

Annual Report 2017



Association of State Wetland Managers, Inc.

Our Mission...

The Association of State Wetland Managers (ASWM) is a nonprofit organization established in 1983 to promote and enhance protection and management of wetland resources, to promote application of sound science to wetland management efforts and to provide training and education for our members and the public. Membership is open to all.



*It is not enough to understand the natural world;
the point is to defend and preserve it.*

- Edward Abbey

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In 2017, ASWM projects were supported by the McKnight Foundation, the Robert and Patricia Switzer Foundation, the U.S. Fish & Wildlife Service and the U.S. Environmental Protection Agency, along with members and private donors. The Association would like to express its gratitude to those who have supported its efforts to protect the nation’s wetlands through the application of sound science, training and education.

Thank you.

Multi-Year Projects

Healthy Wetlands, Healthy Watersheds

In January 2017, ASWM launched a new project funded by a U.S. Environmental Protection Agency's Wetland Program Development Grant, entitled: "Healthy Wetlands, Healthy Watersheds: Leveraging state wetland restoration and protection programs to improve watershed health." The primary goal of this project is to identify ways to integrate state and tribal wetland programs with other federal, state and local water, habitat and floodplain programs, in order to protect, restore and improve wetland acreage and quality while simultaneously improving overall watershed health.

The first task required pulling together a 28-member interdisciplinary workgroup to provide expert advice and guidance throughout the two-year project. The workgroup consists of representatives from federal, state and local government, NGOs, academics and private consultants. ASWM and the workgroup developed draft templates to be populated with data from selected programs and projects that: 1) represent a diversity of successful watershed restoration projects that improved watershed health through traditional and hybrid wetland restoration and protection techniques, and 2) represent a diversity of successful state program integration case studies which include wetlands to address broader watershed management goals. The information gathered from both of these efforts will be used in comparative analyses that will inform a final white paper, including the identification of ecological, regulatory, economic and programmatic barriers to implementing nature-based solutions for watershed health.

Webinars are also an integral part of this project, and the following webinars were hosted, recorded, and posted on ASWM's website by the Association through the [Natural Floodplain Functions Alliance](#) webinar series:

- ["The Value of Nature: Practical Applications for Managers"](#) on Feb. 21, 2017. Presented by Elizabeth Schuster, The Nature Conservancy.
- ["Integrated Stream and Wetland Restoration: A watershed approach to improved water quality on the landscape"](#) on July 25, 2017. Presented by Dr. Curtis Richardson, Duke University, Nicholas School of the Environment.
- ["The Iowa Watershed Approach: A New Paradigm for Flood Resilience"](#) on October 24, 2017. Presented by Allen Bonin, Iowa Dept. of Natural Resources, Dr. Craig Just, Univ. of Iowa, Melissa Miller, Iowa Water Center, Breanna Shea, Iowa Flood Center, Jake Hansen, Iowa Dept. of Agriculture and Land Stewardship, and Jessica Turba, Iowa Homeland Security and Emergency Management.
- ["Towards Resilient and Sustainable Floodplains"](#) on December 19, 2017. Presented by Larry Roth, Arcadis.



Pipeline Permitting Project

Review of oil and gas pipeline development project permits is a complex, time-consuming and challenging task for state and tribal regulators. Effectively participating in the permit planning and Clean Water Act §401 certification review process relies on regulatory staff understanding how the energy permitting process works, what controls they can assert, and when in the process to do so. To assist states with this growing challenge, ASWM has been working in collaboration with states, tribes, energy permitting/licensing agencies and a variety of other stakeholders to explore a critical gap that exists for state permit reviewers around how to effectively engage in this review, comment and conditioning processes which differ from one federal agency to another.

In 2017, ASWM began on a major project to improve oil and gas pipeline permitting capacity at the state and tribal level. ASWM developed a project workgroup with diverse expertise from states and tribes that conduct pipeline permit review, including states where this task is a rapidly growing part of their review tasks. The project is working to develop a range of tools and resources to protect aquatic resources impacted by energy development through more informed and effective engagement in both the pre-application and §401 Certification phases of the permitting process.

The project focuses primarily on 401 permitting of natural gas pipelines, but includes other state permitting as a secondary consideration. The project was funded by a U.S. Environmental Protection Agency (EPA) Wetland Program Development Grant, the McKnight Foundation and the Switzer Foundation.

In 2017, ASWM and its project workgroup members worked collaboratively to:

- Identify gaps and needs to effectively implement requirements around linear oil and gas permit application review (focus on state regulator perspective);
- Provide recommendations on ways to fill these gaps/needs;
- Identify process steps, inputs and outputs, as well as responsible parties;
- Provide guidance tools to allow involved parties to have dialogue to discuss and improve understanding of processes;
- Identify and prioritize best practices for pipeline planning and construction to inform permit review and conditioning, as well as administrative processes for more effectively/efficiently reviewing applications;
- Identification of key contextual elements relevant to cumulative impacts as related to pipeline permit review (common/potential adverse effects, hazards, vulnerable receptors);
- Development of resources to support cumulative impact decisions by pipeline permit reviewers; and
- Develop tools to help state regulators work more effectively with consultants that are assisting energy companies with permit planning and applications.

The project will be completed in 2018. The final project report will provide detailed information on the project's activities, products and final outcomes.



State Wetland Mapping Summaries

During the fall of 2017, ASWM began performing active outreach for the U.S. Fish & Wildlife Service National Wetlands Inventory (NWI) to twenty-five state wetland mapping programs distributed regionally across the United States. The goal of this effort is to get updated contact information and gather information about current and/or future mapping activities, methods, funding avenues and wetland trends as part of an outreach project entitled: “Leveraging the National Wetlands Inventory Nationwide and Advancing Innovations in Wetland Mapping through Improved Coordination and Outreach.” The project will be completed in 2018 with a final report.

Some initial key findings include:

- State wetland mapping programs vary dramatically from one another in multiple ways. Some states have dedicated programs, many do not. Some state mapping efforts are located within one agency while others are spread out among two or three agencies. Some state wetland mapping efforts are focused on voluntary wetland restoration and protection efforts while others are focused on regulatory permitting requirements.
- Political and administrative support for wetland mapping varies dramatically among the states interviewed with some states having robust financial and staffing support, while others do not even have the capacity to apply for and/or manage grants that could support mapping activities.
- Many states are investing in mapping wetland condition and function with attributes that are either based on Ralph Tiner’s LLWW classification scheme or even go beyond LLWW with attributes for function that are unique for regional ecosystem variation and/or program and project goals.
- Most of the states interviewed have never performed a statewide status and trends study and rely on data and findings from the NWI Status and Trends reports.

