

The Association of State Wetland Managers Presents:
**Improving Wetland Restoration Success
Webinar Series**

Water Rights & Wetland Restoration

Presenters:

Alan J. Leak, P.E., RESPEC

Julie A. Merritt, WGM Group

Moderators: Jeanne Christie & Marla Stelk



Supported by EPA Wetland Program Development Grant 83578301

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AGENDA

- **Welcome and Introductions (10 minutes)**
- **Western Water Rights - What You Need to Know - Alan J. Leak, P.E. (40 minutes)**
- **Water Rights Regulations and Wetland Restoration: A Montana Perspective - Julie A. Merritt (40 minutes)**
- **Question & Answer (15 minutes)**
- **Wrap up (5 minutes)**





WEBINAR MODERATORS



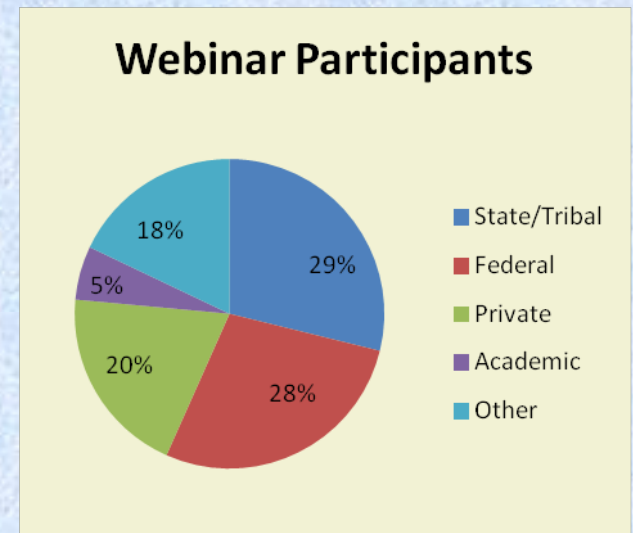
Jeanne Christie,
Executive Director



Marla Stelk,
Policy Analyst

WETLAND RESTORATION PROJECT

- Interdisciplinary workgroup of 22 experts
- Monthly webinar series
- Draft white paper based on webinars, participant feedback, external review
- Pursuing strategies that:
 - Maximize outcomes for watershed management
 - Ecosystem benefits
 - Climate change
 - Invasive species
 - Improve permit applications and review
 - Develop a national strategy for improving wetland restoration success



ACTION PLAN → IMPLEMENTATION

WEBINAR SCHEDULE & RECORDINGS

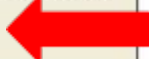
Association of State Wetland Managers - Protecting the Nation's Wetlands.



ASWM Upcoming Webinars

- **Stream/Wet Meadow Restoration** - September 8, 2015
- **The Florida Wetlands Integrity Dataset: Part 2** - September 16, 2015
- **Solar Project Siting and Wetland Permitting** - September 29, 2015

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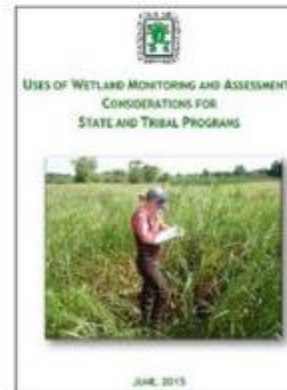
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ASWM Publications

Journal of Monitoring and Assessment in Wetland Programs

Association of State Wetland Managers released a new report - **Journal of Monitoring and Assessment: Considerations for State and Tribal Programs**. This report - which was prepared with technical 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.



Picture of the Week

Lovely Weeds





Jeanne Christie Photo

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

WEBINAR SCHEDULE & RECORDINGS

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



ASWM Upcoming Webinars

- Novel Ecosystems and Restoration - 11/20/15
- Climate-Smart Conservation for Wetlands - 12/9/15
- Improving Wetland Restoration "Success": What We've Learned So Far - 12/15/15

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

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ASWM Webinars/Conference Schedule




The Association of State Wetland Managers holds webinars on various topics, most of which relate to a specific project and work 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 Lewis at lewis@aswm.org.

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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, regulation, policy, and conservation. To meet this goal, the two organizations developed a formal partnership in 2014. ASWM is pleased to provide a 50% to SWS's new Webinars Webinar Series and encourage you to investigate their webinar series as well as our own.

For a full list of all available webinar recordings visit this link [here](#).




