

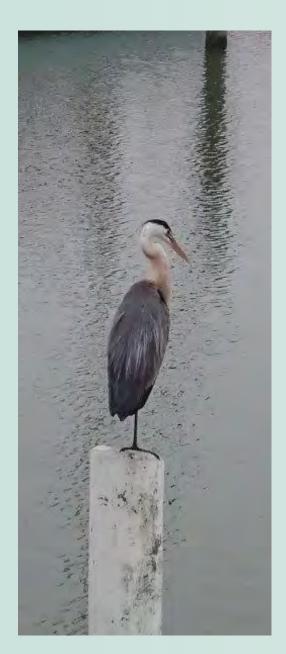
Our Mission ...

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

Contents



Multi-Year Projects
Raising the Bar on Wetland Restoration Success4
High Quality Wetland Training for State and Tribal Wetland Staff
Special Projects
Section 404 State/Tribal Program Assumption: clarifying the scope of assumable waters
Reissuance of the Section 404 Nationwide General Permits6
Outreach & Education
Collaborations
Partnerships9
Publications
Workshops/Conferences 12
Webinars 14
Fianancial Report 17
Board of Directors 18
Ctoff 21

In 2016, ASWM projects were supported by the McKnight Foundation, the Robert and Patricia Switzer Foundation, the Horne Family 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

Raising the Bar on Wetland Restoration Success

ASWM's "Raising the Bar on Wetland Restoration Success" project started at the beginning of 2015 and continued through 2016. The primary goal of this project, funded by the U.S. Environmental Protection Agency (EPA), Wetlands Division, was to identify barriers to wetland restoration "success," articulate solutions and begin implementing actions to improve wetland restoration performance. In 2016, ASWM continued to work on this project with a national 25 member expert work group, including policy makers, regulators, non-profits, practitioners and academics, and identified nine primary challenges and general recommendations to address those challenges. The work group also identified more specific barriers and recommendations that are organized by project phase, i.e. planning, design, and implementation & monitoring.

All of these findings were developed into a draft white paper entitled "Wetland Restoration: Contemporary Issues & Lessons Learned" that was widely circulated to a broad audience for comments and suggested edits. The white paper findings were presented to the management staff at EPA's Office of Water and Wetlands in February, 2016, and at the ASWM State/Tribal/Federal Coordination Meeting at the National Conservation Training Center in March. The findings were also presented in two different symposiums at the Society of Wetland Scientists (SWS) Annual Meeting, and at the Association of State Floodplain Managers (ASFPM) Annual Conference in June of 2016. Chapter 2 of the paper, "A National Strategy for Improving Wetland Restoration" was initiated and is slated to be completed by the end of March, 2017.

The Association continued to organize and host the webinar series "Improving Wetland Restoration

Success" to further explore issues surrounding wetland restoration performance and inform the findings in the draft white paper. Topics included: Evaluating the Ecological Performance of Compensatory Mitigation; Water Rights & Wetland Restoration; Managing Invasive Species in Wetland **Restoration Projects: Considerations for Common** Reed, Reed Canary Grass, Purple Loosestrife, Nutria and Feral Hogs; Establishing Reference Conditions for Performance Standards & Long Term Monitoring Results: Soils, Hydrology and Vegetation; Gulf Coast Restoration Post-Katrina; Bottomland Hardwood Restoration; Not Lost in Translation: How to Select the Right Wetland Restoration Team; and Long-term Management and Legal Protections for Voluntary Restoration. There was an average of 289 participants for each webinar. As a result of the invasive species webinar, ASWM held a one-day training workshop on "Managing Invasive Species in Coastal Wetland Restoration Projects" on Thursday, December 15, 2016, at the Restore America's Estuaries and The Coastal Society's 2016 Summit in New Orleans, Louisiana.

As part of this project, in 2015, ASWM hired Mark Healy, an intern from the University of Southern Illinois, to evaluate a list of available ecosystem service valuation tools selected by ASWM (and research other possible tools as well) and create a synopsis of each tool, evaluating its overall functionality, availability, ease of use, and requirements. In 2016, the report, "A Comparative Analysis of Ecosystem Service Valuation Decision Support Tools for Wetland Restoration" was completed including research and analysis, and a comparative matrix that state and local wetland managers can use to select the best tool for their needs.



High Quality Wetland Training for State and Tribal Wetland Staff

In 2016, ASWM continued work on a major project to improve access to high quality wetland training for states, tribes and other wetland professionals across the United States. The project was designed to explore and articulate training priorities that will increase the capacity of on-the-ground state and tribal wetland professionals to carry out their day-today work implementing wetland programs. Working with a national project workgroup, ASWM identified training tools and techniques to improve wetlandrelated decision making and ultimately enhance the protection and management of wetlands. The project was funded by a U.S. Environmental Protection Agency (EPA) Wetland Program Development Grant, the McKnight Foundation and the Switzer Foundation.