Increasing Access to High Quality, Affordable Wetland Training for On-the-Ground Wetland Professionals in the United States (2016-2017)

In 2017, working with a national workgroup, ASWM completed its [project designed to increase access to wetland training for on-the-ground wetland professionals in the United States](#). At the end of the project, ASWM had collected and posted information about currently available wetland [trainings](#), conducted a [needs assessment](#) about wetland training needs, documented characteristics of high quality wetland training, published several [articles on wetland training](#) in Wetland News as well as blogs on ASWM’s website, developed and delivered four hydric soils webinars with over a thousand registrants each, and modified these webinar recordings into [twelve formal online learning modules](#) for anytime, anywhere access on ASWM’s website. To supplement these online training modules, ASWM also developed an [on-the-ground training guidance document](#) and pilot tested elements of the training at the 2017 NEBAWWG/MAWGG meeting. To create the online modules, ASWM post-processed recordings, developed learning objectives, an online quiz and

certificate delivery system, which is being used to guide other efforts at ASWM and in other parts of the country (e.g. Oregon). All module presentation content was and continues to be delivered at no charge to participants. ASWM completed an analysis of different training delivery tools, including the feasibility of offering online training. Insights from the project were compiled into an [academic white paper](#) for use encouraging wetland education offerings at institutions of higher education and supporting training opportunities for individuals interested in becoming wetland professionals. ASWM presented findings at several meetings and conferences, including ASWM’s annual State-Tribal-Federal Coordination Meeting in Shepherdstown, West Virginia and at the Society of Wetland Scientists Conference in Puerto Rico. The project was funded by an EPA Wetland Program Development Grant, the Mcknight Foundation and the Robert and Patricia Switzer Foundation. A [final report](#) was submitted to EPA including detailed information about each element of the project.

ASWM Wetland Communication Case Studies Project

Early in 2016, ASWM discovered there was great interest across the country in learning about successful wetland communications projects. State and tribal wetland program managers working with their partners across the United States are tasked with communicating sound science, policy and engagement information with the general public and key stakeholders. However, wetland program managers often struggle with developing effective wetland-related communications. The U.S. Environmental Protection Agency (EPA) Office of Water was receiving feedback from their state and regional staff as well. This set the stage for ASWM to lead a new project to identify and share case studies about effective wetland communications strategies. Funding for this project was provided by a U.S. Environmental Protection Agency grant.

In May 2017, ASWM completed a Wetland Communications Case Studies Project to inform state and tribal communications planning and identify needs for future research on wetland messaging and opportunities to initiate behavior change through targeted communication strategies and products. The overarching goal of the project was to improve wetland protection and support for state and tribal wetland programs through improved

understanding by key stakeholders and the general public of wetland values, threats and needed actions. Specifically, the project worked to: 1) develop a set of questions designed to gain a deeper understanding of state and tribal communications needs for use in a future formal communications needs assessment, 2) identify and document a range of existing successful communication practices by states, tribes and nonprofits working on wetland issues, and 3) provide information that will inform future federal, state and tribal wetland communication efforts.

A final [Wetland Communications Case Studies Project Report](#) approved by the national workgroup describing the tasks completed, documenting elements of successful communications strategies and information needed to assess communication needs of state wetland programs. The report includes ten case studies of state agencies and organizations that have developed replicable wetland outreach/communications projects, including lessons learned and information about adapting approaches and tools for use in other locations and applications. The project also produced a list of questions that can be used to gather information about state needs and practices. Findings were presented at the ASWM State/Tribal/Federal Coordination Meeting in April 2017 and at the Society of Wetland Scientists Annual Conference in June 2017.



Photo credit: MNBWSR

Invasive Species Webinar Series

States, federal agencies and local communities are wrestling with the issue of how to effectively address invasive species. There is a great deal of research and experimentation already underway in this area; however, there is also much left to be done. As part of a previous wetland restoration project in 2016, ASWM hosted a webinar on “Managing Invasive Species in Wetland Restoration Projects: Considerations for Common Reed, Reed Canary Grass, Purple Loosestrife, Nutria and Feral Swine.” Over 500 individuals participated in the webinar. The webinar highlighted that while there is good information about how to manage for some invasive species; it has not been widely dispersed.

In light of this evidence, ASWM developed a new webinar series in 2017 (to run through 2018) on managing invasive species for a U.S. Fish and Wildlife Service Coastal Program funded grant entitled: “Improving State Policies & Best Management Practices to Reverse Coastal Wetland Losses Through Training and Stakeholder Engagement.” The

Association coordinated, hosted, recorded, and post-processed the following webinars in 2017:

- [“Invasive Species in Coastal Wetlands: Current and Future Challenges & Management Implications”](#) on August 17, 2017. Presented by Tom Hall, USDA Wildlife Services Program, and Anne Garwood, Michigan Dept. of Environmental Quality.
- [“Biological Control Strategies and Lessons Learned for Giant Salvinia, Water Hyacinth and Alligatorweed”](#) on November 30, 2017. Presented by Dr. Rodrigo Diaz, Louisiana State Univ., Lori Moshman, Louisiana State Univ., and Nathan Harms, U.S. Army Engineer Research and Development Center.
- [“Harvesting Invasive Species as a Management Strategy: Opportunities, Pitfalls and Lessons Learned”](#) on December 7, 2017. Presented by Jason Goldberg, U.S. Fish and Wildlife Service, Susan Pasko, U.S. Fish and Wildlife Service, and Matthew Barnes, Texas Tech Univ.

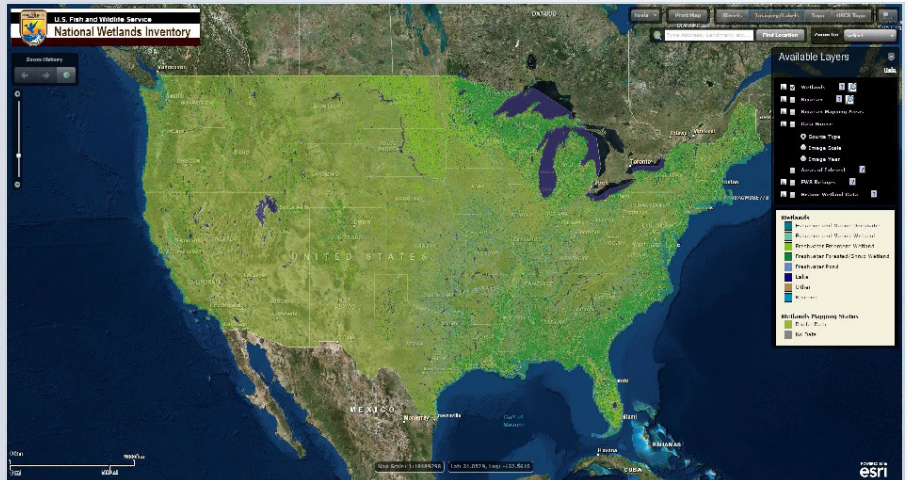


Photo Credit: Krista Lundgren/USFWS

Collaborations

Wetland Mapping Consortium

ASWM is a founding member of the [Wetland Mapping Consortium](#) (WMC). The WMC is an interdisciplinary group of wetland scientists and managers interested in mapping and monitoring wetlands using remote sensing and/or using the resultant products to better manage wetland resources. The consortium fosters collaborations and disseminates data and findings for the purpose of enhanced wetland mapping and monitoring. In 2017, the WMC held five [webinars](#) on topics such as Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data, Recent Updates to the EnviroAtlas Tool: Mapping Ecosystem Goods and Services, and National Wetlands Inventory Wetland Mapping Targeting Tool and Data Use Trends.



