


WETLAND MAPPING CONSORTIUM

Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data

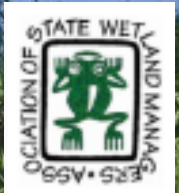
Ben DeVries

University of Maryland

**U.S. Fish &
Wildlife Service**



Hosted by the Association of State Wetland Managers
Supported by the U.S. Fish & Wildlife Service





AGENDA

- **Welcome, General Info & Introductions (10 minutes)**
- **Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data (30 minutes)**
- **Question & Answer (20 minutes)**

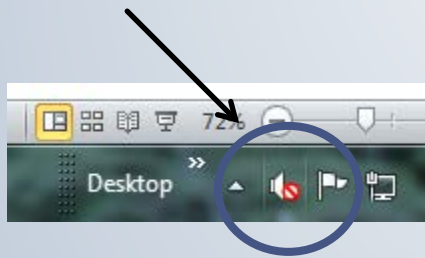
WELCOME!

If you have any technical difficulties during the webinar you can send us a question in the webinar question box or call Laura at (207) 892-3399 during the webinar.



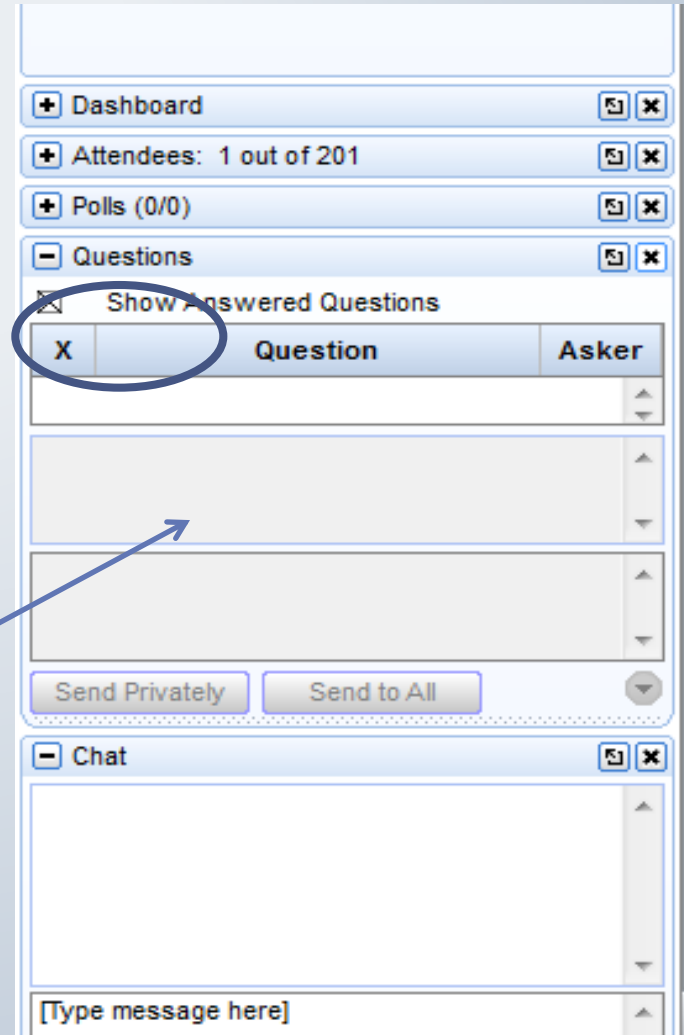
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If you are using the telephone to listen to the webinar, please mute both your computer's microphone and speakers



Please submit your questions for the presenters via the question box.

Tip: Close out other non-essential programs on your desktop



WEBINAR SCHEDULE/RECORDINGS

Association of State Wetland Managers - Protecting the Nation's Wetlands.



ASWM Upcoming Webinars

- **The Florida Wetlands Integrity Dataset: Part 2** - September 16, 2015
- **Solar Project Siting and Wetland Permitting** - September 29, 2015
- **Wetland Restoration in Urban and Highly Disturbed Landscapes** - October 13, 2015

For a complete list of ASWM webinars, [click here.](#)

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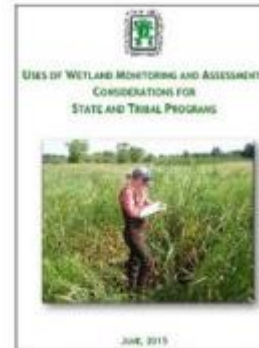
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ASWM Publications

Wetland Monitoring and Assessment in Wetland Programs

The Association of State Wetland Managers has released a new report - **Wetland Monitoring and Assessment: Considerations for State and Tribal Wetland Programs** - which was prepared with assistance from an EPA State Wetland Program Development Grant - explores the various ways that states and tribes could make better use of existing monitoring and assessment methods to obtain science-based answers to wetland management problems. While it provides an overview of many common approaches to wetland monitoring, the focus is primarily on **why** these methods are selected for a given purpose. This report encourages the thoughtful identification of the most appropriate and efficient methods in light of available financial and staff resources. It may be particularly useful to states or tribes that are developing or updating wetland monitoring and assessment strategies.

