

TENNESSEE
STORMWATER
ASSOCIATION



**TNSA
Board of Directors**

Officers

President: Don Green
Green_d@chattanooga.gov

President-Elect: Crystal Piper
CPiper@HamiltonTN.gov

Vice President: Jason Scott
jason.scott@townoffarragut.org

Treasurer: Shelia Knight
Shelia.Knight@mtsu.edu

Ad-Hoc Secretary:
John Chlarson
john.chlarson@tennessee.edu

Secretary: Mary Halley
mary.halley@amecfw.com

Past President: Andy Best
Johnson City Stormwater

Board Members

Joseph Barnett, Elizabethton

Barry Brown, TDOT

David Carver, Sevier County

Steve Casey, CEC Inc.

Jake Chandler, City of Bristol

Tim Gangaware, UT-WRRC

Tracy Jones, Knox County

Mary Halley, AMEC

Mark Heinzer, City of Chattanooga

Dawn Hjelseth, greenspaces

Tasha King, City of Memphis

Jake Greear, McGill Associates

Chris Masin, Shelby County

David Mason, CDM Smith

Michael Scott,
Williamson County

TNSA Regional Chairs

Southeast Tennessee:
[Leah Crisp](#)

Northwest Tennessee:
[Dan Wankel](#)

East Tennessee:
[Amy Mann](#)

Middle Tennessee:
[Amy Murray](#)

West Tennessee:
[Chris Masin](#)

TNSA Times

Tennessee Stormwater Association News & Information

Spring 2015

Message from the TNSA President: Giant Steps!

In the last newsletter I mentioned that I think that this is going to be TNSA's **Best Year**. One reason is because we were hiring an Executive Director: a new position! We went through an exhaustive search process, and interviewed a plethora of excellent candidates--but -- Drum roll please...

I'd like to introduce to you TNSA's new ED: Charlene DeSha.



Charlene is originally from Greenville, South Carolina. She moved to Tennessee in 2000 where she met her husband, and stayed. They have one son, Eli, age 8.

Her position before coming to TNSA was the Executive Director of Keep Blount Beautiful (and we all know how beautiful Blount County is!). Before beautifying her County, she was Marketing Manager of EarthFare Market and Café.

We are excited about Charlene being on board and if any member has a question, please do not hesitate contacting her at charlene@tnstormwater.org.

Speaking of members, if you are not one yet, or if you were a member and have not yet to re-up your

membership, please do as soon as possible. We are going to have an exciting year.

On another note, we still have the services of our stalwart, Jennifer Watson, for limited duties, and I'd like to take this time to thank Barry Brown, and TDOT, for allowing us to have Jennifer; her hard work has gotten us where we are now: **Giant steps**. And I think we are still taking Giant steps.

Sincerely

Don Green
green_d@chattanooga.gov

TNSA Annual Conference October 20-22, 2015 Call For Sponsors!

Join us this fall at Tennessee's premier state park, Fall Creek Falls State Park in Pikeville, Tennessee, as we explore challenges and discover solutions to the ever-changing world of stormwater management in Tennessee.

Our theme is "**Fall into Green**".

This year's Keynote Speaker will be **Bill Landry** who is the voice, host, narrator, and co-producer of "The Heartland Series", which has aired on WBIR-TV for nearly thirty years. Since its beginnings in 1984, over 1,900 short features have been produced, including 150 half-hour specials. Bill's been

awarded two Emmy Awards, the Education in Appalachia Award and received an honorary doctorate of Humanities from Lincoln Memorial University. The series has also received many national and international awards.

For sponsorship opportunities and additional information, please contact Charlene DeSha at

charlene@tnstormwater.org or Crystal Piper at cpiper@hamiltontn.gov. Check our website soon for open registration!

Save the Date!
Tennessee Stormwater Association
Annual Conference 2015
"Fall Into Green"

October 20-22, 2015
Fall Creek Falls State Park



Executive Director

Charlene DeSha

Charlene@tnstormwater.org

Executive Coordinator

Jennifer Watson

jennifer@tnstormwater.org

TNSA Committees

Regulations & Policy

Chair: [Jennifer Watson](#) & [David Mason](#)

Education Training & Professional Development

Chair: [David Carver](#)

Manufacturer BMP Evaluation

Chair: [Chris Granju](#)

Conference Planning

Chair: [Crystal Piper](#)

We welcome TNSA Members to participate on any of these committees! Please contact the committee chair for additional information.

In this issue:

New York Appellate Court Issues Important Decision for Municipal Stormwater Regulation	4
EPA GI/LID Workshop Biloxi, MS July 15-16	4
TN Permanent SW Design Training	5
EPA and USACOE Announced Final Clean Water Rule	6
Free Webinars	7
National Park Service: Rivers, Trails, and Conservation Assistance Program	8
Tennessee Wetland Festival, Athens, TN June 20, 2015 9-5PM	9

TDA—Forestry: Proposals Now Accepted for Tree Planting Projects

NASHVILLE— The Tennessee Department of Agriculture Division of Forestry is now accepting urban forestry project proposals through the Tennessee Agricultural Enhancement Program (TAEP) and the Urban & Community Forestry (U&CF) Program.

TAEP funds will be used to enhance the state of Tennessee through tree planting. “These TAEP-funded projects require that the trees must come from a Tennessee nursery,” Urban Forestry resource specialist Brian Rucker said. “These activities support our nursery industry and provide clean air and water, stormwater control and aesthetic values to our communities.”