For this project, in 2016 ASWM:

- Conducted a significant needs assessment and developed a resulting list of training needs which was then circulated and revised to become a guide for ASWM's priority setting;
- Produced a list of key characteristics to guide practitioners in developing training activities as well as wetland professionals seeking to participate in high quality learning opportunities;
- Assessed different types of training methods to
 - examine measures of quality, similarities, differences, priorities and preferences;
- Worked with state wetland managers, academics and private consulting firm representatives to develop a scope of key training and skills that wetland professionals often need to meet the responsibilities of their positions;
- Recruited five national expert hydric soils trainers who contributed their time. knowledge and skills to develop and deliver four webinars on hydric soils;

- Delivered four hydric soils training webinars, attended by a total of 1,512 individual attendees, with between 600-800 participants per individual webinar:
- Post-processed the hydric soils training webinars into twelve online training modules, packaged with bookend information and a knowledge assessment quiz that allowed those who passed the quiz to receive an online certificate for use in securing continuing education credits;
- Beta tested the hydric soils pilot online training modules and posted them to ASWM's website:
- Tested various automated certificate generating options to improve the efficiency with which these services can be delivered to participants; and
- Developed a list of recommended hydric soils classroom and field-based exercises to complement ASWM's distance learning (webinar and online training module) offerings.

The project was completed spring of 2017, with the final project report providing detailed information on the project's activities, products and final outcomes.



2016 Special Projects

Section 404 State/Tribal **Program Assumption:** clarifying the scope of assumable waters.

Under Section 404(g) of the Clean Water Act, a state or tribe may, with the approval of EPA, assume administration for dredge and fill 404 permitting in many – but not all – waters of the U.S. In recent vears, ASWM together with the Environmental Council of the States and the Association of Clean Water Administrators have identified the need for clarification of the scope of waters that are assumable, and conversely of those waters where the Corps must retain jurisdiction, and requested that EPA assist in doing so.

In response, EPA established an "assumable waters" subcommittee under the National Advisory Council for Environmental Policy and Technology (NACEPT). This group is formally organized under the Federal Advisory Committee Act (FACA). Twentythree individuals representing state and federal agencies and other stakeholders were appointed to the subcommittee, including Peg Bostwick who represents ASWM. Other ASWM members were also appointed to represent their states. The subcommittee includes members with expertise in wetland and water management, policy making, and water law.

During 2016, the full subcommittee met twice in the Washington, DC area, and once on-line. The subcommittee sought consensus regarding the dividing line between Corps and State authorities under a state or tribally assume 404 program, with an emphasis on clarity and practicality, in addition to consistency with congressional intent and federal regulations. By the end of the year, the subcommittee had explored various options and documented findings and had drafted much of the final report, but had not yet reached full agreement on the extent of navigable waters that should remain under the authority of the Corps following state assumption. It was anticipated that the subcommittee would complete its work early in 2017.

Background information and materials compiled by the Assumable Waters Subcommittee are posted at: https://www.epa.gov/cwa-404/assumable-waterssub-committee.

Reissuance of the Section 404 **Nationwide General Permits**

The Nationwide Permits (NWP's) under Section 404 of the Clean Water Act and the Rivers and Harbors Act of 1899 §10 allows the U.S. Army Corps of Engineers (Corps) to grant general permits for similar categories of activities that will have only minimal adverse environmental effects. The NWP's must be renewed every five years through formal rule-making. Publication of a new proposed rule for the nationwide general permits was behind schedule in 2016. The timing of publication of the final rule impacts the states which must complete Section 404 certification and Coastal Zone Management Review before the final rule goes into effect. So the rule needs to be published at least 60 days before it goes into effect. ASWM met first with the Corps and later with the Office of Management and Budget staff to share concerns about the importance of timely issuance of a final rule prior to the expiration of the current rule in March of 2017. After issuance of the proposed rule in the Federal Register in June 2016, ASWM held a series of webinars with Corps and States staff to improve understanding of the contents of the rule and encourage meaningful dialogue between the Corps Districts and the states as preliminary discussions were held on Section 401 Certification of the nationwides in each state prior to issuance of a final rule. This also encouraged the submittal of thoughtful comments during the formal comment period. It is anticipated a final rule will be published early in 2017.



2016 Outreach & Education

Working with federal, state, tribal and nongovernmental partners, ASWM has continued to foster collaborative relationships to further its mission to promote the inclusion of sound science into public policy. The organization's major outreach and education efforts in 2016 are described below. Ongoing information on ASWM's activities can be found on its website, which is updated weekly at https://aswm.org.

Website: In 2016, ASWM continued to use its website as an important communications tool with daily informational updates on news, jobs, trainings, webinars, and important federal legislation. ASWM also continued to improve the user friendliness of its website by redesigning several webpage formats. including the look of its homepage, wetland science pages, wetland programs pages, and news pages.