Natural Floodplain Functions Alliance

The Association of State Wetland Managers is a founding member of the [Natural Floodplain Functions Alliance](#) (NFFA). The Natural Floodplain Functions Alliance (NFFA) is an affiliation of nonprofit and private organizations, government agencies and individuals dedicated to the protection and preservation of the natural functions of floodplains, including coastal areas. ASWM maintains an NFFA webpage on its website devoted to NFFA activities. In 2017 the [NFFA held bimonthly webinars](#) on topics such as

“Minnesota’s Overall and Watershed Approach to Flood Risk Reduction and Protection of Lakes and Streams, The Iowa Watershed Approach: A New Paradigm for Flood Resilience, and the Value of Nature: Practical Applications for Managers. All webinars were recorded and are available to the general public.

Partnerships

The Association of State Wetland Managers works with other organizations on education, training, clean water advocacy and other wetlands-related issues. ASWM has worked with its partners in recent years toward a common goal of protecting wetlands and water resources through sound science and sensible public policy. ASWM is a membership organization; membership is open to anyone.

State Wetland Managers

ASWM has members who are State Wetland Managers from 38 states.

State Associations & Organizations

Association of Clean Water Administrators (ACWA)
Association of Fish & Wildlife Agencies (AFWA)
Association of State Floodplain Managers (ASFPM)
Coastal States Organization (CSO)
Environmental Council of the States (ECOS)
Groundwater Protection Council (GWPC)

Foundations

Horne Family Foundation
McKnight Foundation
Robert and Patricia Switzer Foundation

Non-profits & Academic Institutions

American Institute of Biological Sciences
American Planning Association
American Rivers
Center for Wetlands & Stream Restoration
Ducks Unlimited
Environmental Law Institute
Kenyon College
Louisiana State University
Michigan Wetlands Association
Midwest Biodiversity Institute
Milwaukee Metropolitan Sewerage District
Muskie School of Public Service
(University of Southern Maine)
National Wildlife Federation
Pennsylvania State University & Riparia
Prairie River Network
Ramsar U.S.
Restore America's Estuaries

Saint Mary's University of Minnesota
Society of Wetland Scientists
Southern California Coastal Water Research Project
Southern Illinois University
Stetson University College of Law
SUNY Buffalo Law School
The Nature Conservancy
The Pew Charitable Trusts
The Water Institute of the Gulf
The Wetland Conservancy
Union of Concerned Scientists
University of Wisconsin-Madison
Virginia Tech
Wisconsin Wetlands Association

Federal Agencies

Federal Emergency Management Agency
National Oceanic & Atmospheric Administration
U.S. Army Corps of Engineers
U.S. Department of Agriculture
- APHIS
- Forest Service
- Natural Resources Conservation Service
U.S. Environmental Protection Agency
U.S. Fish & Wildlife Service
- National Wetlands Inventory
U.S. Geological Survey



New Publications in 2017

ASWM Wetland Communications Case Studies Project Report

The Association of State Wetland Managers (ASWM) published a report in 2017 on effective communication and outreach strategies and why they are critical to the success of federal, state and tribal wetland programs because they allow for a greater understanding of and support for wetland protection and restoration. To better inform communications planning and future research on wetland messaging and opportunities, ASWM recently completed a project funded by the U.S. EPA Office of Wetlands, Oceans and Watersheds (OWOW), Wetlands Division, on how to effectively communicate wetland science and benefits. Ten case studies were selected, representing a range of geographic locations, target audiences, messaging goals, tools used and level of development. Each case study provides information on project need and context, timeframe, goals and objectives, target audience, messages, delivery approach, specific communication tools employed, advice/lessons learned, next steps, transferability, resource investment, partners, evaluation results and case study contact information. [Click here](#) to view the report.



ASWM Wetland Communications Case Studies Project Report

Produced by
The Association of State Wetland Managers
May 2017

Wetland Restoration Contemporary Issues & Lessons Learned

The Association of State Wetland Managers
August 2017



Wetland Restoration: Contemporary Issues and Lessons Learned

There is general agreement among restoration professionals that the science exists to achieve restoration goals and that wetland restoration performance will improve if certain barriers are addressed. Many lessons have been learned over the past 50 years and there are wetland professionals throughout the country who have found methods to effectively address these barriers. However, much of this information is stored in the minds of those who have learned these lessons over time. Our intent with this paper is to disseminate this information, provide guidance for improving restoration outcomes and to identify practical solutions for those who can implement them. This white paper was developed with guidance from a national expert work group in order to disseminate this information, present potential solutions to restoration challenges

and barriers, and recommend specific actions that can be taken to improve wetland restoration outcomes. To download this white paper, [click here](#).

Government Liability for Flood Hazards

The Association of State Wetland Managers (ASWM) released a new online book– **Government Liability for Flood Hazards**. This book has been written for the staff of local governments, states, and federal agencies concerned about potential government liability for flooding private property or for adopting floodplain regulations which “take” private property without payment of just compensation. Such staff include lawyers, floodplain and wetland regulators, planners, legislators, emergency managers, and watershed managers at all levels of government. More information can be found [here](#).