U&CF funds support all other urban forestry related projects. Pro-

jects that address ordinances, inventory and management planning, advisory organization and staffing of an urban or community forestry program will be given priority.

Other projects for education, training, printed materials, and travel to state and national urban forestry conferences are also accepted. Local governments, private non-profit organizations and educational institutions are eligible to apply.

The Division of Forestry will also accept proposals to fund urban forestry staff positions. If accepted, the agreement will be for three years on a sliding scale and dependent on available funds from the USDA Forest Service.

An information packet is available on request. The packet includes

additional details on the grant programs, the types of projects accepted, application forms and proposal instructions.

Proposals must be received in the Nashville office of the Division of Forestry by 4:30 p.m. on Friday, June 19, 2015.

For an information packet or questions about the urban forestry grants, contact:

Middle Tennessee - Brian Rucker at 615-837-5439

or brian.rucker@tn.gov

East Tennessee - Tom Simpson at 865-908-4434

or tom.simpson@tn.gov

West Tennessee - Shawn Posey at 901-754-5185

or shawn.posey@tn.gov

Meeting your Public Education Minimum Measure: Join the Tennessee Association of Broadcasters: TAB Program!

TNSA is continuing to work with the [Tennessee Association of Broadcasters](#) (TAB) and Stormwater Consultant, Tom Lawrence, P.E., to provide the TAB Stormwater Education Program for the 2014-2015 year.

The program works with TAB to distribute professionally developed radio and television Non-Commercial Sustaining Announcements (NCSAs) to television and radio stations throughout the State. TAB has over 330 television and radio station members in Tennessee.

Due to TNSA's relationship with TAB, all participating MS4s will be provided with NCSA airtime reporting, which can be included in your annual report as credit to-

ward your stormwater education and outreach program. TAB states that the return-on-investment in the average NCSA program can deliver 4 to 10 times the annual expenditures!

The cost of participation is based on the population within the MS4 (see table below). TAB uses the money received from TNSA for distribution, promotion, and tracking of the NCSAs. TNSA pools the money from the individual MS4s to contract with TAB for the program to negotiate additional airtime at lower costs.

Chris Masin, Shelby County MS4, enthusiastically promotes TAB: “Of course Shelby County MS4 would like to participate in the TAB program for 2015. The exposure that

the radio ads give the stormwater program is invaluable. The effort level to receive TDEC accepted public education credits is as simple as approving the invoice and downloading the efficiently-sent, timely reports. And the amount of value that the airtime is worth compared to the minuscule cost is absolutely mind-blowing. Count me in!”

If you would like to get an invoice for the TAB Program and receive the available monthly reports from July 2014 on, please contact [Tom Lawrence](#) (901-237-4819) or [Jennifer Watson](#) (615-418-7284).



Tier Level	Population	Yearly Rate	Tier Level	Population	Yearly Rate
1	25,000 or less	\$400	4	100,000 or less	\$1,600
2	50,000 or less	\$800	5	Greater than 100,000	\$2,000
3	75,000 or less	\$1,200			

Upcoming Conferences

Municipal Wet Weather Stormwater Conference



EPA REGION 4 MUNICIPAL WET WEATHER STORMWATER CONFERENCE

The EPA Region 4 and the Southeast Chapter of the International Erosion Control Association (IECA) are hosting the second annual Municipal Wet Weather Stormwater Conference. Presentations will inform and educate MSA operators, consultants, contractors and others practicing in the discipline of stormwater management, stormwater quality and erosion and sediment control. The deadline to submit presentations is March 13, 2015.

Monday, June 15 - Tuesday, June 16
 Holiday Inn Atlanta-Perimeter
 4386 Chamblee-Dunwoody Road
 Atlanta, Georgia 30341
www.ieca.org/ms4

PRESENTATION TOPICS	PRICING
<ul style="list-style-type: none"> Presentations to include the following conference topics: <ul style="list-style-type: none"> • Integrated or Watershed based Permitting • Sustainable Development, LID and Green Infrastructure • TMDLs and Watershed Implementation Plans • Stormwater Funding • Legal, Ordinances and Regulations • Stormwater Management Program and Training • Public Education and Outreach • Erosion and Sediment Control Practices on Construction Sites • Evaluation of Stormwater Practices and Devices • Inspection Methods and Technologies • Stream Evaluation, Restoration, and Monitoring • Watershed Modeling • Water Quality Landscaping 	Standard registration (after May 15, 2015): \$225 Late and on-site registration (after June 10, 2015): \$250 Your registration fee includes education, access to exhibit booths, breakfast on both days plus lunch on both days.
LODGING	
The Holiday Inn Atlanta-Perimeter is the conference host hotel. Registrant will get the group per diem rate and one free breakfast per room night booked. Room Rate: \$135 per night plus tax. For Reservations: Call 770-457-6363 or visit www.hyperimeter.com (use code EPA). Parking at the hotel is free.	
PRESENTED BY	



88th Annual Water Environment Federation Technical Exhibition and Conference
 McCormick Place | Chicago, Illinois USA
 September 26-30, 2015

The Stormwater Congress Program, offered as a part of WEFTEC, allows stormwater professionals from around the world to gather in one location, at the largest water quality conference and exhibition in the world, to learn from the very best, thought-leaders in the stormwater sector.

