 207-892-3089



*Send your news items, events, comments,  
corrections, or suggestions to [news@aswm.org](mailto:news@aswm.org).*

*All photos by Jeanne Christie, ASWM*