[Click here to read or download the report.](#)



Picture of the Week *Southward Bound*



Jeanne Christie Photo

For information about this picture and to see past pictures of the week [click here.](#)

ASWM RECENT PUBLICATIONS

- [Ecosystem Service](#)



WEBINAR SCHEDULE & RECORDINGS



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ASWM Webinars/Conference Schedule

ASWM WEBINARS

The Association of State Wetland Managers hosts webinars on various topics, most of which relate to a specific project and sub-group. In addition, ASWM hosts webinars as part of its members webinar series on topics of interest to members. Please click on the webinar group name below for more details about individual webinars. In all cases, if you have any questions about registering for a webinar, please contact Laura at laura@aswm.org. If you haven't used Go To Webinar before or you just need a refresher, please visit our guide prior to the webinar here.

The Association of State Wetland Managers (ASWM) and the Society of Wetland Scientists (SWS) share the common goal of encouraging sound science in wetland research, management, education, policy, and conservation. To meet this goal, the two organizations developed a formal partnership in 2019. ASWM is pleased to provide a link to SWS's new Wetlands Webinar Series and encourage you to investigate their webinar series as well as our own.

For a full list of all available webinar recordings with links, click here.



Members' Wetland Webinar Series

For Members of ASWM Only

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Hot Topics Webinar Series

Future Webinars

Past Webinars

Improving Wetland Restoration Success Project

Future Webinars

Past Webinars

Natural Floodplain Functions Alliance Webinar

Future Webinars

Past Webinars

Wetland Mapping Consortium Webinar (WMC)

Future Webinars

Past Webinars



WETLANDS ONE-STOP MAPPING

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WETLANDS ONE-STOP MAPPING

The Association of State Wetland Managers in collaboration with Virginia Tech's Conservation Management Institute (CMI) and the U.S. Fish and Wildlife Service's Northeast Region created Wetlands One-Stop Mapping to provide easy online access to geospatial data on wetlands and soils produced by federal and state agencies. The U.S. Fish and Wildlife Service (FWS), through its National Wetland Inventory

produced wetland geospatial data for most of the country. While different agencies post data on their own sites, there is not a single place to go for these data. Wetlands One-Stop Mapping provides links to these and other websites. It provides online access to classification tools for adding hydrogeomorphic-type to wetland inventory data and the results of NWI+ projects (maps and reports). The geospatial information is linked to aerial imagery (and topographic maps) through ESRI's ArcGIS (including ArcGIS Explorer) for easy viewing of wetlands, their characteristics, and functions for areas where NWI+ data are available.

The website also provides links to other federal and state websites that contain information on wetlands and geospatial wetland data. Among the national datasets accessible via Wetlands One-Stop Mapping are the NWI's wetlands mapper, USDA's web soil survey, USGS's national hydrography data and hydrologic units (HUCs). Links are also provided to NatureServe Explorer and the U.S. National Vegetation Classification Hierarchy Explorer along with guidance on how to extract descriptions of wetland plant communities from those sites for specific areas of interest.



Wetlands One-Stop Mapping Links by Subject

NWI

- National Wetlands Inventory (NWI)
- FWS Wetlands Mapper
- Wetland Primer
- Federal Standards & Funding for Wetland Mapping
- National Data Sets & Information

NWI+

- NWI+ Data & Information
- LLWW Classification
- NWI+ Data Layers
- NWI+ Mapper
- NWI+ Reports

States

- State Wetland Mapping Summaries
- State Wetland Program Websites & Data

Training

- Wetland Mapping Training

Reports and Publications

- Reports & Publications
- Other Mapping & Wetland Resources

Other Resources

- Wetland Plant Community Information
- Wetland Mapping Consortium
- Wetland Classification Image Gallery

What is NWI+?