Highlights include:

- Access to more than 30 specifically-tailored, stormwater technical sessions and workshops on:
 - Regulations and policies
 - Flooding impacts and mitigation
 - Benefits of green infrastructure
 - Stormwater and transportation systems
 - Operations and maintenance
 - Research in stormwater
 - Stormwater financing and funding strategies, and more...
- Opportunity to attend additional WEFTEC programming covering the entire water industry
- Stormwater Pavilion – located on the WEFTEC exhibition floor, filled exclusively with stormwater exhibitors, and includes numerous presentations, discussions, and networking events
- Full access to the WEFTEC 2015 Exhibition, featuring nearly 1,000 exhibiting companies

www.weftec.org/stormwatercongress

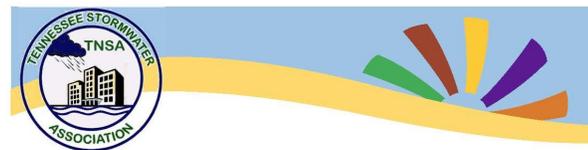
Registration begins on March 31, 2015.
 "Best Rate" deadline is July 15.



Weftec STORMWATER CONGRESS PROGRAMMING AT-A-GLANCE

SATURDAY, September 26	TUESDAY, September 29	WEDNESDAY, September 30
Workshop 12: Tools To Quantify Environmental Benefits of Trees for Stormwater/Green Infrastructure Projects Workshop 25: Pollution Load and Volume Based Urban Stormwater Modeling for Meeting Regulations Workshop 26: Quantifying Restoration for Clean Water Act Compliance: Common Ground for Water Quality Trading and Stormwater Management Workshop 27: WEF/WEFAP Benefits of Integrated Modeling: Collection Systems, Plant, and Watershed and Beyond Monday, September 28 Opening General Session Morning Sessions 10:30 am – 12:00 pm 104 Asset Management for Green Infrastructure* Stormwater Congress Luncheon (ticketed event) Afternoon Sessions 1:30 pm – 5:00 pm 211 Collection Systems and Private Property: Crossing the Line to Reduce I/P* 213 Stormwater Treatment Device Research: Meet Your Makers* 214 Hey There's a Cool Idea! MSA Program Innovations* 215 Groundwater Impacts of Green Infrastructure* 216 Findings From the National Cooperative Highway Research Stormwater Program 225 Collection Systems: Deep Sewers and Tunnels* 226 Quantifying Reduction From Structural and Non-Structural BMPs* 227 Meeting Stormwater Design Challenges in Urban Areas* Stormwater Networking Reception	Morning Sessions 8:30 am – 12:00 pm 306 Wet Weather Treatment and Optimization at WRRFs 314 Real Time Operations: Using SCADA and Your Data To Make Daily Decisions* 315 Stormwater Policy Update From U.S. EPA* 317 Design Solutions in CSO Settings 318 Putting It All Together: Integrated Planning 322 Resilient Water Infrastructure: Design and Operational Strategies 327 Stormwater Policy in Practice: Case Studies* 328 Bugs and Beaches: Design and Modeling for Bacteria Reduction* Afternoon Sessions 1:30 pm – 5:00 pm 412 Collection Systems Design and Construction: Exploring a Diverse Range of Project Deliveries 414 Stormwater Offset Frameworks, Credits, and Calculations 415 Online Stormwater Design Tools* 416 Stream Restoration Techniques and Case Studies 417 The Latest on Erosion Control From IECA* 418 Integrated Modeling: State of the Practice, Vision for the Future 425 Leading Edge Research on Vegetation in Stormwater Design* 426 Get the Gunk Out: Advanced Pollutant Removal for Separate Stormwater Systems* 427 WEF Stormwater Treatment Device Program (STEP) Update* 429 "Be Prepared": What Does Climate Change Adaptation Mean* Stormwater Networking Reception	Morning Sessions 8:30 am – 12:00 pm 513 Developing Successful Funding Strategies for Watershed and Stormwater Programs 514 Integrated Stormwater Planning Case Studies 515 Flooding 516 Paving the Pavement: Approaches for Streets and Surfacing 517 Calumet Partnership: Examples of Successful Cooperation 518 TMDL and Nonpoint Sources: Its More Than Just the Loads 519 Bang for Your Buck: Evaluating Your CIP for Maximum Effectiveness* 520 The ABCs of Public Outreach and Education Afternoon Sessions 1:30 pm – 5:00 pm 605 Developing and Using Asset Management in Collection Systems 610 Monitoring and Modeling the Watershed for Improved Water Quality 77 Stormwater Management Tour: Calumet Stormwater Collaborative Projects (ticketed event)

* Indicates half session.



2015 East Tennessee Development

Plan to join the Tennessee Stormwater Association in Knoxville, TN as we explore challenges and discover solutions to the ever-changing world of land development and stormwater management.

November 18 & 19, 2015
 Knoxville Convention Center
 701 Henley Street, Knoxville

MORE INFO COMING SOON TO:
TNStormwater.org

CEU's and PDH's will be offered!
 Check website for more details

For more information:
 Phone: (865) 215-5283
 Email: Amy.Mann@knoxcounty.org

New York Appellate Court Issues Important Decision for Municipal Stormwater Regulation

Source: [National Association of Clean Water Agencies](#) (NACWA)

Another precedent-setting stormwater legal development to be aware of: on Tuesday, the New York Court of Appeals [issued a ruling](#) that dismissed challenges to the state general stormwater permit program and endorsed [arguments](#) made by NACWA and other municipal advocates in the case. The decision in *Natural Resources Defense Council, et al. v. New York State Department of Environmental Conservation* upholds the current approach used by New York (**and, by extension, many other states**) in implementing general stormwater permits under EPA's Phase II stormwater regulations, but also sets the stage for future legal battles over the Phase II program.

