



**EXECUTIVE DIRECTOR**

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**WEBSITE**

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# TNSA Times

## Tennessee Stormwater Association Quarterly Newsletter

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### **A Message From the TNSA President**

Dear Members and Friends:

December 14, 2020

It has come down to another year ending, but a year like no other in our recent history. This past year has definitely been one of challenge in social, economic, religious and environmental issues.

Climate change, COVID-19 and social injustices have governed our media outlets as well as recent Capitalism and Democracy itself being tested. Many of you are aware of the possible/proposed pending changes to our world governance in 2021 and beyond through "The Great Reset". This proposal is in response to many failures at all levels of government, economics and political systems worldwide. We can only wait and see if, and how this may, or may not, influence changes.

Our recent Presidential election has also seen a Nation split by differences as COVID continues to be a worldwide tragedy and pandemic, now claiming more than 300,000 American lives. Local headlines continue to elevate constant crime and civil unrest. The World in many areas are again, proposing massive lockdowns as seen earlier in 2020 to help control the rapid spread of the disease.

What can we all derive from this past year that would be of any comfort or benefit to our environmental goals and objectives in the area of Stormwater and Water Quality? I can personally reflect on this past year as being one of the darkest and most challenging in my career as an MS4 Coordinator. If our community is to keep pace with the perceived world changes based on climate change and environmental challenges, I do believe, it will take all of our collaboration as a unit moving forward. TNSA has already developed the strong base and leadership for all members within the State of Tennessee, and I believe it can continue to be the leader and assistance to members moving through all possible new uncharted changes.

Below is a couple items of interest as a result of this past year that I would like to share with you all for encouragement.

**Coronavirus Is Improving Water Quality — For Now, At Least ...**

[blogs.ei.columbia.edu > 2020/06/08 > coronavirus-imp...](https://blogs.ei.columbia.edu/2020/06/08/coronavirus-imp...)

"Many researchers have monitored the decline in air pollution in response to the restrictions imposed by the pandemic. For this reason, many scientists believe that *water improvements* associated with COVID-19 will be localized and short-lived. ..."

**"COVID-19 and surface water quality: Improved lake water ...**

[www.sciencedirect.com > science > article > pii](https://www.sciencedirect.com/science/article/pii/S004873312030112)

"by AP Yunus · 2020 · Cited by 56 — Volume 731, 20 August 2020, 139012. Science of The Total ... Business lockdown *due* to the COVID-19 spread *improved* adjacent lake *water quality*."

**In Wake of Global Shutdowns, Researchers Expect Water ...**

[news.ncsu.edu > 2020/05 > water-quality-to-improve-af...](https://news.ncsu.edu/2020/05/water-quality-to-improve-af...)

"May 28, 2020 — Since air and *water quality* are *linked*, researchers expect to see signs of ... World map of nitrogen dioxide air pollution in 2020. ... were imposed around the world in response to the COVID-19 pandemic, ... But water systems are complex, Hallema said, so those *water quality improvements* could take time to ..."

**Assessment of the Impact of Covid-19 Pandemic on Water ...**

[www.frontiersin.org > research-topics > assessment-of-t...](https://www.frontiersin.org/research-topics/assessment-of-t...)

"Direct impacts include *water quality improvements* owing to reduced industrial effluents while indirect impacts include changes in urban climate or land- ..."

I want to thank you all for the opportunity to serve as your President in a very unusual and unprecedented 2020, as well as extend a very "Merry Christmas" and happy holidays to all! My prayers are with everyone both small and great regardless of affiliation or background, our family just recovered from COVID-19 and we know first hand the challenges and health related issues. Stay safe and May God continue to Bless us and heal our land!

I do so look forward to in-person conference next year 2021, and wish the best of luck and blessings to our new President of 2021, Shelia Huffmire!

Respectfully,

**Warren C. Garrett**

**Goodlettsville, Tn. MS4 Stormwater Coordinator/TNSA President 2020**



## Upcoming Regional Meetings

Regional meetings are held each quarter. You do not have to be a TNSA member to attend a meeting. Region meetings are a great way to keep updated within your area and the state. Meet like minded professionals, network, learn about statewide events and new ideas within the stormwater community. Two meetings were held on Zoom in December, one for each time zone.

**NOTE: All in-person meetings are on hold at this time. Meetings will be held on Zoom.**

♦ **Central Time Zone: Tuesday, March 2, 10:00 am CST**

♦ **Eastern Time Zone: Friday, March 5, 10:00 am EST**

Email Charlene DeSha if you would like to be added to a specific region email list.

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## Committee Updates

### CONFERENCE COMMITTEE CHAIR AND MEMBERS NEEDED

Please email Charlene if you are interested in helping with Conference.