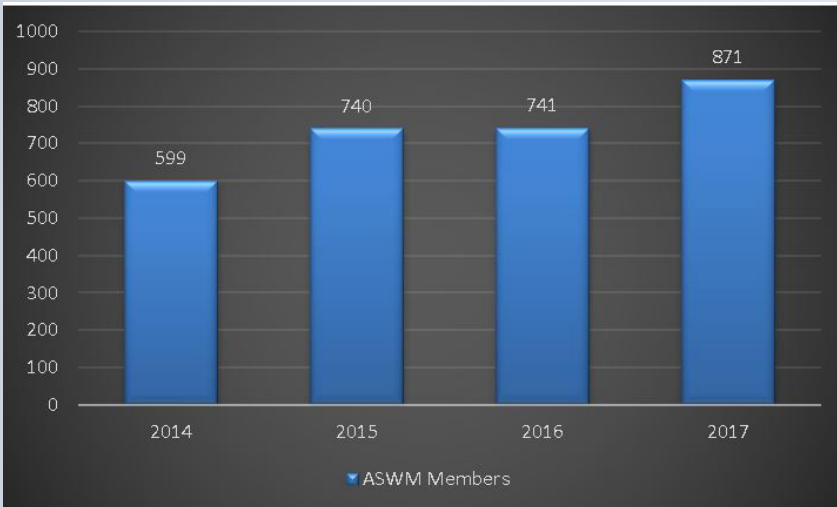
GOVERNMENT LIABILITY FOR FLOOD HAZARDS



By
Jon A. Kusler, Esq., Ph.D.
Association of State Wetland Managers

April 2017

Engagement

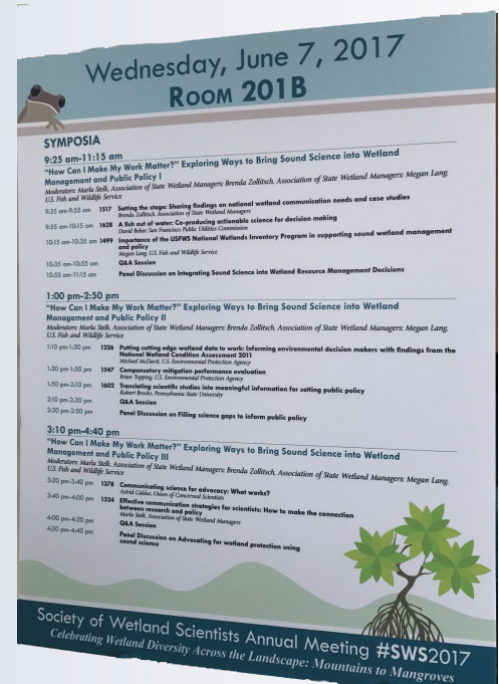


ASWM Membership Development in 2017:

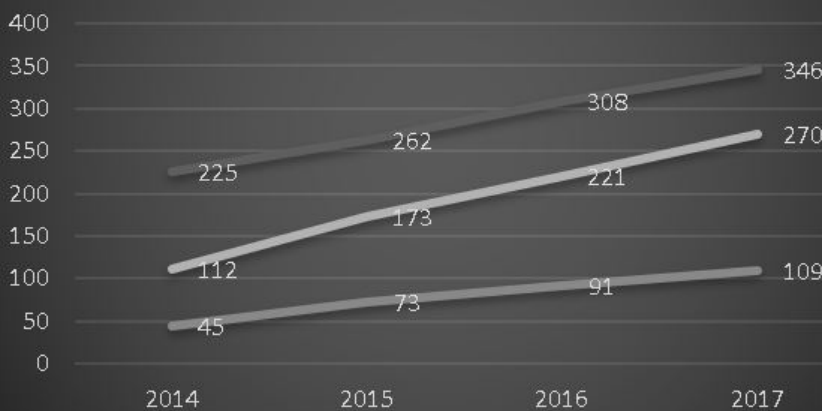
- Implemented ASWM Membership development plan, including new fee structure and benefits
- Between December 31, 2016 and December 31, 2017, welcomed 130 new members, representing a 22% increase in memberships
- Current number of members (April 2018): 871 members

ASWM Speaking Engagements/Presentations in 2017:

- Association of State Floodplain Managers Conference
- Society of Wetland Scientists Annual Conference
- Interagency Riparian and Wetland Assessment Workshop
- Michigan Wetlands Association Annual Conference
- American Law Institute Clean Water Act Meeting
- American Water Resources Association Conference



Social Media Engagement (2014-2017)



Top Line: Facebook (members)

Middle Line: Facebook Company (likes)

Bottom Line: LinkedIn (members)

Formal Comment Letters Submitted in 2017:

- Comment Letter on the Proposal to Amend the Effective Date of the 2015 Clean Water Rule
- Comment Letter in Response to Outreach Request on CWA Jurisdiction Step 2 Rulemaking
- ACWA/ECOS/ASWM Comment Letter to House Leadership Highlighting Concerns about H.R.3043, Hydropower Modernization Act of 2017
- Comment Letter on Proposal to Rescind the 2015 Clean Water Rule
- Signed onto Letter on Disaster Recovery Reform Act (DRRA)
- Co-Signed Letter on Vessel Incidental Discharge Act (S.1120)

ASWM Served on FACA Committee on Assumable Waters

- Served on EPA's Assumable Waters Subcommittee convened under the National Advisory Council for Environmental Policy and Technology (NACEPT)
- Co-wrote draft Final Report of the Assumable Waters Subcommittee

ASWM Periodic Publications Ongoing in 2017:

- Wetland Breaking News (monthly)
- Insiders' Edition (weekly)
- Wetland News (Bi-monthly)



Workshops/Conferences

ASWM State/Tribal/Federal Coordination Meeting

The Association of State Wetland Managers held a three-day meeting April 11-13, 2017 at the National Conservation Training Center near Shepherdstown, WV. The topic of the Annual State/Tribal/Federal Coordination Meeting was “Using Sound Science and Effective Communication to Strengthen Wetland Conservation, Restoration and Management.” There were 123 attendees onsite and 83 remote participants.



During this three-day meeting there were presentations and discussion on: building on integrations to strengthen wetlands protections, integrating monitoring between wetlands, streams and surface water programs, creating and sustaining an ecological restoration program and addressing regulatory barriers to wetland restoration. In addition, ASWM held a half-day concurrent session with the Wetland Mapping Consortium and a concurrent session on Section 401 Certification Programs as well as an evening discussion on the National Wetlands Inventory Version 2 Standards. Following the meeting, the agenda and PowerPoints were made available to participants [here](#).



How can I make My Work Matter? Exploring Ways to Bring Sound Science into Wetland Management and Public Policy

ASWM organized a daylong symposium on communication strategies for wetland professionals at the Society of Wetlands Scientists 2017 Conference in San Juan, Puerto Rico.

Plant Identification Workshop

ASWM held a workshop on wetland plant identification June 20-22, 2017 at Pershing State Park, Laclede Missouri. The training was carried out through a combination of lecture, laboratory and field exercises. The workshop wrapped up with a facilitated group discussion to explore the information presented, share best practices, identify gaps in knowledge, and identify needs and next steps.



Evaluating Wetland Site Hydrology through Interpreting Soils Data

ASWM carried out a three-day training program to assist southeastern state staff in understanding how to use soils and HGM data to determine if a site is likely to support the wetland restoration type proposed through compensatory mitigation. The training was held at the Alcove Conservation Center outside Atlanta, Georgia October 3-5, 2017.