Improving Wetland Restoration Success Webinar Series: ASWM continued its newest webinar series as part of its efforts to tackle some of the biggest challenges for wetland restoration and share insights and lessons learned from experts in the field. Eight new free webinars were produced on topics such as Evaluating the Ecological Performance of Compensatory Mitigation, Managing Invasive Species in Wetland Restoration Projects, How to Select the Right Wetland Restoration Team and more. All of these webinars were recorded, edited and posted on ASWM's website.

Members' Webinar Series - A Valuable Series of Training & Presentations: ASWM continued its Members' Webinar series in 2016. This webinar series is a benefit only available to ASWM members. Members may participate and also access recordings of past webinars. Monthly webinars cover science, legal and policy issues. In 2016, members were provided seven webinars on topics such as financial assurances and compensatory mitigation, wetlands and nutrient uptake, innovative tools for monitoring wetlands, and innovations in buffer management and more.

Natural Floodplain Functions Alliance (NFFA):

In 2016, the NFFA decided to combine their alternating monthly schedule of webinars and conference calls into a new combined format, held every other month. ASWM and ASFPM alternated hosting a total of six new webinars/conference calls on topics such as "Funding for Floodplain Restoration: Breaking Down Incentives to Develop Floodplains & Recent FEMA Policy Updates," and "Living Shorelines: Lessons Learned and New Opportunities." A subcommittee within NFFA

also organized and executed a successful one-day workshop, hosted at the Pew Charitable Trusts headquarters in Washington, D.C. in November on "Overcoming Policy and Permitting Challenges to **Implementing Natural Infrastructure Solutions.**"

Wetland Mapping Consortium (WMC): In 2016, the WMC held six webinars on topics such as Defining Wetland Gems in North Central New Mexico, The Soil and Water Assessment Tool, and Maps of Potential Wetland Extent for Selected Streams in Indiana. Two of the six webinars were training webinars presented by the National Wetlands Inventory and were cross-posted on the Wetlands One-Stop Mapping webpage for wetland mapping training. In addition, the WMC broadcast three presentations, in webinar format, live from ASWM's Annual State/Tribal/Federal Coordination Meeting at the National Conservation Training Center and posted the recordings on ASWM's website.

Communications: ASWM's Communications Team continued to increase the reach of ASWM's communication efforts through its website, social media, newsletters and emails. This year, the communications team created a special marketing campaign for Giving Tuesday and an end of year fundraising solicitation that featured a four part video mockumentary of ASWM staff meeting a mysterious wetland creature that was a huge hit. The video received over 1,300 views.

Blogs: ASWM's Program Staff produced weekly blogs on a rotating basis. They consisted of **The Compleat** Wetlander by Jeanne Christie, For Peat's Sake by Marla Stelk and The Wetland Wanderer by Brenda Zollitsch. Melissa Mullineaux, ASWM's intern in 2016, also produced her own blog series entitled "Counting Cattails" during 2016.



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. The WMC's 8 member steering committee, including representatives from ASWM, the U.S.



Fish & Wildlife Services's National Wetlands Inventory, Saint Mary's University of Minnesota and Virginia Tech, met throughout the year to identify topics and presenters for the webinar series. ASWM hosted the webinars which were recorded and posted on the ASWM website. Two of the WMC webinars were used as training webinars and were posted to the Wetland Mapping Training webpage hosted on ASWM's Wetlands One-Stop Mapping website. Members of the WMC steering committee also met at ASWM's Annual State/Tribal/ Federal Coordination Meeting at the National Conservation Training Center in March and hosted a town hall discussion on the U.S. Fish & Wildlife Service's next Wetland Status & Trends Report as well as a concurrent session with three presentations on New Mapping/Monitoring Program Trends.

Natural Floodplain Functions Alliance

ASWM is a founding member of the Natural Floodplain Functions Alliance (NFFA). The Alliance is an affiliation of federal agencies, professional and nonprofit organizations, and individuals who are dedicated to the protection and preservation of the natural functions of floodplains, which includes coastal areas. It was established to "promote, protect, and enhance the protection, restoration, and management of natural floodplain resources." NFFA is a non-advocacy organization and is guided by a steering committee comprised of representatives from professional associations, non-profits, state agencies, federal agencies and private consultants. In December of 2015, the NFFA steering committee met in Washington D.C. to develop a strategic



focus for 2016 which included reducing the number of webinars and conference calls and combining them into one bimonthly event. ASWM and ASFPM split up the responsibility of organizing and hosting the bimonthly presentations. Other products produced by NFFA in 2016 include a media kit, an in-person NFFA meeting at the ASFPM national conference and a one-day by invitation only workshop at the Pew Charitable Trusts headquarters in Washington, Annual State/Tribal/ Federal Coordination Meeting D.C. on "Overcoming Policy and Permitting Challenges to Implementing Natural Infrastructure Solutions."

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)

Pennsylvania State University & Riparia

National Wildlife Federation

Restore America's Estuaries

9 ASWM Annual Report 2016

Prairie River Network

Ramsar U.S.