**Communication:** Goal is to work on communication within and outside of the organization

**Chair: Aaron Rogge, CDM Smith**

The Communication Committee has complete video #2 in the Legislative Video Series “Why Should We Care About Stormwater?”. Thank you to Amy Katcher & Aaron Rogge! The video can be viewed on the Tennessee Stormwater Association’s You Tube Channel.

The next video in the series, “Stormwater, What’s Being Done?” will be released in Spring 2021.

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**Public Outreach:** Creates Education Resources

**Chair: Tom Lawrence, Thomas Lawrence Engineering**

The TNSA children’s activity book is finished and ready to print! The book is slated for 2nd graders and under. The first printing will be distributed to MS4’s free of charge. Your free copies will come with a dedicated brochure holder & stickers. Please contact Charlene DeSha if you would like free copies for future events.

The committee is in full swing and working on creating education outreach brochures/rack cards for your needs.

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**BMP:** Standardizes Device Evaluation and Develops BMP Toolkit

**Chair: Jacob Dorman, Contech**

Congratulations to the BMP Committee for finalizing the *Guide to Stormwater Manufactured Treatment Devices*. The guide is available on the TNSA Website, click here for page link. The committee will be sending a survey to members in order to determine their next project. Stay tuned!

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**Education:** Manages and Creates Educational Training and Resources

**Chair: Tim Gangaware, UT Tennessee Water Resources Research Center**

Thank you to all of the TNSA Talk speakers so far this year. TNSA Talks are free to attend on Zoom and TNSA Members receive a PDH certificate. Registration is required for each talk. If you are interested in speaking at a talk, email Charlene DeSha. Several past TNSA Talks have been recorded and posted on the TNSA website:

<https://www.tnstormwater.org/tnsatalks>.

The Committee is working on in-person education opportunities for 2021 as soon as it’s safe for everyone to meet in person including the Stormwater Basics for MS4’s.

## Committee Updates Continued...

**Policy:** Works with TDEC to share and update members on state and EPA regulations and policies;

**Chair:** David Mason, CDM Smith

No updates at this time.

## TNSA BOARD MEMBER UPDATE

### OUTGOING TNSA BOARD MEMBERS

**A BIG THANK YOU** to our board members.

**These folks have gone over and above to help bring TNSA to where we are today!**

David Mason, CDM Smith, 2019 President

Alan Sparkman, TN Concrete Association

Crystal Bishop, 2016 President

Dale Jayne, City of Maryville

David Edwards, City of Kingsport (taking a new Job, position open)

Casey Lambert, City of Bristol

Scott Ball, City of Dyersburg

### INCOMING TNSA BOARD MEMBERS

Mary Beth Sutton, WaterWays

Roger Fields, City of Alcoa

Jessica Hartley, City of Johnson City

Tim Ware, City of Dyersburg

Mark Miller, AquaShield

Barrett Fisher, Hamilton County

### 2021 Executive Committee

President: Shelia Huffmire

Vice President: Josh Rogers

Treasurer: Tom Lawrence

Secretary: Chris Masin

## Exciting Update for Member Crystal Bishop

“Change is the law of life. And those who look only to the past or present are certain to miss the future.”

John F. Kennedy

It's with great excitement that I write to inform you that I have embarked on new career adventure as a Water Specialist in the Water Permits, Compliance and Monitoring group at TVA. I am enthusiastic about the new opportunities that await on the horizon in my new role. However, I am saddened that I will no longer serve on the TNSA Board of Directors as a MS4 representative. I have been on the TNSA Board of Directors since 2011, serving as both Middle and Southeast regional representative, and I served on the executive committee as Vice President, President Elect, President and Secretary. I have poured my heart and soul into this organization and I hope my departure from the Board will create space for other individuals to reap the rewards of serving this wonderful group of professionals. It has been an honor serving with all of you. I've learned so much from you and from TNSA; I guess you could say that I've grown up with the organization since it was founded soon after I began my stormwater management career in Franklin. I plan to continue involvement with TNSA and to invest in the stormwater community. My new email address is [clbishop0@tva.gov](mailto:clbishop0@tva.gov) or call/text me at 423-314-3820.



Best Fishes!

Crystal Bishop

Water Specialist III: Water Permits, Compliance, and Monitoring

Tennessee Valley Authority

## Leveraging Success to Grow Tennessee Rain Gardens

“V” is for victory, but also for vadoso! Gardening and landscaping projects have seen a boom during the recent pandemic conditions, so what better time for a push for residential rain gardens? It has been my experience when talking with homeowner groups that interest in rain gardens is strong. Incorporating native plants for pollinators, replacing turf areas with wildlife-beneficial areas, and taking actions that result in community-level benefits are all attractive outcomes for residents interested in building a rain garden. The barriers to adoption all relate to access to information that will help them take the leap and make it happen.