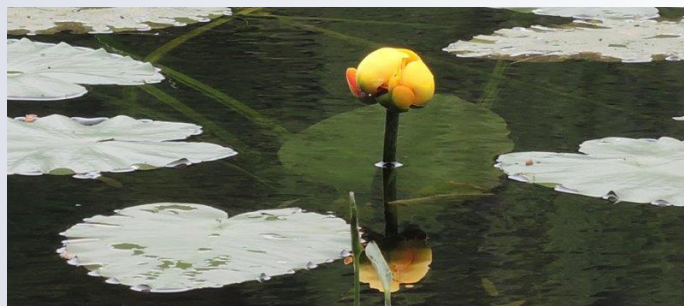
Webinars

The Association of State Wetland Managers hosted a number of webinars in 2017 as part of ongoing projects to improve state wetland programs and to further the efforts of two collaborations: the Natural Floodplain Function Alliance and the Wetland Mapping Consortium. ASWM utilizes webinars as a tool for communication and for reaching an audience that would not otherwise be able to travel to conferences or seminars. ASWM also hosts a monthly webinar series for members only. Topics alternate between science, policy and legal issues each month. ASWM also records and post-processes all webinars and they are available to view on the ASWM website. The 2017 webinar series are listed below.

Members' Wetland Webinars

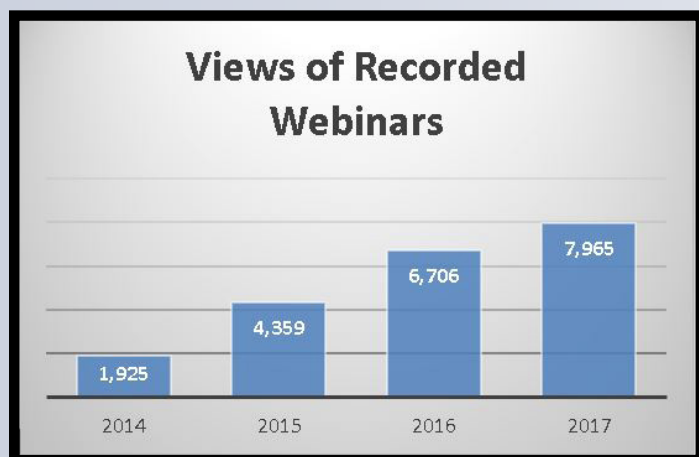
This monthly series continued through 2017. The webinar topics are provided below.

- How to Keep Headcuts from Working their Way Up or Downstream and Destroying Wetlands
- Restoration Outcomes and Reporting: An Assessment of Wetland Area Gains in Wisconsin
- Centred Outdoors: Trading Screen Time for Wild Spaces — One Community's Approach
- Inspiring Lifelong Wetland and Coastal Habitat Stewards through Citizen Science
- The Price of Everything and the Value of Nothing: Is Ecosystem Valuation Worth It?
- Improving Wetland and Stream Mitigation Crediting
- Working with Wetlands to Increase Resilience: A Panel on Innovative State Program Practices



Hot Topic Webinars

- Wetland Link International Americas Webinar: Evaluation of environmental awareness-raising activities at wetland sites
- Partnering with Beaver to Benefit Sage Grouse and Working Lands: Restoring Emerald Islands in the Sagebrush Sea
- How to Connect with the Public to Protect Wetlands: Findings from ASWM's Wetland Communications Case Study Project
- What's Next for Clean Water Act Jurisdiction
- The Basics of Wetland Plant Identification
- Wetland Link International - Americas Webinar: Successfully Attracting Local People into Wetland Sites
- What's Next for Clean Water Act Jurisdiction: Maintaining - or Draining - the Swamps? The Future of the Clean
- Nationwide Permit Rule Webinar: Low-head Dam Removal: Technical Issues and Considerations for State/Tribal/Federal Review
- Overview of the Final Rule on Issuance and Reissuance of the §404 Nationwide Permits



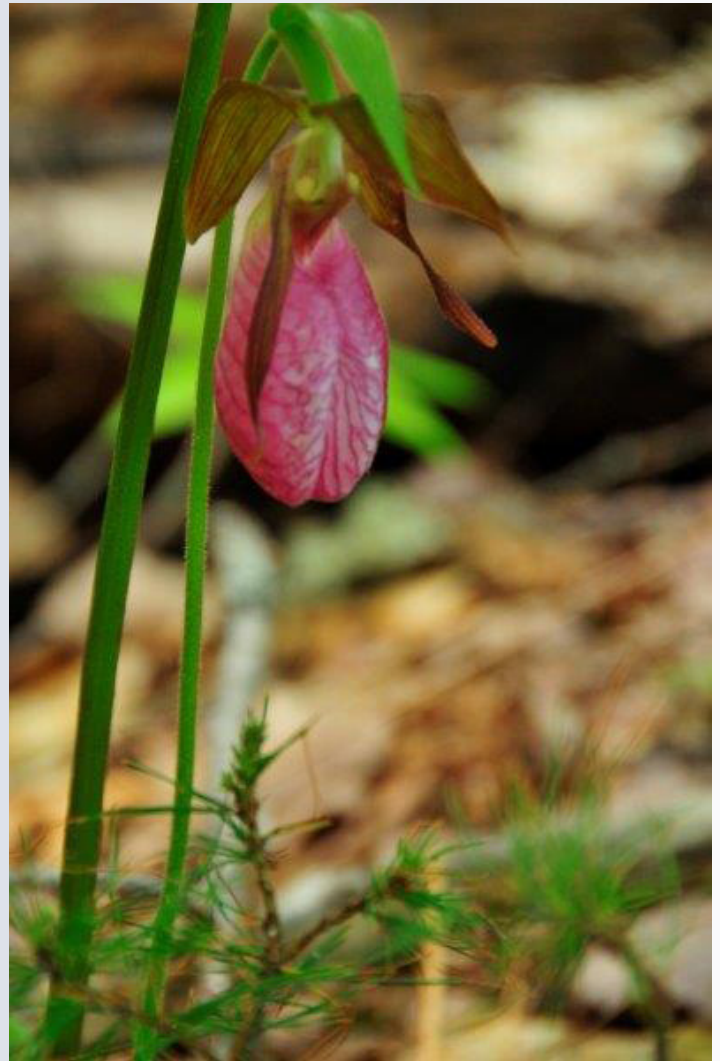
[ASWM webinars can be found here.](#)

Invasive Species Webinars

- Harvesting Invasive Species as a Management Strategy: Opportunities, Pitfalls and Lessons Learned
- Biological Control Strategies and Lessons Learned for Giant Salvinia, Water Hyacinth and Alligatorweed
- Invasive Species in Coastal Wetlands: Current and Future Challenges & Management Implications