River Network

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 2016

A COMPARATIVE ANALYSIS OF ECOSYSTEM SERVICE VALUATION DECISION SUPPORT TOOLS FOR WETLAND RESTORATION



red for the Association of State Wetland Managers By Mark Healy and Dr. Silvia Secchi Southern Illinois University

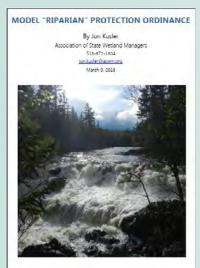
A Comparative Analysis of Ecosystem Service **Valuation Decision Support Tools** for Wetland Restoration

The Association of State Wetland Managers (ASWM) published a report in 2014 on the valuation of ecosystem services as an advantageous method for the promotion of wetland restoration. As a continuation to this effort, in 2015 we conducted an extensive review of existing decision support tools suitable for the valuation of ecosystem services for wetland restoration. This report describes six tools that maintain "off-the-shelf" capability and currently demonstrate the greatest potential for widespread dissemination and use.

<u>Click here</u> to view the report.

Protecting and Restoring Riparian Areas

The Association of State Wetland Managers (ASWM) released a new paper – **Protecting and Restoring Riparian Areas**. This paper briefly examines the functions and values of "riparian" areas. It suggests some priority measures states, local governments, federal agencies, and not for profit organizations can take to better protect and restore riparian areas. To download this report, click here.

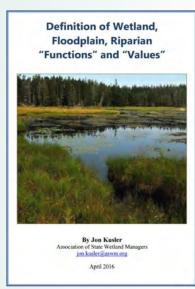


Model Riparian Protection Ordinance

The Association of State Wetland Managers (ASWM) released a new paper - Model Riparian Protection Ordinance. The model ordinance provided in this paper is designed to help local communities develop their own "riparian" ordinance and has been prepared as a "stand alone" ordinance. However critical provisions could be extracted for inclusion in broader ordinances. To download this report, click here.

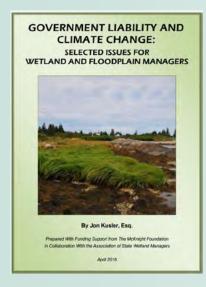
Definition of Wetland, Floodplain, Riparian "Functions" and "Values"

The Association of State Wetland Managers (ASWM) released a new paper – Definition of Wetland, Floodplain, Riparian "Functions" and "Values." State and federal wetland regulatory programs typically include an overall goal to prevent net loss of wetland "functions", and "values". However, there is only partial agreement among regulators and other wetland managers concerning the use of these terms. This paper explores the use of the terms "function" and "value" and makes suggestions for future use of these terms. Click here to view the report.



PROTECTING AND RESTORING RIPARIAN AREAS

By Jon Kusler on of State Wetland Managers March 9, 2016

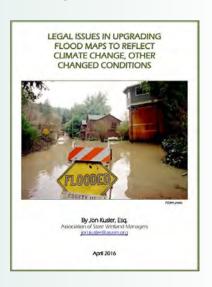


Government Liability and Climate Change: Selected Issues for Wetland and Floodplain Managers

There is broad scientific consensus that climate change is occurring. Most scientists agree that this change will, in some instances, cause substantial increases in sea level, ground water levels and the levels of inland lakes, rivers and streams and other inland water bodies. They broadly agree that this will increase not only the depth of flooding on both public and private lands but also the duration of flooding and associated erosion. Governments may increase flood damages by failing to anticipate climate change (e.g., failing to elevate houses) in their programs and policies. This paper by Dr. Jon Kusler, Esq. is one of several designed to help government wetland and floodplain managers understand their potential legal liability for failing to consider climate change in their programs or for incorporating strengthened flood loss reduction standards reflecting climate change in their zoning, building codes, subdivision and other regulations. Click here to view the report.

Legal Issues in Upgrading Flood Maps to Reflect **Climate Change, Other Changed Conditions**

Governments will, over time, need to upgrade flood hazard maps to reflect climate change, urbanization, erosion and sedimentation and other watershed changes. Will governments face legal problems with such upgrading? How can governments avoid legal problems? This paper by Dr. Jon Kusler, Esq. provides an overview of the types, uses and limitations of existing floodplain maps, examples of court cases dealing with floodplain maps and recommendations for avoiding problems with upgrading floodplain maps to reflect climate change and other changed conditions. Click here to view the report.





Challenges & Solutions in Coastal Wetlands

This white paper is divided into three topic areas addressing major threats to coastal wildlife. The three subject matter areas include: (1) wetland protection and management; (2) wetland restoration; and (3) natural coastal defenses. This paper is the final product of a one-year grant from the U.S. Fish & Wildlife Service Coastal Program and is intended to identify gaps and priorities that can be addressed in future years by the Association of State Wetland Managers and other organizations. Click here to view the report.



Workshops/Conferences

ASWM State/Tribal/Federal Coordination Meeting

The Association of State Wetland Managers held a three-day meeting March 29-31, 2016 at the National Conservation Training Center near Shepherdstown, WV. The topic of the Annual State/ Tribal/Federal Coordination Meeting was "Managing Change – Wetland Protection and Restoration in an Era of Changing Water and Energy Demands." There were 108 attendees onsite and 74 remote participants.