NACWA joined with other national and state clean water organizations late last year to support a [brief](#) in the New York litigation that was spearheaded by New York City.

The court agreed with municipal advocates

in the case that municipal stormwater is unique from other regulated CWA discharges in some important ways, including that:

- precipitation is naturally occurring, intermittent and variable and cannot be stopped;
- although municipalities operate sewer systems, stormwater contamination results from the often unforeseen or unpredictable choices of individual residents and businesses (for example, to let litter pile up or to use certain lawn fertilizers), as well as decisions made long ago about the design of roads, parking lots and buildings; and
- because stormwater runoff flows into surface waters through tens of thousands of individual outfalls, each locality's contribution to the pollution of a particular river or lake is difficult to ascertain or allocate through numeric limitations.

The court also agreed with NACWA and others that the general permit does not establish an "impermissible self-regulatory

system," nor does it violate the public participation requirements of the CWA.

However, the court also noted that legal questions have been raised regarding whether EPA and states must provide greater regulatory and public review of NOIs and SWMPs under EPA's Phase II regulations. They suggested that these legal questions surrounding the Phase II program will ultimately be resolved by EPA and the federal courts.

This follows on the heels of an NRDC [suit](#) filed in December charging that EPA has failed to implement a Ninth Circuit Court's 2003 ruling ordering the agency to strengthen rules for Phase II MS4 systems.

NACWA staff and committee chairs have already been in discussions with the petitioners and EPA about potential changes to the Phase II program as a result of the ongoing Ninth Circuit case, and will be closely involved in developments moving forward.

Call for Sponsors and WQ Festival Exhibitors!

August 29, 2015: [Nashville's Metro Water Services](#), the [TDEC](#), [TDA](#), and [TNSA](#) have teamed up together once again to host a chip-timed Urban Runoff 5k run in Nashville.

The run begins at the Centennial Park and weaves its way past several cool and innovative green stormwater management practices. A portion of the net

2015 Urban Runoff 5K in Nashville

proceeds will go to TNSA to continue to offer this healthy and fun public educational opportunity each year and assist local governments that promote water quality health awareness & local clean water efforts.

Additionally, two (2) grants of \$750.00 will be given for water quality improvement projects. Please visit the [race website](#) for more details.

The Urban Runoff will lead into a post-race,

family festival, taking place 8:00 - 10:30 a.m.

The Festival celebrates clean water and green infrastructure and includes kids' activities, hands-on education, and more!

Please contact [Jennifer Watson](#) or [Josh Hayes](#) for more information.



EPA GI/LID Workshop Biloxi, MS July 15-16

EPA is inviting you to participate in the Low Impact Development, Green Infrastructure Workshop to be held in Biloxi, Mississippi on July 15-16, 2015.

This workshop is being held in cooperation with the Mississippi Department of Environmental Quality (MDEQ), the Mississippi Department of Marine Resources (DMR), the Mississippi Chapter of the American Planning Association (MAPA), and Allen Engineering and Science, Inc. (AllenES). To improve water quality in urban waters located in Mississippi, managing stormwater to predevelopment hydrological conditions for newly developed and redeveloped sites

is a goal of the existing Phase I and II municipal separate storm sewer system (MS4) permits.

The workshop will focus on water quality and non-point source pollution management practices utilizing Low Impact Development (LID) and Green Infrastructure (GI) techniques. The goal is to educate municipal staff and engineers on how to design sites to meet predevelopment conditions.

The workshop will include case studies of projects that have implemented stormwater controls particularly in the coastal areas to meet the MS4 permits' goals. Also anticipated

at the workshop will be MDEQ's discussion on permit expectations for the next Phase II MS4 permit.

The workshop is open to MS4s, State representatives, developers, and other stormwater practitioners involved in the municipal stormwater program. The workshop is free, but attendees will need to register online.

Provided below is the link to handle registration for the EPA LID/GI Workshop. <https://www.eventbrite.com/e/epa-lid-and-green-infrastructure-workshop-tickets-16904205935>

Register now! Tennessee's Permanent Stormwater Management Design Courses!

Permanent Stormwater Management Design Course



Course Description: This one-day course is designed for engineers, landscape architects, stormwater plans preparers and local government plan reviewers. The course describes how to create stormwater management systems using green infrastructure and evaluate performance with the Tennessee Runoff Reduction Assessment Tool (TNRRAT) so that stormwater management plans for new and redevelopment projects meet the requirements of the TN MS4 permit.

Dates & Location:

Knoxville – June 18, 2015, Rothchild Conference Center, 8807 Kingston Pike

Memphis – July 28, 2015, Ensafe Office, 5724 Summer Trees Dr.

Nashville – July 30, 2015, One Century Conference Ctr., 26 Century Blvd.

Times: Course begins at 8:00 a.m. – 5:00 p.m. Lunch provided.

Costs: \$200 per person

Professional Development Hours: Certificates of Attendance for 8.0 PDHs will be issued and mailed to all attendees.

Materials Required: All attendees should bring a laptop loaded with the basic version of the TN Runoff Reduction Assessment Tool (TNRRAT). The TNRRAT can be downloaded from the TN Stormwater Training website www.tnstormwatertainingo.org. Attendees will be granted design level access to the TNRRAT during the course.