Natural Floodplain Function Alliance (NFFA) Webinars

- Towards Resilient and Sustainable Floodplains
- Minnesota's Overall and Watershed Approach to Flood Risk Reduction & Protection of Lakes & Streams
- The Iowa Watershed Approach: A New Paradigm for Flood Resilience
- Integrated Stream and Wetland Restoration: A watershed approach to improved water quality on the landscape
- The Naturally Resilient Communities Project: Siting Guide and Case Studies Mainstreaming of Natural Infrastructure to Address Coastal and Riverine Flooding
- The Value of Nature: Practical Applications for Managers



Wetland Mapping Consortium Series

- Mapping Innovations at the Michigan DEQ: New approaches, tools and technologies
- Developing a Spatially Enabled Wetland Program Website to Communicate the Importance of Tribal Land Management
- Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data
- Moving Wetland Restoration into Recommendations into Action: New Mapping/Monitoring Program Tends
- Recent Updates to the EnviroAtlas Tool: Mapping Ecosystem Goods and Services

FINANCIAL REPORT

INCOME

Government Grant Income	541,225
Private Grant Income	55,000
Non Cash (ASWM)	46,640
Contributions (Public Support)	1,973
Program Income	19,486
Membership Dues	34,659
Interest Income	305
TOTAL INCOME	<u>\$699,288</u>

EXPENSE

Labor (personnel)	\$377,636
Benefits & Fringe	\$49,178
Nonlabor	
General Office	34,828
Banking	1,496
Office Computers (IT)	5,735
Program Expense	90,339
Commercial Insurance	1,671
Non-employee compensation	2,215
Travel Expense	23,768
Miscellaneous	801
Total Nonlabor	<u>\$160,853</u>
Cost Share	<u>46,640</u>
TOTAL EXPENSE	<u>\$576,842</u>
NET INCOME	<u>\$10,753</u>

ASSETS

Current Assets	
Checking/Savings	342,052
Accounts Receivable	0
Other Current Assets	0
Total Current Assets	<u>\$342,053</u>
TOTAL ASSETS	<u>\$342,053</u>

LIABILITIES & EQUITY

Liabilities

Total Accounts Payable	0
Other Current Liabilities	15,125
Total Liabilities	<u>\$15,125</u>

Equity

Retained Earnings	255,683
Temp Restricted Net Assets	16,902
Net Income	54,342
Total Equity	<u>\$272,097</u>

TOTAL LIABILITIES & EQUITY	<u>\$342,053</u>
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The Association of State Wetland Managers is a 501(c)(3) nonprofit, nongovernmental organization.

Board of Directors

Officers:



Kenneth Murin, Chairman

Ken has 30+ years with the Pennsylvania Department of Environmental Protection (PADEP). He currently works within the Bureau of Waterways Engineering and Wetlands, serving as the Chief for the Division of Wetlands, Encroachments and Training. Under this position Ken manages statewide implementation of the Commonwealth's environmental laws and regulations, and corresponding federal requirements relating to Erosion and Sediment Control, the NPDES Stormwater Construction Permitting, Submerged Lands License Agreements, Water Obstructions, Encroachments and Wetlands, and Environmental and Geological Services Programs. Ken is a graduate of West Virginia University, with a BS in Forest Resource Management, along with an accreditation as a soil scientist. He currently represents the PADEP as a board member to the Villanova Urban Stormwater Partnership, and serves on the EPA Chesapeake Bay Urban Stormwater Workgroup.

Prior to working with PADEP, Ken worked for a private consulting firm preparing environmental permit applications, drafting, surveying and conducting water quality monitoring activities. He also worked for the USDA Forest Service where he worked with teams collecting data for the forest resource inventory in the state of Maine. Ken lives in the suburbs of Harrisburg, Pennsylvania with his wife Chris. He has two adult sons, and two grandchildren. Ken enjoys fishing, hunting, hiking, and DIY activities. He is also an avid Pittsburgh sports fan following the Pirates, Steelers and Pens teams.



Tom Harcarik, Vice Chairman

Tom is an environmental planner with Ohio EPA's Division of Environmental and Financial Assistance where he evaluates stream and wetland protection and restoration projects under the innovative Water Resource Restoration Sponsor Program. Tom also assists communities by reviewing potential environmental impacts to streams and wetlands, threatened and endangered species, historic properties, and floodplains that may result from projects seeking financing through the Water Pollution Control Loan Fund and Water Supply Revolving Loan Account SRF programs.

Tom started his career at Ohio EPA as a summer intern in 1985 conducting surveys of fish and macroinvertebrate communities in rivers and streams throughout Ohio. Tom has since worked for Ohio EPA for over 29 years, including 18 years in the 401 Water Quality Certification program and Wetland Ecology Group. Additionally, Tom represented Ohio EPA in civil enforcement matters and served as a liaison to the Attorney General's Office for Ohio EPA's solid waste and unregulated hazardous waste programs.

Tom served in Ohio EPA's Wetland Ecology Unit, and was the lead author on a paper to quantify the benefits of restoring wetlands in urban watersheds to treat nutrients and reduce flooding. More recently, Tom co-authored a paper with colleagues at Ohio EPA developing a protocol to locate wetlands in agricultural landscapes to reduce nutrient loadings.

Tom received a B.S. in Conservation, with a focus on aquatic ecology, from Kent State University. Tom currently lives in Columbus, Ohio with his wife and two children. Tom coached his sons in little league baseball for 9 years while also serving as a league commissioner for 7 of those years. Tom enjoys backpacking, hiking, kayaking and just generally being outdoors with Marston, his four year old chocolate labrador retriever. Tom lives by the motto, "A bad day in the field always beats a good day in the office!"



Mark Biddle, Secretary/Treasurer

Mark is a lead wetland scientist with more than 23 years of experience working for the Delaware Department of Natural Resources and Environmental Control. Currently, Mark is housed within the Watershed Assessment Section, Wetland Monitoring and Assessment Program. Mark holds degrees in Natural Resource Management and Soil and Water Management and attended both Delaware State University and the University of Delaware. Residing in Dover, Delaware, Mark lives with his wife and two daughters. Mark enjoys his time with the family lab Gabby, and hopes that the future holds ample time for two of his other loves, hunting and fishing.

Members At Large:

Jill Aspinwall, New Jersey Department of Environmental Protection

Jill Aspinwall has worked at the New Jersey Department of Environmental Protection since 2001. She has a background in watershed management, education and outreach, wetlands mitigation, ecosystem restoration, and policy. For the last five years, Jill has been working in the Office of Policy Implementation assisting in the development and implementation of New Jersey's land use regulations, including the Freshwater Wetland Protection Act Rules, Flood Hazard Area Control Act Rules, and the Coastal Zone Management Rules. Jill manages the State's In-Lieu Fee Program and has also recently become the lead in the development and management of the New Jersey's Mitigation Banking Program. Jill currently serves as an ex-officio member of the Board of ASWM. She has a B.S. in Biology and Environmental Studies from Washington College, and an M.S. in Environmental Science from Rutgers/NJIT.