During this three-day meeting there was discussion on Natural Hazards. water pollution, climate change mitigation, wildlife protection, source



water protection, and effective communication. There was also discussion about opportunities to integrate wetlands protection, restoration and management into other programs by using wetlands to meet these other programs' goals. In addition, ASWM held a half-day concurrent session with the Wetland Mapping Consortium and a concurrent session discussion on Non-Regulatory Wetland Conservation Programs as well as an evening Town Hall Discussion on the U.S. Fish & Wildlife Service (USFWS) Next Wetland Status & Trends Report. Following the meeting, the agenda and PowerPoints were made available to participants here.

Overcoming Policy and Permitting Challenges to Implementing Natural Infrastructure Solutions



A 2016 Natural Floodplain Functions Alliance Workshop

ASWM worked with the Association of State Floodplain Managers and the American Planning Association to develop and facilitate a one-day Natural Floodplain Functions Alliance workshop at Pew Charitable Trusts headquarters in Washington, D.C. on November 29, 2016. The overall goal of the workshop was to identify permitting processes and policies that impede

ecological restoration of the natural and beneficial functions of floodplains and to assist participants in identifying

implementable solutions. The workshop included three case study presentations and a panel of federal agency representatives.



Managing Invasive Species in Coastal Wetland Restoration Projects: A Participatory Workshop to Identify Trends, **Innovative Approaches and Research Needs**

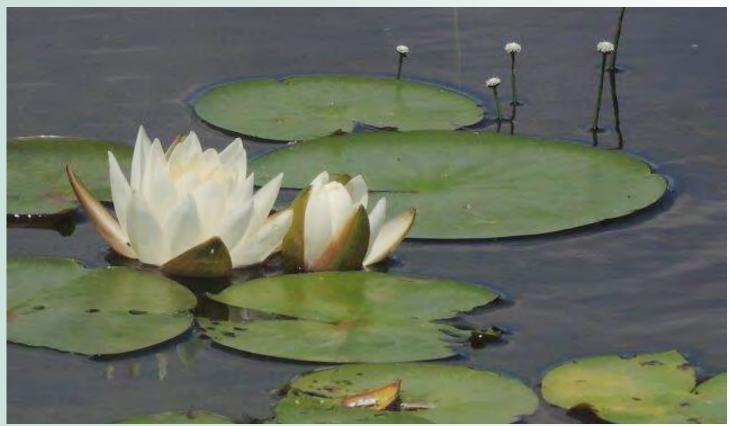
• Restore America's Estuaries & The Coastal Society 2016 Summit

ASWM organized and facilitated a one-day workshop on December 15, 2016 on the topic of wetland restoration, climate change and invasive species at the Restore America's Estuaries and The Coastal Society 2016 Summit in New Orleans, LA. Nine presentations were given on topics including invasive species-climate change interactions, nutria, feral swine, giant salvinia, and water hyacinth, highlighting various management approaches and sharing lessons learned. 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.

Silviculture in Forested Wetlands of the Southeastern and Gulf Coastal Plains: Exploring Wetland Impacts, Communication Hurdles, Best Practices, and Future Directions

2016 Society of Wetland Scientists Annual Meeting

ASWM agreed to work with the Interagency Coastal Wetlands Workgroup to host a symposium at the Society of Wetland Scientists Annual Meeting in Corpus Christie, Texas on Thursday, June 2, 2016. A planning committee was developed very early in the process, which consisted of ASWM staff, federal agency staff, Weyerhauser employees, academics, and private practitioners. The symposium brought together experts in wetland science, silviculture, and remote sensing to address outstanding questions about what may be causing coastal forested wetland loss. Ten presentations were given covering Clean Water Act Section 404 and the silviculture exemption, forestry best management practices, application of hydrologic models and tools, and modelling effects of silviculture drainage on wetland hydrology. Panel discussions allowed participants to identify areas for further research and future action.



Webinars

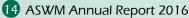
The Association of State Wetland Managers hosted a number of webinars in 2016 as part of ongoing projects to improve state wetland programs and to further the efforts of two collaborations: the Natural Floodplain Function Alliance and the Wetland Mapping Consortium. ASWM utilizes webinars as a tool for 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 2016 webinar series are listed below.

Members' Wetland Webinar Series

This monthly series continued through 2016. The webinar topics are provided below.