Whether it’s needing more confidence in their ability to plan and build a rain garden, knowing who to call to provide installation service, or feeling comfortable with the level of maintenance needed to make a rain garden part of their landscape, overcoming these uncertainties takes access to readily-available guidance. At the same time, there are many amazing programs across our state that promote or incentivize these practices that have attracted many early adopters who have rain gardens already. We as a community of stormwater professionals should leverage this experience and example of early adopters to recruit more residents into the fold.



Figure 1. Wild Bergamot (*Monarda fistulosa*) attracts pollinators and is a versatile perennial for rain garden included on the “all-star” selections list.



Figure 2. Screenshot of the storymap for Rain Gardens of Tennessee state-wide showcase.

Through technology and social media, it is possible to build a state-wide resource for residents to find information they need to turn the tide from “hey, that’s a clever idea” to “let’s do this!” and produce a wave of adoption across our communities. Taking a cue from the agriculture community where “farmer-to-farmer” programs have shown effective in boosting adoption rates of conservation practices on farms, building a “rain gardener-to-rain gardener” platform may be an effective approach to leverage existing knowledge and crowd source a suite of resources for our audiences. I seek your help in connecting with rain gardeners to help populate a

state-wide rain garden map and help to build a community among this group. At this site, you will find a storymap built in ArcGISOnline, a link to submit rain gardens for inclusion on the map, and access to a social media group for current and future rain gardeners. Please encourage your local rain gardeners to add to the map and join the community to help spread the word.

Some quick tips on rain gardens: 1) minimize use of river rock that could contribute to compaction over time, instead use a “living mulch” or groundcover to maximize infiltration and outcompete weeds, 2) take pictures of rosettes or seedlings of perennials so they don’t get smothered or accidentally weeded out in the spring, and 3) here is a collection of rain garden plant “all-stars” compiled from a survey conducted in Knox and Davidson Counties (iNaturalist project to show photos of plants in a variety of landscapes). Of course rain gardens are just one of the many practices promoted in the Tennessee Smart Yards program. Link us on your homepage and start to receive counts of Smart Yards popping up across your community. Happy rain gardening and please don’t hesitate to contact me! Andrea Ludwig, aludwig@utk.edu or raingardens@utk.edu

**Andrea Ludwig, Associate Professor & Extension Specialist, University of Tennessee**

## TDEC Updates from December TNSA Region Meetings

### Rules – Chapters 5, 6, and 10

The new proposed rules for Chapter 6 - *State Operating Permit* will be brought before the Board of Water Quality, Oil and Gas at the December 15<sup>th</sup> board meeting. The Division anticipates that the response to comments and any revisions to the proposed rule will be published on the website prior to the December 15<sup>th</sup> hearing. <https://www.tn.gov/environment/about-tdec/boards-and-commissions/board-tennessee-board-of-water-quality--oil-and-gas.html>

The Division is planning to bring the amendments to Chapter 5 – *Permits, Effluent Limitations and Standards* and Chapter 10 – *NPDES General Permits* before the Board together on February 16, 2021. The Division plans to publish the response to comments as well as any revisions to both Chapter 5 and Chapter 10 on the website.

The Division wants to ensure enough time is allotted for a thoughtful review and discussion by bringing these three rules before the Board across two separate meetings.

### Triennial Review of TN Water Quality Standards – Notice of Rulemaking Hearing (Rule Chapters 0400-40-03 and 0400-40-04) [Notice of Rulemaking Hearing \(tn.gov\)](#)

The Department conducted a public listening session on October 27, 2020, to solicit comments from the public regarding what amendments, if any, may be appropriate for Tennessee's water quality standards. [wr rulemaking hearing 0400-40 triennial review \(tn.gov\)](#)

The agency invites comments from interested parties and the public regarding any changes to water quality standards that the division should consider. The current version of the regulations can be accessed at the following web address: <https://publications.tnsosfiles.com/rules/0400/0400-40/0400-40.htm>

Written comments regarding water quality standards are due no later than December 15, 2020.

Written comments, as well as any questions, should be directed to:

Greg Denton  
Watershed Planning Unit Division of Water Resources  
11th Floor, Tennessee Tower  
312 Rosa L. Parks Ave.  
Nashville, TN 37243  
[gregory.denton@tn.gov](mailto:gregory.denton@tn.gov)

### MyTDEC Forms

The Department has been working on developing a platform to submit several NPDES forms electronically. The Division of Water Resources is currently testing the CGP NOI form and anticipates having it available for use sometime early next year.