Denise Clearwater - Maryland Department of the Environment

Denise Clearwater has worked in Maryland's wetland programs since 1986. She has a background in developing and implementing a regulatory wetland program; a mitigation program; policy development; and special projects for program improvement and grant management. She has represented the Wetlands and Waterways Program in the Maryland Department of the Environment on numerous interagency work groups for regulatory, wetland monitoring, restoration, and preservation and is the co-chair of the Chesapeake Bay Program Wetland Work Group. She is also serving as an ex-officio Board member of ASWM and is a member of the Society of Wetland Scientists. Denise has a B.S. in zoology from the University of Maryland and an M.S. in wildlife management from Frostburg State College (now University).



Edward Clements, Indiana Department of Environmental Management

Edward is employed by the Indiana Department of Environmental Management in Indianapolis, Indiana as an Environmental Engineer and has also worked for the State of Indiana, Indiana Department of Natural Resources in the capacity of Natural Resource Scientist. Edward has been involved with the underground injection control program for Class II injection wells and the Compliance and Technical Assistance Program, which provides technical compliance assistance on a wide array of environmental topics. Edward has been working for the State of Indiana since 2015. Edward has bachelors and master's degrees in geology from Indiana University, a master's degree in environmental engineering from Wayne State University, and a Master's degree in management from Davenport University. Edward's specialties include storm water management, assessment of groundwater resources, development and implementation of wetland mitigation plans as well as a diverse array of other regulated projects. Edward has 20 years of organizational leadership experience and a strong background in facilitation, training and project implementation and management. Edward is Vice Chair of the Earth Science section of the Indiana Academy of Science.



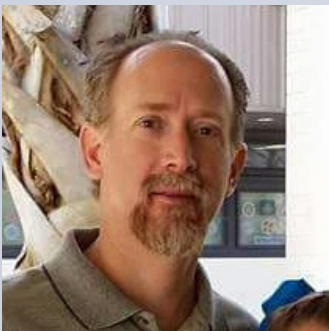


Lauren Driscoll, Washington State Department of Ecology

Lauren Driscoll is the manager of the wetlands program at the Washington State Department of Ecology, a position that she has held since 2005. She is responsible for ensuring statewide consistency in the implementation of 401 WQ certifications, technical assistance, and guidance for local wetland regulations. She is responsible for assisting and mentoring wetland technical staff statewide. She oversees the wetland compliance program and writes grants for wetland program activities. Since 2007 she has also served as the agency's wetland policy lead doing bill analyses and legislative briefings, tracking national issues, and providing guidance on local wetland ordinances and their implementation. Lauren specializes in wetland policy and mitigation options such as wetland banks, ILF and advance mitigation.

Lauren began work at Ecology in 1998 when she was hired to develop a wetland banking rule and establish the state's bank certification program. Before joining Ecology, Lauren worked for the Washington State Department of Transportation where she performed wetland studies on transportation projects statewide, designed mitigation sites, and participated in the development of the Washington Wetland Function Assessment model. Prior to that she worked for the two federal agencies: the US Forest Service doing trail work where she ran a pack string of mules; and the USFWS where she did Swampbuster work under the Farm Bill.

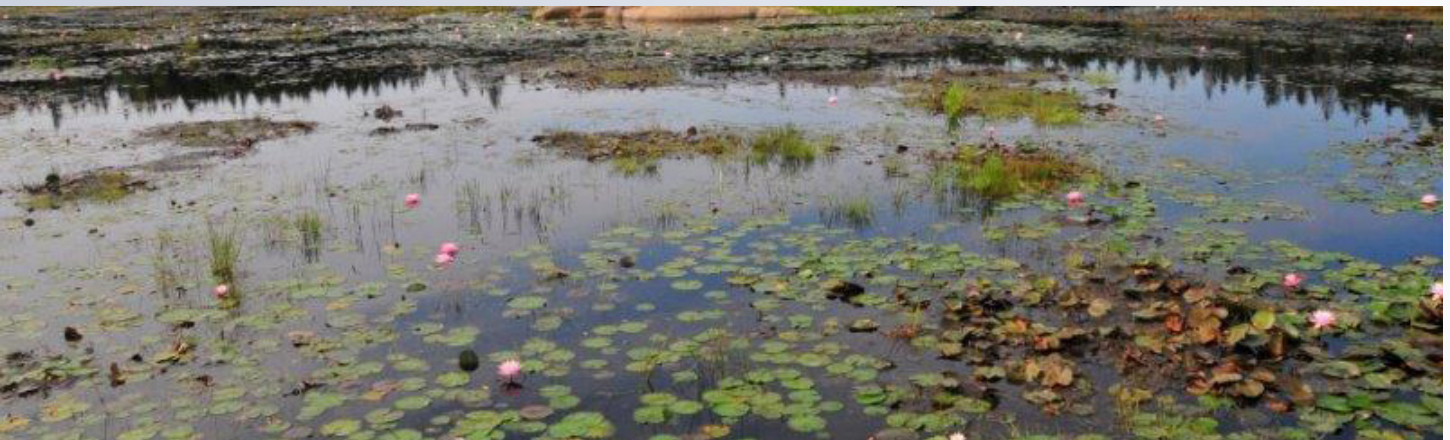
Lauren received her bachelor's in environmental studies from the Evergreen State College where she studied ecology, botany, organic agriculture and computer sciences. Lauren and her husband live in Yelm, Washington and they have two fledging adult children along with a dog and two indoor cats (who are enjoying their new patio.) She enjoys gardening, doodling, card making, hiking and any excuse to get outside.



Timothy Rach - Florida, Department of Environmental Protection

Timothy Rach is a Program Administrator in the Submerged Lands & Environmental Resources Coordination Program. He has been with DEP for over 22 years in various management and supervisory positions. Most of his time has been in the Environmental Resources Permitting program regulating development in wetlands and surface waters. Tim is responsible for overseeing the statewide implementation of the ERP rules and regulations within the Department, Water Management Districts and local delegated programs. He holds a BS degree in Marine Biology from Troy University and a MS degree in Ecology from Old Dominion University.

Prior to working for the state of Florida he interned with the dredge and fill section in the Norfolk District (VA) of the U.S. Army Corps of Engineers while he was working on his Master's Degree. Tim lives in Tallahassee, Florida with his wife Denise and their three kids. Tim enjoys camping, hiking, volleyball and brewing beer.