- Innovations in State Buffer Management –
 Kimberly Roth, Environmental Analyst, New
 England Pollution Control Commission; Trish
 Garrigan, Healthy Watersheds and Green
 Infrastructure Coordinator, EPA New England; Tom
 Gile, Buffers and Soil Erosion Program Coordinator,
 Minnesota Bureau of Water and Soil Resources;
 Danny Bennett, Wildlife Biologist, West Virginia
 Department of Natural Resources
- Legal Processes for Wetland Permits Janet Brooks, Esq., Attorney at Law
- Long Term Financial Assurances for Wetland Mitigation and Voluntary Restoration – Steve Martin, U.S. Army Corps of Engineers; Palmer Hough, U.S. Environmental Protection Agency's (EPA), Office of Wetlands, Oceans, and Watersheds; Robert Capriola, Westervelt Ecological Services; Angela Sturdevant, The Nature Conservancy's Indiana Chapter
- Ohio's VIBI-FQ: An Innovative Tool for Monitoring Natural and Mitigation Wetlands – Brian Gara, Ohio Environmental Protection Agency







- Financial Assurances and Compensatory Mitigation – Steve Martin, U.S. Army Corps of Engineers
- Capitalizing on the Forthcoming Release of the National Wetland Condition Assessment Report to Promote Your Wetland Program – Brenda Zollitsch, ASWM Policy Analyst
- Wetlands and Nutrient Uptake in Agricultural Settings – Tom Harcarik, Ohio Environmental Protection Agency, Division of Environmental and Financial Assistance; Bill Schumacher, Ohio Environmental Protection Agency, Division of Surface Water; and Eric Saas, Ohio Environmental Protection Agency, Division of Surface Water

Hot Topic Webinars

- Wetlands & Climate Change: A Summary of Current Wetland Scientific Findings – Gillian Davies, PWS, Senior Ecological Scientist, BSC Group, Inc. and President, Society of Wetland Scientists
- Nationwide Permit Rule Webinar #2: Panel on State Processes for Reviewing the Proposed Nationwide Permits and Lessons Learned from States – Jeff Boyles and Joni Lung, Ohio Environmental Protection Agency; Tyler Brown and Steven Smailer, Delaware Department of Natural Resources and Environmental Control;

- Vena Jones, Tennessee Department of Environment and Conservation; Heather Preston, South Carolina Department of Health and Environmental Control
- Nationwide Permit Rule Webinar #1: The New Nationwide Permit Rule - What You Need to Know - David Olson, U.S. Army Corps of Engineers
- American Wetlands Month: What you can do to protect and restore wetlands - Kathleen Kutschenreuter, U.S. Environmental Protection Agency (EPA); Susan-Marie Stedman, NOAA Fisheries; Mitch Bergeson, U.S. Fish & Wildlife Service; Dr. Abbey Tyrna, University of Florida, IFAS Extension; Dr. Bianca Wentzell, Passaic River Institute, Montclair State University

Natural Floodplain Function Alliance (NFFA) Webinars

- Comprehensive Local Planning and Programs: Charlotte-Mecklenburg's Approach - Tim Trautman, PE, CFM, Charlotte-Mecklenburg Storm Water Services, Engineering & Mitigation Program Manager
- October Federal Update: The FEMA Proposed Rule for FFRMS and Update on WRDA - Kim Matthews, RTI International; Jason Doll, Moffatt & Nichol; Kristine Cherry, Governors' South Atlantic Alliance (GSAA)
- Funding for Floodplain Restoration: Breaking Down Incentives to Develop Floodplains & Recent FEMA Policy Updates - Zachary Christin, Project Director, Earth Economics
- Living Shorelines: Lessons Learned and New Opportunities – Suzanne Sime, Strategic Programs Manager, Restore America's Estuaries; Bill Sapp, Senior Attorney, Southern Environmental Law Center; Tracy Skrabal, Southeast Regional Manager and Coastal Scientist, North Carolina Coastal Federation; Lee Anne Wilde, Living Shorelines Program Managers, Galveston Bay Foundation



- The Nature Conservancy's Emiguon: Restoring Functional Floodplain for Nature & People - K. Douglas Blodgett, Director of River Conservation, Illinois Chapter of The Nature Conservancy
- The Ecology, Engineering & Economics of Natural Coastal Defenses - Mike Beck, The Nature Conservancy and Adjunct Professor in Ocean Sciences, University of California Santa Cruz

Wetland Mapping Consortium Series

- Maps of Potential Wetland Extent for Selected Streams in Indiana- Kathleen Fowler, U.S. Geological Survey
- Mapping Coastal Storm Surge Flooding and Marsh Structure - Elijah Ramsey III, U.S. Geological Survey and Amina Rangoonwala, U.S. Geological Survey
- Uses of the Soil and Water Assessment Tool (SWAT) - Grey Evenson, PhD, Post-Doctoral Fellow, Virginia Tech and Visiting Scientist, U.S. EPA; Sangchul Lee, PhD Candidate, University of Maryland; Greg McCarty, PhD, Research Soil Scientist, USD
- Defining Wetland Gems in North Central New Mexico - Andy Robertson, Saint Mary's University of Minnesota and Kevin Benck, Saint Mary's University of Minnesota
- Wetland Functional Assessments for Watershed Planning & Decision Support- Andy Robertson, Saint Mary's University of Minnesota
- Working towards an Automated Wetlands Mapping Process: Successes, Failures, and Potential for the Future -Robb McLeod, Ducks Unlimited
- **Updated Data Collection Procedures and** Requirements for Meeting FGDC Wetland Mapping Standards - Rusty Griffin, U.S. Fish & Wildlife Service's, National Standards and Support Team
- Changes in the FGDC Wetland Classification Standard - Cowardin 2.0 - Rusty Griffin, U.S. Fish & Wildlife Service's, National Standards and Support Team