Registration: Course registration is limited to 30 persons and can be completed at the training website www.tnstormwatertainingo.org. NOTE: You must download the TNRRAT from the website before you can register for the course. You are encouraged to view the tutorial videos available on the website to assist with the download process. Course confirmation and information for credit card authorization forms and invoices will be automatically emailed to you once registration is complete. If you have any questions regarding registration contact Kellie Caughorn at kcaughor@utk.edu. For information on course content or assistance with TNRRAT download contact info@tnpermanentstormwater.org.

Permanent Stormwater Management Design Course



Agenda

Time	Topic
8:00 am	Welcome and Introductions
8:15 am	TN Runoff Reduction Assessment Tool (TNRRAT) <ul style="list-style-type: none"> Runoff reduction performance standards Soils, climate, and special conditions Model fundamentals
9:30 am	Runoff Reduction Achieved with Smart Site Design <ul style="list-style-type: none"> LID concepts to avoid, minimize, and manage
10:00 am	Break
10:15 am	Basic Design with TNRRAT <ul style="list-style-type: none"> Residential site examples (passive and sub-basin structural controls) Subdivision development design using block approach Small commercial simple site example
12:00 pm	Lunch – Install Design Level Template
12:45 pm	Stormwater Control Measures (SCMs) & Managements <ul style="list-style-type: none"> Overview of SCMs Establishing management Design considerations Selection for success
1:45 pm	Inlet/Outlet and Bypass Design
2:30 pm	Break
2:45 pm	Advanced Design with TNRRAT <ul style="list-style-type: none"> Redevelopment with incentives Site-constrained design with infiltration limitations Multituse plan with variable soils and special conditions
4:00 pm	Helpful Hints, Tips, and Addressing Barriers <ul style="list-style-type: none"> Saving files Reporting Barriers to implementation
4:30 pm	Adjourn

The **Design Level** access in TNRRAT will provide designers additional flexibility in SCM specifications by allowing them to change the engineering specifications from the standard set of specifications. For example, they may change the thickness and composition of media layers in bioretention applications or permeable pavement. Designers will also have access to additional model outputs such as time series data on storage and outflow rates from SCMs.

Workshop Sponsored By:



WERF is Now Accepting Pre-Proposals for the 2015 Research Program

Proposals in all relevant wastewater, **stormwater**, and water quality areas are welcome. Submissions are due no later than 5:00 pm EDT on Thursday, July 16, 2015.

Proposers are invited to submit pre-proposals on topics consistent with WERF's ongoing efforts to advance science and technology addressing water quality issues as they impact water resources, the atmosphere, the land, and quality of life. Areas of interest include, but are not limited to, conveyance systems; wastewater treatment; reuse; solids

management; condition assessment and infrastructure management; energy efficiency; decentralized collection and treatment systems; risk assessment and communication; watershed management and water quality; and other emerging issues.

The 2015 Unsolicited Research Program also encourages submittals of applications to test and evaluate innovative technologies at wastewater and stormwater facilities.

The launch and growth of the joint WERF/ WEF Leaders Innovation Forum for Technology (LIFT) program has placed an increased emphasis and urgency on moving

new technologies into practice and accelerating innovation. **LIFT's high priority technology areas currently include:** Biosolids to Energy, Energy from Wastewater, Digestion Enhancements, Nutrient Removal, P-Recovery, Collection Systems, and **Green Infrastructure**.

This **FAQ** will be updated continuously with your questions as they arise. [Click Here](#) for more information.

Supporting Documents:

[2015 Unsolicited RFP Call for Pre-Proposals: PDF](#)

[2015 Unsolicited RFP Instructions: PDF](#)

[2015 Unsolicited RFP Cover Sheet: DOC](#) .

Middle Tennessee Project WET workshop for Teachers, Non-Formal Teachers

Project WET workshop by the lake at Long Hunter State Park!
Saturday, July 25, 2015, 9 to 3:30
Admission: \$30.00

Parking fee: none

Registration: Leslie Anne Rawlings, Long Hunter State Park, 2910 Hobson Pike, Hermitage, TN 37076-4027 Phone: 615-885-2422

Project WET is an interdisciplinary activity

guide suitable for children of PK - High School ages. Appropriate for classroom and home-school teachers, pre-service teachers, non-formal teachers such as leaders of Boy Scout and Girl Scout troops, Boys and Girls Club staff, Sunday School teachers, 4-H leaders, nature center staff, etc.

Project WET workshop by the lake at Long Hunter State Park! A fun filled day of hands-on activities and adventure - all related to

water, correlated to current Tennessee science standards, for teachers of PK - High School aged students.

Go home with the Project WET Curriculum and activity Guide plus other gifts. Lunch and snacks are provided. Come prepared to be outside and in the water.



EPA and USACOE Announced Final Clean Water Rule

Source: [National Association of Clean Water Agencies](#) (NACWA)

On May 27th, EPA and the U.S. Army Corps of Engineers released the final Clean Water Rule, often referred to as the Waters of the United States or WOTUS rule. The rule has consumed much of EPA's time over the last several years and has been the focus of intense criticism from a range of stakeholders and Members of Congress from both sides of the aisle. A pre-publication version of the rule, along with supporting materials, is available on EPA's [website](#). EPA has also made available a [fact sheet](#) and a [blog post](#) from Administrator McCarthy.

NACWA's *Advocacy Alert* provides a brief summary of the provisions from the final rule that are of most importance to the clean water community.