Members' Wetland Webinar Series

For Members of ASWM Only

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Hot Topics Webinar Series

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Improving Wetland Restoration Success Project




[Future Webinars](#)

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Natural Floodplain Functions Alliance Webinar



[Future Webinars](#)



FUTURE SCHEDULE

New Topics for 2016:

- Establishing Reference Conditions for Performance Standards & Long Term Monitoring Results: Soils, Hydrology and Vegetation
- Managing Invasive Species in Wetland Restoration Projects
- How to Select the Right Wetland Restoration Team
- Gulf Coast Restoration Post-Katrina
- Bottomland Hardwood Restoration
- How to Incorporate Wetland Restoration in to Landscape Planning
- Prioritizing Wetland Restoration Mitigation Site Selection in the Face of Climate Change
- Final draft report: A National Strategy for Improving Wetlands Restoration Outcomes

FOR FULL SCHEDULE, GO TO: <http://aswm.org/aswm/6774-future-webinars-improving-wetland-restoration-success-project>

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Please contact **Laura Burchill**
laura@aswm.org
(207) 892-3399

Provide:

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- Webinar date and Title

PRESENTERS



Alan J. Leak, P.E.
Program Manager
Water Rights and Infrastructure
RESPEC



Julie A. Merritt
**Water Resources Specialist/
Project Manager**
WGM Group

A “COOKBOOK” APPROACH TO WETLAND RESTORATION WON’ T WORK

There are too many variables.

- *Every landscape is different*
- *Purpose of restoration varies*
- *Even a good design may not anticipate events*
- *Time needed varies*
- *Intervention and adaptation may be needed during and after construction*
- *Evaluating progress and completeness is needed*



Major Reasons for Failure (examples)

Overarching

- Poorly Defined Outcomes/Performance Criteria
- Lack of Access to Expertise and Training
- Lack of Accountability and Enforcement
- Altered and Changing Landscapes/Climate
- Separation of Professions – The ‘Silo’ effect

Site-Specific

- Planning issues, i.e., Inadequate Assessment of landscape, hydrology & soils
- Construction issues, i.e., failure to implement design, no adaptive management
- Post construction issues, i.e., poor record keeping, limited follow up activity to address problems

How Do We Improve?

- Better defined goals and performance criteria
- Improve Access to Knowledge and Training
- Require Accountability
- Require Documentation of Credentials
- Develop a Common Taxonomy
- Adopt New Science and Technology into Regulations and Guidance
- Engage Multi-Disciplinary, Integrated Teams
- Regional Data Depositories to Document Reasons for Success and Failure

EACH WETLAND RESTORATION PROJECT IS UNIQUE:

- *Consider both historic and current landscape setting*
- *Analyze how water moves into and out of the site*
- *Evaluate soils present and identify any onsite drainage*
- *Focus first on hydrology and soil first, last on plants*
- *Develop a plan that is achievable for the site*
- *Develop comprehensive cost estimates*
- *Ensure plan is followed*
- *Hire experienced and knowledgeable contractors*
- *Adapt plan as needed during construction*
- *Determine if monitoring criteria will measure progress*
- *Keep good records and share with others*



Water Rights & Wetland Restoration

IT WILL TAKE US A FEW MOMENTS TO MAKE THE SWITCH...



Photo Credit: Marla Stelk

Alan Leak's Recommendations

Cause of Failure	Recommendation	Selected Measures
Lack of Planning for acquisition of the necessary water rights	At the start of the project identify if water rights will be necessary	<ul style="list-style-type: none"> ➤ Engage a water rights professional ➤ Determine the type of water impact ➤ Contact and meet with the water rights administrator in your State to discuss the project
Did not identify that the excavation for the wetland pond would expose groundwater	Determine the potential exposure of groundwater for any wetland excavation	<ul style="list-style-type: none"> ➤ Contract with a Geotechnical engineer to construct soils borings and conduct groundwater level monitoring ➤ Engage a professional to provide opinions regarding potential groundwater level fluctuations
No budget for long term water rights accounting and administration	Assure that the long term maintenance budgets include water rights accounting and administration	<ul style="list-style-type: none"> ➤ Obtain an estimate from a water rights professional for the long term water rights accounting and administration ➤ Identify the person who will be responsible for water diversions / deliveries and connect them with the water rights professional
Did not expect the time required to obtain water rights for the project	Plan that water rights can take a substantial time to acquire/adjudicate/permit	<ul style="list-style-type: none"> ➤ Depending on the State in which the project is constructed, you may need to conduct water rights evaluations early on and live with the results of the process ➤ Don't cut corners / establish contingencies (20%)

Julie Merritt's Recommendations

Cause of Failure	Recommendation	Selected Measures
Geographic area closed to new appropriations of water	Identify site with existing water rights	Locate a landowner with existing water rights who is willing to convert water rights from existing use to wetland use
Existing water rights for project site are determined to be less than expected	Have knowledgeable professional review water rights as part of initial site selection	Choose sites with rights that have been vetted and/or identify other rights in the vicinity that may be purchased and relocated
Application to change denied do to unacceptable change in timing, location or amount	Research other water rights in the area for potential adverse effect	<ul style="list-style-type: none">• Modify project to address timing, location or amount discrepancies• Obtain additional water rights to resolve adverse effect
Cost and time budgets for water rights overrun	Be prepared to invest in an initial assessment for water rights and allow for year or more for application process	Team with experienced water right professionals and include \$ and time in budgets for initial assessment and water right authorization process

Questions?

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*Thank you for your
participation!*



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