Improving Wetland Restoration Success Webinars

- Long-term Management & Legal Protections for Voluntary Restoration - Ellen Fred, Esq., Conservation Partners; Ted LaGrange, Nebraska Game & Parks Commission; Jeff Williams, USDA Natural Resources Conservation Service: Andrew **James. USDA Natural Resources Conservation** Service
- Not Lost in Translation: How to Select the Right Wetland Restoration Team - Lisa Cowan, PLA, ASLA, Principal, Studioverde; John Bourgeois, Executive Project Manager, South Bay Salt Pond Restoration Project; and Matt Schweisberg, Principal, Wetland Strategies and Solutions, LLC
- Bottomland Hardwood Restoration John A. Stanturf, PhD, U.S. Forest Service; John W. Groninger, PhD Southern Illinois University
- Gulf Coast Restoration Post-Katrina Bren Haase, Planning and Research Division, Coastal Protection and Restoration Authority, State of Louisiana; William P. Klein, Jr. Ed.D., U.S. Army Corps of Engineers; John Andrew Nyman, PhD, Professor, School of Renewable Natural Resources, Louisiana State University; Denise J. Feed, PhD, Chief Scientist, The Water Institute of the Gulf
- **Establishing Reference Conditions for Performance** Standards & Long Term Monitoring Results: Soils, Hydrology and Vegetation - Dr. Robert Brooks, Professor, Pennsylvania State University and Director, Riparia; Dr. W. Lee Daniels, Professor,

- Virginia Tech; Dr. Eric Stein, Principal Scientist, Southern California Coastal Water Research Proiect
- Managing Invasive Species in Wetland Restoration Projects: Considerations for Common Reed, Reed Canary Grass, Purple Loosestrife, Nutria and Feral Hogs - Margaret (Marnie) Pepper, Wildlife Biologist and Project Leader, USDA-APHIS-Wildlife Services, Chesapeake Bay Nutria Eradication Project/Nutria Detector Dog Program; Wendy Anderson, Certified Wildlife Biologist and Assistant Program Manager, USDA-APHIS-Wildlife Service, National Feral Swine Damage Management Program; Eric Hazelton, PhD Candidate, Smithsonian Environmental Research Center and the Department of Watershed Sciences & Ecology Center, Utah State University; Ben Peterson, Aquatic Noxious Weed Specialist, King County Noxious Weed Control Program, Washington; Craig Annen, Operations Manager and Director of Research, Integrated Restorations, LLC
- Water Rights & Wetland Restoration Alan J. Leak, P.E., Program Manager, Water Rights and Infrastructure at RESPEC and Julie A. Merritt, Water Resources Specialist/Project Manager, WGM Group
- Evaluating the Ecological Performance of Compensatory Mitigation - Joseph A. Morgan, U.S. Environmental Protection Agency, Wetlands Division; Dr. Eric Stein, Southern California Coastal Water Research Project; Dr. Siobhan Fennessy, Kenyon College



FINANCIAL REPORT 2016

INCOME

Non Cash (ASWM)	28,587
Contributions (Public Support)	508,044
Program Income	18,859
Membership Dues	29,858
Interest Income	261
Reimbursed Expenses	1,987
TOTAL INCOME	\$587,596

ASSETS

TOTAL ASSETS	\$292,475
Total Current Assets	\$292,475
Other Current Assets	0
Accounts Receivable	0
Checking/Savings	292,475
Current Assets	

EXPENSE

Labor (personnel)	\$442,191
Nonlabor	
General Office	30,668
Banking	1,621
Office Computers (IT)	5,492
Program Expense	42,081
Commercial Insurance	1,816
Non-employee compensation	2,899
Travel Expense	20,338
Miscellaneous	1,149
Total Nonlabor	\$106,064
Cost Share	28,587
TOTAL EXPENSE	\$576,842
IET INCOME	\$10,753

The Association of State Wetland Managers is a 501(c)(3) nonprofit, nongovernmental organization.

LIABILITIES & EQUITY

Liabilities

Total Accounts Payable	0
Other Current Liabilities	20,378
Total Liabilities	\$20,378
Equity	
Retained Earnings	261,344
Net Income	10,753
Total Equity	\$272,097
TOTAL LIABILITIES & EQUITY	\$292,475



Board of Directors

Officers:



Collis Adams, Chairman

Collis has served as the administrator of the Wetlands Bureau at the New Hampshire Department of Environmental Services (DES) for the past thirteen years. As the administrator, he oversees all activities relative to the New Hampshire Dredge and Fill Law (NH RSA 482-A) and the Shoreland Water Quality Protection Act (NH RSA 483-B). Collis lives in Goffstown, New Hampshire with his wife Laura. He has two children, one of each, and is particularly proud that he has instilled in them his same sense of love for the outdoors. Collis particularly enjoys spending time along the varied coastlines of New England and he is seldom seen without his vellow lab Zoë at his side.