NACWA has focused its attention on maintaining the current exemptions for wastewater treatment systems and ensuring that municipal separate storm sewer systems (MS4s), green infrastructure and recycled water projects were not incidentally regulated as jurisdictional waters. NACWA is still reviewing the final rule, but below is a quick summary of the key provisions for the clean water community that demonstrate EPA heard and addressed NACWA's concerns.

The final definition of 'waters of the United States' maintains the key elements NACWA has fought to preserve and addresses a number of the concerns NACWA raised in its comments:

As proposed, the final definition makes no substantive changes to the existing exclu-

sion for waste treatment systems designed to meet the requirements of the CWA. "Only ministerial changes to delete an outdated cross reference are made to the exclusion for waste treatment systems."

As proposed, the final definition exempts groundwater and groundwater drained through subsurface drainage systems from federal jurisdictional reach, which the Agencies "have never interpreted to be a 'water of the United States' under the Clean Water Act."

Newly added in the Final Rule – a key recommendation from NACWA's comments – the definition specifically excludes: "Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land."

EPA clarifies in the preamble to the rule that the new exclusion for stormwater control features includes green infrastructure. "This rule is designed to avoid disincentives to this environmentally beneficial trend in stormwater management practices." In addition, EPA's press release on the rule stresses that: the definition maintains "the status of waters within Municipal Separate Storm Sewer Systems. The rule does not change how those waters are treated and encourages the use of green infrastructure."

EPA further states that stormwater control features "have evolved considerably over the past several years, and their nomenclature is not consistent, so in order to avoid unintentionally limiting the exclusion, the agencies have not included a list of excluded features in the rule. The rule is intended to exclude the diverse

range of control features that are currently in place and may be developed in the future."

Newly added in the Final Rule – a key recommendation from NACWA's comments – the definition specifically excludes "wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling."

Revised for the Final Rule, the definition specifically excludes the following ditches:

- Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (1)(i) through (iii) of the waters of the U.S. definition.

Both the House and Senate have been working on measures to limit EPA's ability to finalize or implement the rule, but the White House has promised to veto any such measure. Those in favor of stopping EPA and the Corps from moving forward with the current rule do not have the votes to override a veto. It is unclear how Congress will proceed at this point, but the matter is likely not settled. In addition, NACWA fully anticipates that legal challenges will be filed shortly after the final rule is officially published in the Federal Register.

Schedule a Regional Training Opportunity: Stormwater Administrative Hearings Course

How do you defend and collect penalties? How do you avoid problems if a decision is appealed?

This class provides municipal/ county attorneys, public officials and municipal staff an understanding of administrative law and the fundamental components of administrative hearings, as well as how to better present evidence to boards. Instructors will discuss procedures of particular hearings such as:

stormwater, water and wastewater and property maintenance.

During this highly interactive class, participants will view a video of administrative hearing procedures and witness a mock session that will illustrate the dos and don'ts of administrative hearings. You are not limited to "\$50 a day for the bad guys."

With the administrative penalty process, you can assess much higher penalties – in

the case of stormwater, for example, \$5,000 per day per violation.

This important class is recommended for elected officials, appointed officials, city attorneys, city recorders, codes enforcement officials and utility and public works directors and managers. Schedule your class by contacting John Chlarson at 731-423-3710.

 THE UNIVERSITY OF TENNESSEE
INSTITUTE FOR PUBLIC SERVICE

Free Webinars!

Advances in Water Quality Trading as a Flexible Compliance Tool

07/08/2015 - 1:00 PM - 3:00 PM EDT [Registration Link](#)

Water quality trading is an innovative approach that offers greater flexibility and efficiency, and allows one source to meet its NPDES obligations by using pollutant reductions created by another source that may have lower pollution control costs while also creating greater benefit for water quality.

Trading examples include temperature: riparian restoration [More...](#) on private land that generates temperature credits;

stormwater: improvements in offsite land best management practices (BMPs) that generate stormwater credits for urban developers; and nutrients: improvements in agricultural BMPs that generate nitrogen, phosphorus or sediment credits. Measuring and tracking these trading actions with the same metrics allows us to embrace the "one water" concept.

Sharing the successes and best management practices from water quality trading for stormwater offsets creates an alternative compliance solution for meeting new waste

load allocations that is achievable, cost-effective and makes the watershed healthier. Topics covered in this webinar are from the WEF publication *Advances in Water Quality Trading as a Flexible Compliance Tool* and include:

- ◆ Water quality trading framework and examples
- ◆ Point- and non-point-source trading
- ◆ Future of water quality trading
- ◆ Integrated water management
- ◆ Stormwater offsets

University of Vermont Webinar: Green Roofs

[Register Here](#) for Green Stormwater Infrastructure: Green Roofs on Jun 10, 2015 2:00 PM EDT

Green roofs are a Green Stormwater Infrastructure Best Management Practice that intercept precipitation, thereby

greatly reducing the contribution of roof-top runoff to stormwater. Green roofs provide other useful benefits such as reduced heat-island effect, reduced need for heating and cooling of the building, and a longer lifespan when compared to a

traditional roof. In urban areas, green roofs can provide valuable open space where little exists. In this webinar, our presenters will share their experiences in building, maintaining, and researching aspects of green roofs in Vermont.