NWI+ was a regional initiative by the Northeast Region of the U.S. NWI+ Fish and Wildlife Service's NWI Program. It was supported by the NWI through regional mapping projects funded by the U.S. Fish and Wildlife Service and federal and state cooperators from the mid-1990s to 2015. It began as a regional demonstration initiative in how NWI data could be enhanced with hydrogeomorphic attributes for landscape position, landform, water flow path, and waterbody type (LLWW descriptors) to increase the functionality of NWI data for better characterizing wetlands, for predicting wetland functions at the landscape or watershed level, and for assessing the impact of wetland changes on wetland functions. The expanded database and its outputs were called NWI+ data as the results go beyond the standard NWI mapping. Production of NWI+ data was a special project of the NWI with work mostly in the Northeast Region but also undertaken by some states (e.g., Colorado, Georgia, Montana, and New Mexico) in other Regions when they were updating NWI data. While the demonstration was successful and NWI+ or similar data continue to be generated by several states, the national NWI Program (the U.S. Fish and Wildlife Service) is no longer able to support NWI+ initiatives. Moreover budget cuts for the program have made the NWI+ NWI more dependent than ever on having cooperators update even the basic NWI database.

Wetlands One-Stop Mapping Links by Subject

NWI

- National Wetlands Inventory (NWI)
- FWS Wetlands Mapper
- Wetland Primer
- Federal Standards & Funding for Wetland Mapping
- National Data Sets & Information

NWI+

- NWI+ Data & Information
- LLWW Classification
- NWI+ Data Layers
- NWI+ Mapper
- NWI+ Reports

States

- State Wetland Mapping Summaries
- State Wetland Program Websites & Data

Training

- Wetland Mapping Training

Reports and Publications

- Reports & Publications
- Other Mapping & Wetland Resources



Other Resources

- Wetland Plant Community Information
- Wetland Mapping Consortium
- Wetland Classification Image Gallery



WETLAND MAPPING TRAINING WEBPAGE

Association of State Wetland Managers - Protecting the Nation's Wetlands.



ASWM Upcoming Webinars

- **Wetlands & Nutrient Uptake in Agricultural Settings** - 1/27/16
- **Changes in the FGDC Wetlands Classification Standard - Cowardin 2.0** - 1/28/16
- **Evaluating the Ecological Performance of Compensatory Mitigation** - 2/2/16

For a complete list of ASWM webinars, [click here](#).

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Wetland Mapping Training


U.S. Fish & Wildlife Service

The Fish and Wildlife Service's National Wetlands Inventory (NWI) is pleased to announce the availability of initial modules of an online Wetland Mapping Training course. NWI is providing the training to encourage and enable mapping partnerships with other organizations in order to increase the amount of current, modernized wetlands geospatial data available to all users. The training is geared towards image interpreters already skilled in GIS, who may need special training for mapping wetlands, to learn how to interpret and classify wetlands, apply the new standards and requirements, or learn tips and tricks (coming soon) to make the mapping more efficient. The training is designed to implement the new Wetlands Mapping Standard and ensure the quality of the data – and training is an effective way to make sure the data are collected accurately from the beginning. Currently only three modules are available, two technical modules are coming soon, and three additional modules on related topics are planned. NWI will continue to provide in-person training to partnering organizations as needed, as well as data verification tools, guidance, and quality control of the data before it becomes part of the NWI layer of the National Spatial Data Infrastructure. To review or take the training, [click here](#).


The training is evolving as we receive feedback. If you want to be part of the process, send comments to FW9_Wetlands@fws.gov. This training was developed in cooperation with the Association of State Wetland Managers, supported by EPA and the FGDC.

Training Webinars


Mapping Standards & Requirements – Rusty Griffin, U.S. Fish & Wildlife Service (10/15/14)



Part 1: Introduction - Marla Stelk, Policy Analyst, ASWM
Presenter: Rusty Griffin, U.S. Fish & Wildlife Service



Part 2: Presenter: Rusty Griffin, U.S. Fish & Wildlife Service



Part 3: Questions

February 15 Webinar Recording Available

Recent Updates to the EnviroAtlas Tool: Mapping Ecosystem Goods and Services



Anne Neal

U.S. Environmental Protection Agency



Interested in Receiving CEUs?

Who can get Certificates for Use in Applying for Continuing Education Credits?

- You must be a participant during the entire live webinar presentation.
- We are able to track webinar participation by registrants using our GoToWebinar software.
- Your Certificate of Participation will state that you were a participant in this specific ASWM webinar on today's date from 3-5 pm Eastern.
- You will be responsible for sending the ASWM certificate to your accrediting organization.