Kenneth Murin, Vice 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.



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:



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-oficio 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).



Maryann McGraw - New Mexico Environment Department

Maryann is the Wetlands Program Coordinator and the Wetlands Team Leader with the New Mexico Environment Department (NMED) Surface Water Quality Bureau. Maryann has managed the New Mexico Wetlands Program since 2003. The Wetlands Program conducts wetlands mapping and classification, wetlands rapid assessment, develops innovative restoration measures and improves wetlands regulation and water quality standards related to wetlands.

Previously, Maryann managed CWA Section 319 projects for the Surface Water Quality Bureau since 1998. Maryann also worked for the New Mexico Department of

Transportation (DOT) as an Environmental Specialist beginning in 1993 where she provided input for natural resources protection as a part of transportation project design, wrote NEPA documents and was in charge of developing mitigation plans and projects for wetland impacts.

She brings the perspective and understands the challenges of a growing Wetlands Program in the arid west. She was awarded the 2010 New Mexico Riparian Council Award for Research, and the Quivira Coalition 2010 Radical Center Award for Civil Service. She has previously taught landscape ecology and restoration classes at Santa Fe Community College including Wetlands, Riparian Restoration, Dryland Restoration, Bioremediation, and Natural History of Arid Lands. Maryann holds Bachelor's and Master's Degrees in Geology from the University of Texas at Austin. Maryann paints en plein air in pastel and oil, concentrating on New Mexico's scenic vistas, how time and seasonal changes affect those places.



Doug Norris - Minnesota Department of Natural Resources

Doug is the Wetlands Program Coordinator for the Minnesota Department of Natural Resources, Ecological and Water Resources Division, a position he has held since 1992. Doug represents the DNR in developing state wetland policies and programs. He was involved in developing the original rules for Minnesota's main wetland regulatory program and has collaborated on numerous subsequent legislative and rule revisions. Doug manages the DNR's program for identifying and regulating impacts to calcareous fens, which receive special protection under state law. He provides guidance and technical assistance to DNR staff in reviewing wetland permits and in complying with wetland regulations for DNR projects. Doug

also provides technical expertise in developing wetland assessment methods such as the Minnesota Routine Assessment Method and in developing methods for prioritizing wetland restorations for maximum benefit.



Timothy Rach - Florida, Department of Environmental Protection

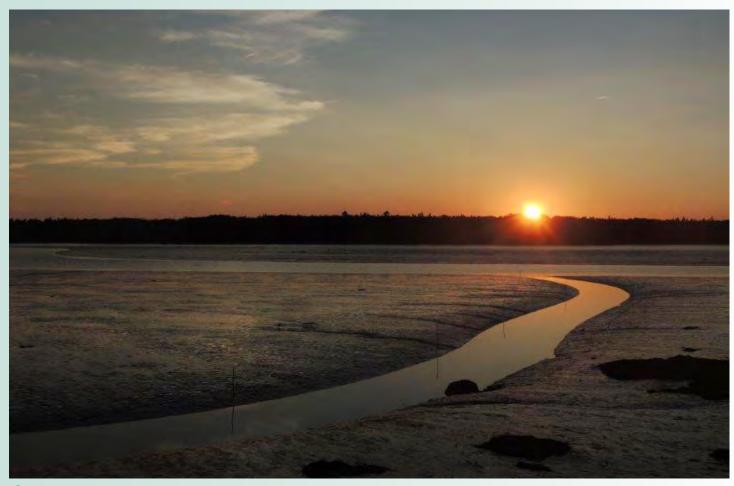
Timothy Rach is a Program Administrator in the Submerged Lands & Environmental Resources Coordination Program. He has been with DEP for over 21 years in various management and supervisory positions. Most of his time has been in the Environmental Resources Permitting program regulating development in 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.



Bill Ryan - Oregon Department of State Lands

Bill Ryan is the Assistant Director at the Oregon Department of State Lands (DSL) leading the Wetlands and Waterways Conservation Division and is responsible for implementation of Oregon's Removal-Fill and Wetlands Conservation Laws. Prior to joining the DSL in June of 2010, Bill enjoyed 14 years at the Oregon Department of Transportation performing environmental compliance work including wetlands delineation and mitigation, mitigation banking, regulatory streamlining and process improvement. Bill started his professional career in Southern California in 1989 working for various planning and engineering firms providing environmental planning and habitat restoration expertise for various planning and engineering firms.



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 Jav.

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*.



Association of State Wetland Managers 32 Tandberg Trail, Suite 2A Windham, ME 04062

Tel: (207) 892-3399 Fax: (207) 894-7992 www.aswm.org