Moving Toward Sustainability: Sustainable and Effective Practices for Creating Your Water Utility Roadmap

Free Webinar: June 25 from 1 – 2:30 p.m. Eastern EPA, WEF, NACWA, AMWA, and NACWA team with water sector utility leaders to deliver this webinar on building public support for sustainable water infrastructure.

One of the most pressing challenges facing utilities is building and maintaining understanding and support from rate-payers and the public at large. Utility

leaders representing both large and small communities will discuss innovative programs they are using to work with their communities and build support for the environmental and economic value of water infrastructure.

EPA will also discuss "[Moving Toward Sustainability: Sustainable and Effective Practices for Creating Your Water Utility Roadmap](#)," a recently released guidance

document to help utilities implement "proven and effective practices over time to improve their operations and move toward sustainability.

Recordings and presentations from our first two webinars are available on [EPA's Web-site](#).

Register for the webinar [Here](#)

EPA Hosting a Grant 101 Webinar - June 18th

EPA is hosting a webinar for the EPA grants community on June 18th. The webinar will cover grants topics, including: how to find and apply for grant opportunities; EPA's new Grants.gov requirement; and preparing a proper budget detail. In addition, EPA will be hosting a Q&A session during the second half of the webinar.

This is a recurring webinar. Please distribute to any recipients and applicants you think would be interested.

Webinar details are included below and also at this website <http://www.epa.gov/ogd/training/grantaward.htm>.

Upcoming Webinars

Date: June 18, 2015

Time: 2:00 pm ET

No registration required. Please go to <https://epa.connectsolutions.com/grantsjune2015/> at the time of the webinar.

National Park Service: Rivers, Trails, and Conservation Assistance Program

National Park Service Now Accepting Applications for 2016 Projects Supporting Community-Led Conservation and Recreation Projects

The National Park Service helps communities create close-to-home recreation opportunities and conserve natural resources.

Our [Rivers, Trails, and Conservation Assistance](#) program is accepting applications through August 1, 2015 for help with a wide range of community-led projects. National Park Service staff can help local leaders:

- Develop close-to-home parks and greenways
- Manage community-led visioning, planning, and design
- Facilitate public involvement
- Build sustainable partnerships

- Engage youth through outdoor recreation skill-building and conservation stewardship
 - Plan for trails, landscape conservation, water trails, river restoration, green transportation, and tourism
- Can we help your community? Find out by first reviewing the [application process](#) and exploring [current projects in your state](#). Then [call or email a National Park Service staff member near you](#) to discuss your idea, and let them know **by July 15** if you intend to submit an application by the **August 1 due date**.

Do you still need help deciding whether the

National Park Service might help you and your community? Check out this short [video](#).

The National Park Service works with partners and helps communities advance their stewardship, conservation, and recreation goals. Conservation and Outdoor Recreation programs extend and expand the benefits of the National Park Service throughout the nation to connect all Americans to their parks, trails, rivers, and other special places.

How can we help you [make your vision a reality](#)?



EPA New Report: Attracting Infill Development in Distressed Communities

Many communities across the country have been revitalizing their older neighborhoods, traditional downtowns, and central business districts. However, economically distressed communities have been less able to attract this kind of infill development and attain the accompanying economic, environmental, health, and quality of life benefits.

EPA's new report, [Attracting Infill Development in Distressed Communities: 30 Strategies](#), can help these communities determine their readiness to pursue infill development and identify strategies to better position themselves to attract infill development. It presents strategies and case studies to

establish priorities, policies, and partnerships and change public perceptions, which can help make infill development more feasible. It discusses innovative strategies to help finance infill development and replace aging infrastructure. It includes comprehensive self-assessment questions communities can answer to determine if they are ready to pursue infill development and if particular strategies are appropriate for their context.

Many of the strategies in this publication stem from work in Fresno, California, that was part of the [Strong Cities, Strong Communities \(SC2\) initiative](#), which provides

intensive technical assistance and capacity building to economically distressed cities. EPA and the state of California partnered with the city to convene a task force of experts in development finance, law, public policy, planning, and business to identify strategies to promote infill that were feasible in Fresno's challenging economic and fiscal environment. EPA developed this publication based in part on the task force's work.

To download *Attracting Infill Development in Distressed Communities: 30 Strategies*, [Click Here](#) To learn more about EPA's work on smart growth and infill development, [Click Here](#).

Spring 2015: Level II TNEPSC Course and TN-HDT Course and Refresher Schedule

TNEPSC Level II Certification Course	
June 10 & 11, 2015	Knoxville

TN Hydrologic Determination Training (TN-HDT)	
August 10-12, 2015	Montgomery Bell State Park

TN Hydrologic Determination Training (TN-HDT) Refresher Course	
June 25, 2015	Knoxville TDEC EFO
July 16, 2015	Nashville. Warner Park Nature

Please contact [Tim Gangaware](#) with questions or visit the website: <http://tnstormwatertraining.org/> or <http://tnhdt.org/>.

EVERY DROP COUNTS



WATER ■ WASTEWATER ■ STORMWATER
877.754.8254 ■ LDAENGINEERING.COM



Tennessee Wetland Festival, Athens, TN June 20, 2015 9-5PM

Platinum Sponsors \$1,500

Tennessee Valley Authority
Tennessee Department of Transportation
Tennessee Department of Agriculture

Gold Sponsors \$1000

Citizens National Bank
Tennessee Smart Yards

Silver Sponsors \$500

Resolute Forest
Gresham Smith and Partners
Midlab

Friends of the Wetland

Herbin Services
Mattern and Craig
Jack Allen

WANT TO BE A SPONSOR?