Using *ClassMarker* to Download your Certificate of Participation

If you need CEUs for your participation in today's webinar, use the link you are sent to access today's webinar certificate page on the **ClassMarker site.***

You will need to **create a username and password.**

This will take you to the "test" where you will **certify your participation.** If you certify your participation, click "yes."

You will be prompted to download your certificate. If you cannot download, go back into ClassMarker using your password to print. *Do not pay twice to download.*

For assistance, please contact **Laura Burchill** laura@aswm.org or (207) 892-3399.

***A link to a page with instructions will be sent to everyone who registered in an e-mail one hour after the webinar ends. Non-members will be required to pay \$25 per certificate.**



ASWM Upcoming Webinars

- Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data - July 19, 2017
- Integrated Stream and Wetland Restoration: A watershed approach to improved water quality on the landscape - July 25, 2017
- Partnering with Beaver to Benefit Sage Grouse and Working Lands - July 26, 2017

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How to Receive a Certificate of Participation for the July 19, 2017 Wetland Mapping Consortium Webinar

Using the *ClassMarker* online system, ASWM will ask you to certify that you participated in the entire Wetland Mapping Consortium live webinar on Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data on Wednesday, July 19, 2017 from 3-5 pm Eastern.

Once you are in *ClassMarker*, you will be prompted to provide your name and email address, which will be used to process your certificate.

Answering "yes" to the question about your participation will automatically qualify you to receive a certificate for your attendance. Answering "no" will result in no certificate being issued.

You will be prompted to download your Certificate of Participation from *ClassMarker* after you complete the quiz.

Once you download your certificate, you can then submit the certificate to the accrediting organization of your choice to potentially receive continuing education units/credits.

Please select the appropriate certificate process:

- I am an ASWM Member:

All ASWM members receive free Certificates of Participation for webinars. Non-Members will be charged a processing fee of \$25.00 US. To receive your free Certificate of Participation, [click here](#).

[ASWM Member Free Certificate](#)

If you are not a current ASWM Member, you must select the non-member certificate link to receive your certificate.

- I am not an ASWM Member:

If you are not an ASWM member, please either:

A) Select the [Non-member Certificate Option](#) to get your certificate. All non-ASWM Members are required to pay a \$25.00 certificate processing fee. You will be prompted to pay the processing fee using PayPal, with the option to sign in as either a PayPal member or as a guest (not requiring a PayPal account and using your credit card).

[Non-Member Certificate](#)

B) We encourage you to go to the ASWM.org website and [become a member](#) so that you can receive certificates at no charge for the next 12 months.

[Join ASWM](#)

If you have any questions, please contact Laura Burchill at laura@aswm.org or contact the ASWM office at (207) 892-3399.



We Invite You to Join the Association Of State Wetland Managers

ASWM BENEFITS OF MEMBERSHIP

- Free Participation in our Member's Only Wetland Webinar Series
- Exclusive access to Member's Webinar recordings*
- Free Certificates of Attendance for all ASWM webinars*†
- Free Subscription to the Association's bi-monthly membership newsletter, Wetland News
- Free Subscription to the Association's weekly news bulletin, Insider's Edition
- Reduced Rates for Participation in ASWM Workshops and Training Sessions
- Opportunities for Involvement in ASWM Committees
- Voting rights in elections of the Board of Directors and all issues presented to members to vote*
- Access to a member's only section for discussions in ASWM's Online Forum*
- Access to a Robust Online Collection of Wetland References
- Access to a National Network of Wetland Professionals
- A Sense of Pride Knowing That You Have Directly Supported Active Wetland Conservation Efforts Nationwide
- Corporate group memberships (11-20+ people) also include logo placement on ASWM's website homepage with a live link*
- For a detailed description of benefits, [click here](#).

* New benefits as of Dec. 1, 2016

† Non-members will be charged \$25.00 for each Certificate of Attendance beginning January 1, 2017.

<https://www.aswm.org/join-aswm>



WETLAND MAPPING CONSORTIUM WEBINAR SERIES MODERATOR

Marla Stelk
Policy Analyst

Association of State
Wetland Managers



PRESENTER



Ben DeVries
Post-Doctoral Research Associate
Department of Geographical Sciences
University of Maryland

Mapping Wetland Inundation Dynamics Using Multi-Source Satellite Data

It Will Take Us A Few Moments To Make The Switch....



Questions?

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*Thank you for your
participation!*



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