

Presentation Summaries

(Listed in the order they appear on the agenda)

Mapping Wetlands with Statistical Distributing Modeling Techniques

Patrick A. Raney, Ducks Unlimited

Distribution modeling provides an efficient means to quickly identify existing and potentially restorable wetland features over large spatial scales. Increases in computing power and availability of terrain layers have enabled researchers and conservation practitioners alike to gain better insights into the distribution of wetland resources over very large areas. This presentation will review recent projects in the Northeast.

Innovations in Wetland Inventory & Mapping: Massachusetts Statewide Mapping Update

Mike McHugh and Lisa Rhodes, Massachusetts Department of Environmental Protection

This presentation will cover our efforts to create a statewide map of wetlands in Massachusetts as well as the first ever statewide update. We will also discuss how we identified anthropogenic changes through use of feature extraction software (the MA Wetland Change project) and our program to map eelgrass in coastal areas. We will include a very brief discussion on what we have learned from our mapping with regard to changes in wetland resource areas.

Mitigation Tools and Opportunities to Improve Aquatic Connectivity in NH

Cheryl Bondi, New Hampshire Department of Environmental Services

This presentation will introduce new web maps that provide stream crossing, fish habitat, and flood vulnerability data to assist in identifying candidate culvert replacement and stream restoration projects. The New Hampshire Aquatic Restoration Mapper is now available to provide culvert assessment data, fishery information, flood hazard reports, and other ecological information that should be considered when prioritizing culvert replacements. This information is readily available to grant applicants that are considering submitting a proposal to support culvert replacements and stream restoration projects.

New England Wetland Functional Assessment

Paul Minkin, US ACE- New England, and Erica Sachs Lambert, EPA Region 1

The US Army Corps of Engineers New England District and US Environmental Protection Agency Region 1 (New England) have developed a wetland functional assessment method for use in the Federal regulatory program. It is a quantitative method that will replace the qualitative Highway Methodology Supplement which has been in use since 1995. Fourteen specific functions are modeled, relating to water quality maintenance, hydrologic support, and biota support. Data are collected both remotely and in the field and then run as variables through the models, yielding functional capacity grades for each function that occurs within the given wetland system. The method is designed to be objective, repeatable, and fairly rapid.

Developing and testing a three-tiered approach to wetland condition assessment along an urban to rural gradient in New York State

Laura Shappell, New York Natural Heritage Program

New York Natural Heritage Program has developed a three-tiered sampling approach to assess the condition of NYS wetlands. This presentation will introduce our three-tiered sampling design, validation methods, and floristic quality benchmarks. Tiers include (1) a rasterized Landscape Condition Assessment (LCA) model at the broadest scale; (2) New York Rapid Assessment Method (NYRAM) onscreen aerial assessment and field stressor checklist; and (3) Intensive relevé plot surveys for vegetation structure data and floristic quality (FQ) metrics.

Summary of ASWM Floodplain Workshop

Andy Robertson, St. Mary's University of Minnesota

The Association of State Wetland Managers (ASWM) and the Association of State Floodplain Managers (ASFPM) have convened a consortium of floodplain and wetland mapping professionals to explore opportunities for integrated mapping and functional assessment of riverine and coastal floodplains and wetlands. This group met several times throughout FY 17/18 to discuss the current state of practice culminating in a day-long workshop that was held at the annual ASWM Meeting in April 2018. This presentation will summarize the presentations and discussions that occurred during the workshop with a focus on next plus opportunities for participation and collaboration.

Creating a Story Map: Case Study on The Delaware Living Shoreline Committee

Alison Rogerson and Brittany Haywood, Delaware Department of Natural Resources and Environmental Control

This presentation will discuss how we designed our Story Map based on our intended audience and the goals of the Delaware Living Shoreline Committee. We will highlight some of the useful features of the site and how we use it for basic education on living shorelines, to display project photos, link users to resources, and even allow professionals to list their services on the site for customers. Additionally, we included space dedicated to announcing our upcoming events and trainings as well as national news related to living shorelines.

Creating a Story Map: Case Studies from Spatial Data & Mapping

Andy Robertson, St. Mary's University of Minnesota

Communicating wetland inventory and functional assessment data to both professionals and stakeholders can be challenging. The science, technology, methods and classification systems used to create enhanced wetland data are complex and are often a stretch for non-technical audiences. This presentation will explore the use of web-based Story Maps (graphics, photos, text and maps) as a communication tool for data and information dissemination and management decision support. Examples will be drawn from recent projects in New Mexico, Wisconsin and Wyoming.

Considerations for Riparian Areas in a Stream Mitigation Assessment

Denise Clearwater, Maryland Department of the Environment

Some stream assessments contain limited metrics for characterizing condition and function of riparian areas adjacent to streams. The presentation will describe considerations for assessing wetlands and uplands that are part of a riparian area, rather than viewing them as a separate resource from the stream. Potential metrics and crediting considerations will also be described.