Contact:

Keep McMinn Beautiful
at
423-506-7316
or
keepmcminn@gmail.com



**Keep McMinn Beautiful
Litter-Free Event**

"Children of a culture born in a water-rich environment, we have never really learned how important water is to us. We understand it, but we do so respect it." - William Ashworth, *Nor Any Drop to Drink*

"We forget that the water cycle and the life cycle are one." - Jacques Cousteau

MAKE YOUR YARD A TENNESSEE-SMART YARD!
Use a rain barrel for irrigation-free rainwater! Compost your kitchen and yard scraps and spread over problem soil areas. Pick native plants and minimize energy-intensive turf areas.

For more info:
Tennessee Smart Yards—<http://tvsyards.utb.edu>



EXPLORE • SUPPORT • ENJOY



Tennessee Wetlands Festival 2015 has gone mobile! Schedule, maps, twitter, alerts, more on your iPhone/Android, free! Get Guidebook <http://guidebook.com/tn/WetlandsFestival/>



Welcome to the
Tennessee Wetlands Festival
in Athens, TN

A celebration of Wetlands providing a hands-on community activity that draws together individuals interested in protecting the environment and restoring and maintaining the wetlands and their related ecosystems.



Transportation Stormwater Conveyance System

TDOT – Successfully Navigating the Crossroads of Safety, Stormwater Management, and Water Quality.

Proud Sponsor of TNSA

Focusing on clean water for your communities.

ENSAFE
ensafe.com

Memphis (901) 372-7962
Nashville (615) 255-9300
Knoxville (865) 693-3623

STORMWATER CONSULTING SERVICES

McGill ASSOCIATES

- > Capital Improvement Plans
- > Pollution Prevention Plans
- > Outfall Mapping
- > GIS Database Creation
- > Project Inspection
- > Utility Creation
- > Rate Studies
- > Ordinance Creation

2240 Sutherland Avenue, Suite 2 /// Knoxville, TN 37919 /// 865.540.0801

CEC
Civil & Environmental Consultants, Inc.

CEC provides diverse water resources services to support the environmental challenges in the Tennessee communities where we practice. To learn more, contact:

Steven Casey, P.E., CPESC | scasey@cecinc.com
325 Seaboard Lane, Suite 170 | Franklin, TN 37067
Toll-free: 800-763-2326 | Local: 615-333-7797

**TENNESSEE
STORMWATER
ASSOCIATION**



Phone: 615-926-7094
admin@tnstormwater.org

We're on the web!
www.tnstormwater.org

"Like" us on Facebook!
<https://www.facebook.com/tnstormwater>



**Become a
member today!**
www.tnstormwater.org



Purpose

The mission of the Tennessee Stormwater Association (TNSA) is to assist local government entities in their efforts to comply with State and Federal clean water laws and Stormwater Regulations promulgated by the Environmental Protection Agency and the Tennessee Department of Environment and Conservation; and through such assistance, to protect and improve the quality of the waters of Tennessee. This mission will be accomplished through TNSA members' exchange of information and knowledge regarding the design, construction, maintenance, administration and operation of stormwater facilities. The TNSA will promote the dissemination of information in stormwater control measures and the adoption of improved practices in stormwater administration.

Members

TNSA membership is composed of designated Municipal Separate Storm Sewer Systems (MS4s) including local governments (city and county), universities, military installations, and other entities such as TN Department of Transportation (TDOT). Associate members include environmental advocacy groups, non-profits, Tennessee State, sub-state or federal government entities consultants. Private sector membership is available to for-profit engineering, scientific and management firms or other organizations with an interest in stormwater.

EPA has launched a new Community Resources Website

New Community Resources

Site - EPA has launched a new Community Resources website to help local officials and community members find information for improving the environment, public health and quality of life. The site leverages information from three existing community-oriented resources:

- The Local Government Environmental Assistance Network, managed in partnership with

the International City / County Management Association, provides information on environmental compliance and stewardship.

- The National Resource Network, established by HUD as part of the Obama Administration's Strong Cities, Strong Communities Initiative, offers practical solutions to help communities pursue economic devel-

opment and growth.

- The EPA Community Health site can help users learn about and improve local environmental health conditions.

Access to the Community Resources site is available via EPA's homepage or via this link: <http://www.epa.gov/communities>

For more For More Information [Click Here.](#)

EPA Local Government Climate Adaptation Training Module Available Online

EPA has released an online training module to help local government officials take actions to increase their communities' resiliency to a changing climate. The virtual training, which lasts about 30 minutes, was developed with EPA's Local

Government Advisory Committee. It illustrates how a changing climate may affect a variety of environmental and public health services, describes how different communities are already adapting to climate-related challenges, and links to a number of federal and

state resources that can help communities assess their unique climate-related risks and opportunities to become more resilient to climate change.

Click [here to access the online training.](#)

U.S. Geological Survey Publishes Water-Energy Nexus Report

The United States Geological Survey (USGS) has published a report entitled, "The Water-Energy Nexus: An Earth Science Perspective." The intent of this report is to provide scientific insight to resource managers and the general public on the complex ways in which water

and energy are interconnected and to highlight the important issues that affect availability and sustainability of water and energy resources in the U.S. Issues analyzed and discussed in the report include freshwater availa-

bility, water use, ecosystems health, assessment of fossil-fuel, and other energy sources, the subsurface injection of wastewater, carbon, and much more.

Click [here to access the report.](#)