ASWM Staff

Jeanne Christie, Executive Director

Jeanne has been with ASWM since 1999 and Executive Director since 2001. ASWM's primary mission is to support the incorporation of sound science into public policy and assist states in building state wetland program capacity. Jeanne has led projects to improve wetland restoration science, respond to proposed revisions to Clean Water Act jurisdiction, improve wetlands mapping methodologies and a host of other science and policy related projects. From 1995 to 1999 she was a Resource Conservationist with the USDA Natural Resources Conservation Service, Wetlands and Watersheds Division where she was national program leader for the Wildlife Habitat Incentives Program. She worked for the U.S. Environmental Protection Agency, Wetlands Division (1988-1995) moving from the staff level to Section Chief and Acting Branch Chief. Responsibilities included working as a liaison with other federal agencies and state wetland program capacity building. As an environmental planner at the Wisconsin Department of Natural Resources (1985-1988) responsibilities included the Green Bay Remedial Action Plan and the 208 Watershed Plan for Southeastern Wisconsin. She has a B.A. in Political Science and a B.S. in Environmental Science, both from the University of Maine at Presque Isle. Jeanne is a 2007 winner of the National Wetlands Award for Education and Outreach. During her spare time she does volunteer work with the Maine Chapter of the Appalachian Mountain Club, the Maine Master Gardeners and the Maine Master Naturalists. She lives in an 1885 farmhouse in Windham, ME with her husband Larry and their 'rescued' animal companions Navia, Gabby and Connie.

Peg Bostwick, Senior Staff Policy Analyst

Peg was Chief of the Wetland Lakes and Streams Unit in the Water Resources Division for the State of Michigan – Department of Natural Resources and Environment. Peg joined the (then) DNR in 1979 after completing a B.S. in fisheries and wildlife and additional graduate work in limnology at Michigan State University. With over 30 years of experience, Peg is also a member of the Society of Wetland Scientists, the Michigan Chapter of the North American Lake Management Society, and the Jacob Sheep Breeders Association. Peg lives with her family on a 40 acre farm near St. Johns, Michigan, where they raise Jacob sheep – an old heritage wool breed.

Marla J. Stelk, Policy Analyst

Marla has been ASWM's project leader for two U.S. EPA wetland restoration grants and coordinates a national wetland restoration workgroup. She also facilitates the Wetland Mapping Consortium and the Natural Floodplain Functions Alliance webinar series. Marla is ASWM's Communications Team leader and the Editor of Wetland Breaking News. She represents ASWM on the Advisory Committee on the Water Information Water Resources Adaptation to Climate Change Workgroup. She comes to ASWM with a strong professional background in environmental issues, stakeholder engagement, facilitation, special events and communications. Marla earned her MA in Community Planning and Development with a focus on Land Use and the Environment at the Muskie School of Public Service and her BA in Environmental Issues from Colorado College. She enjoys hiking backcountry, getting out on the waters of Maine, art, gardening, cooking and music.

Brenda Zollitsch, PhD, Policy Analyst

Brenda is a Policy Analyst at the Association of State Wetland Managers. Brenda's areas of expertise include water resource policy, stormwater management, collaborative environmental policy implementation, and most recently, climate adaptation. At ASWM, Brenda conducts research and policy analysis on wetland and stream issues, manages projects; designs, coordinates and evaluates training for wetland professionals; coordinates webinars; publishes reports, articles and blogs; helps develop communications guidance; and is involved in conference planning and making presentations on ASWM's work to a variety of audiences. Brenda recently completed a national status and trends/state summaries project analyzing 50 state wetland programs across the United States and a national stream identification, delineation and mitigation study. She currently leads projects focused on increasing access to high quality wetland training and improving energy permitting to protect wetlands. Brenda received her PhD in Public Policy from the University of Southern Maine's Muskie School of Public Service in 2012, focusing on environmental policy and collaborative environmental

management. She has her double Master's degree from Boston University and her bachelor's degree from the University of Maine. Brenda has 25 years of organizational leadership experience and a strong background in academic and action research, facilitation, training and communications. Brenda is a Switzer Environmental Fellow and has been instrumental in developing regional approaches to stormwater management in the State of Maine.

Dawn Smith, Communications Specialist

Dawn works on multimedia projects, focusing on webinars and short videos. After working in the corporate world for several years, she is redirecting creative energies towards social media, documentaries and short film communication formats. A lifetime resident of Maine, she has an appreciation for the preservation of local heritage and natural treasures, primarily from behind the lens. Working with ASWM, she has gained a greater appreciation for the local and national efforts to preserve and rebuild the wetland ecosystems that are all around us.

Michael Burton, Bookkeeper

Michael comes to us with over twentyfive years of professional experience in accounting and technical administration. Michael has many years of experience in federal/ state contract administration and financial management. His undergraduate degree was in business administration/aviation management and he holds a FAA Commercial MEL/Instrument pilot's license and is a Certified Flight Instructor. Michael is ASWM's resident ornithologist and lotic ecosystem specialist, having participated in many citizen-science projects over the years, related to ornithology and watershed monitoring. Michael is a retired PSIA Level II Alpine ski instructor and you can find him at either Sunday River or Sugarloaf USA, on the wickedest of snow-days. Michael lives alone on his twenty-five acre homestead in the foot-hills of Maine where he tends to his flock of sweet, Finn sheeplets and spends time working in his greenhouse.

Laura Burchill, Program Assistant

Laura is the program assistant in the Windham office and has been with the Association since 2004. She is responsible for maintaining the membership information; assisting with the many tasks involved in preparing for webinars and workshops, Association publications as well as general office duties. She has 30+ years experience in graphic design and also works part-time for *Parent & Family*, a local publication. She lives in Windham, Maine with her husband Dave and their canine companion Jay.

Sharon Weaver, Webmaster

Sharon is the Publications Specialist and Webmaster for the Association in the Berne, New York office, where she has worked for the past 20+ years. Along with general office tasks, she works on the layout and design of Association publications, reports, and brochures. She helps coordinate ASWM workshops and symposia. She manages the ASWM website, which includes daily updates and prepares and designs new webpages. When she is not entertaining company, she enjoys some alone time with her husband, Ken, and grown children Karla and Pieter. She adores her cat and three dogs, who complete the family nest.

Jon Kusler, Associate Director, Emeritus

Jon is a lawyer, writer, and educator with more than 35 years of experience with wetlands, floodplains and riparian areas. In addition to a law degree, he holds a M.S. in Water Resources Management and an interdisciplinary Ph.D. in Land and Water Management from the University of Wisconsin. He helped found the Association of State Wetland Managers in 1983 and served as its Executive Director from 1990 to 2001. He received EPA's National Wetland Lifetime Achievement Award in 1990, the Gilbert White award in floodplain management in 1979, and the Society of Wetland Scientist's Lifetime Achievement Award in 2009. He has authored many books and reports concerning wetlands, such as *Our National Wetland Heritage: A Protection Guide, Regulating Sensitive Lands, and Wetland Creation and Restoration*.



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