NWCA data and applications/uses for state wetland programs

Gregg Serenbetz, U.S. Environmental Protection Agency

Attendees will learn about the status of NWCA data collected in 2016 and EPA plans for rollout and analysis of data. They will also learn about additional EPA efforts to support use of the NWCA data for a variety of wetland management applications at national, regional, and state scales.

Introduction to the Upper Susquehanna Watershed

Jeremy Waddell, Wendy Walsh, and Melissa Yearick, Upper Susquehanna Coalition

USC presenters will give an overview of the Upper Susquehanna River Watershed and describe the programs and practices currently being implemented to improve water quality, enhance wetland ecosystems and stream corridor protection in the Chesapeake Bay Watershed. We will outline USC funding and delivery mechanisms and provide examples of our projects and initiatives.

Wetlands Assessment, Aquatic Connectivity and CAPS

Scott Jackson, University of Massachusetts Amherst

We have been using the Conservation Assessment and Prioritization System (CAPS; www.umasscaps.org) in Massachusetts as the basis for developing and evaluating wetlands assessments methods and approaches. We've used CAPS as a level one assessment method, to develop wetland IBIs (level three methods), to evaluate the effectiveness of FQA, to figure out how to use level 1 and level 3 wetland assessments in a TALU framework, and to assess the effect of dams and road-stream crossings on aquatic connectivity (Critical Linkages). Over the past couple of years we have expanded our assessment area to cover 13 states in the North Atlantic region. These include all New England states and some states in the Mid-Atlantic region, including NY, PA, NJ, VA, WV, MD and DE. We have CAPS and Critical Linkages data for these states that will soon be available for download from our web site.

Lightning Talks

Innovations in Functional Assessments – an Example from West Virginia

Elizabeth Byers, West Virginia Department of Environmental Protection

Wetlands can be rapidly and robustly assessed for functional values using GIS tools and the field skills of a wetland delineator.

Building Reference Wetland Networks in the Region to Enhance Assessment, Conservation, Restoration and Mitigation

Don Faber-Langendoen, NatureServe

Rigorous wetland assessment methods, including NatureServe's Ecological Integrity Assessment and EPA's NWCA, are now available to build reference wetland networks in and across states in EPA R1-R4. Successful completion of these networks will accelerate the establishment and application of reference wetlands in the United States, and contribute to improved wetland assessment, conservation, restoration and mitigation.

Functional Assessment Method

Laura Shappell, New York Natural Heritage Program

Quantifying wetland function and values relative to state-specific regulations is crucial for developing appropriate mitigation criteria for wetland permitting; however, New York State (NYS) lacks state-specific protocols. Our recently-funded project focuses on developing rapid functional assessment methods tailored in NYS's needs. Protocol development will be iterative over the course of this three-year project. We plan to streamline the method following our 2018 pilot season, and look forward to receiving feedback from our partners and community.

Future Directions: Building state capacity

Marla Stelk, Association of State Wetland Managers

Growing emphasis on cooperative federalism by federal agencies is providing new opportunities for states and tribes to evaluate existing regulatory programs, including the role their state/tribal government plays in regulating wetlands. This is occurring at a time when there is high staff turnover, reduced state budgets, and significant changes proposed in federal wetland programs. This talk will share success stories from states who have found innovative ways to strengthen their wetland programs.

Integration of Headwater Aquatic Resources

Dave Goerman, Pennsylvania Department of Environmental Protection

As more research is conducted on headwater aquatic resources it is becoming more apparent that these resources are better represented when assessed as integrated systems rather than separately as wetlands and riverine units.

NEBAWWG – MAWWG Joint Wetlands Meeting
Nov. 14-16, 2018

Riparian Forest Buffers in the Susquehanna-Chesapeake: Performance of CREP Projects

Robert P. Brooks, Corina Fernandez, and Mike Nassry, Riparia at Penn State University

This presentation on riparian forest buffers will summarize landscape and field assessments of an USDA–FSA sponsored study of buffers throughout the Susquehanna-Chesapeake watershed and subsequent recommendations from practitioners in the CREP buffer program.

New Jersey’s Wetland Condition Assessment Intensification Study: A Multi-Tiered Assessment of Wetlands and Watersheds

Kathleen S. Walz, New Jersey Department of Environmental Protection

The NJDEP conducted an EPA-funded WPDG intensification study to develop a statewide wetland condition assessment and establish a monitoring network for freshwater and estuarine reference wetlands. A 3-tiered condition and stressor assessment method was applied, based on NatureServe’s Ecological Integrity Assessment (EIA), in conjunction with protocols from the NWCA using a GRTS design. Results showed a high correlation between L2 stressors, EIA scores, and L3 floristic quality (Cover-weighted Mean C and NWCA Vegetation Multimetric Index). In turn, a Level 1 metric (Land Use Index) was sufficiently predictive of on-site ecological integrity to provide the basis for a state-wide, watershed and wetland type-based assessment of condition using 344 combined EIA and NWCA GRTS sites.