### Reminder - MS4 audits/inspections

One of TDEC priorities is employee and public safety. During the COVID-19 pandemic the Division is offering alternative approaches to perform MS4 audits and inspections. As applicable the Division will perform audits/inspections using a hybrid approach utilizing virtual evaluations. MS4s should feel free to request a hybrid approach.

### Small MS4 Annual Reports

The Division has received all Small MS4 Annual Reports for the 2019/2020 reporting year.

**Ann Morbitt** | Integrated Water Resources Consultant  
Tennessee Department of Environment & Conservation  
Division of Water Resources  
711 R.S. Gass Blvd., Nashville, TN 37216  
(615) 687-7119



## TNSA RESOURCES

**Webinars and Job Openings are listed on TNSA Website Page**

**Link:** <https://www.tnstormwater.org/webinars>

**Link:** <https://www.tnstormwater.org/job-openings>

**Link:** <https://www.tnstormwater.org/tnsatalks>

**TNSA Stormwater Videos: Tennessee Stormwater Association YouTube Channel**

**TNSA Members have access to the Tresorit File Sharing program.**

**Please let Charlene DeSha know if you would like access.**

**Access links will be sent to all members in January.**

The Tennessee Stormwater Association is Tennessee's premier membership organization for stormwater professionals. TNSA's mission is to assist members with their local efforts to comply with State and Federal clean water laws; including stormwater regulations through EPA and TDEC (Tennessee Department of Environment and Conservation). TNSA's goal is to protect and improve the quality of the waters of Tennessee through the exchange of information and knowledge regarding design, construction, maintenance,

## Work continues to stop Goodlettsville's Moss-Wright Park from falling into Mansker Creek

Goodlettsville's Moss-Wright Park had been losing property with land falling into Mansker Creek, causing pollution and negatively affecting aquatic life and other streams.

It led to a restoration project headed up by the Cumberland River Compact in conjunction with Goodlettsville, that has completed a phase I with the second phase underway.

The areas "most impacted by stream bank erosion and were falling into the creek, they have stabilized those areas," Goodlettsville City Manager Tim Ellis said. "It's been a great partnership."

Moss-Wright Park is approximately 150 acres. The park is used for youth sports, has a popular walking trail with shelters, playground, dog park and the historic Mansker's Station as well. It draws 6,000-7,000 visitors on a typical day that can go up to 15,000 visitors during certain youth sports tournaments, Ellis said.

The first phase that began in 2017 and finished last year included the correction of streambank along Mansker Creek that Will Caplenor of the Cumberland River Compact said "posed an immediate human and ecological danger ..."

Three restoration improvements involved properly sloping the bank and then installing stone in needed areas for reinforcement, Caplenor said.



"This project involved installing several stone weirs to correct the flow and capture sediment in areas of need," Caplenor said.

"Finally, the newly sloped and constructed streambank is heavily planted with native vegetation."

Five pet waste stations, 10 rain gardens, planting trees, stream cleanups and educational opportunities were also part of the first phase.

The second phase includes major bank restoration of about 250 linear feet where there is heavy erosion and trail falling into the creek. Minor bank stabilization of about 550 feet to address collapsing and

eroding streambanks with work done in smaller streams, Caplenor said. Rain gardens, trees pet waste stations, stream cleanups and educational opportunities are also part of the second. A project to remove asphalt or concrete and installing a stormwater feature in its place is also planned.

The Cumberland River Compact is working with KCI Technologies on the project funded by the Tennessee

Department of Agriculture's 319 Grant Program and Goodlettsville. The 319 grant funding will provide about \$460,000 toward the work after both phases with the city putting in about estimated about \$400,000 overall for around \$860,000 combined, Caplenor said.



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## TNSA Virtual Conference 2020 & TNSA Award Winners

TNSA is excited to announce that 150 people attended for the TNSA Virtual Conference held October 21-22. 43 speakers covered a wide variety of topics including Green Infrastructure, FEMA Permitting & Grant Funding, Urban Water Report Card, TN GIS Data Resources, How to Ace your Audit and more. TNSA worked with a local Tennessee small business, Epic Nine, who facilitated the Remo platform. Remo allowed us to host an exhibitor hall, networking areas and two breakout rooms for technical sessions. TNSA hosted a door prize drawing and 13 lucky attendees received gift cards from Amazon, Starbucks, Khol's, Visa and Target.

Thank you so our sustaining sponsor CEC, Inc. and all of our other sponsors and exhibitors.

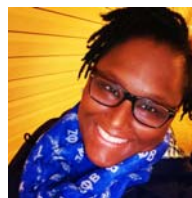


Civil & Environmental Consultants, Inc.

The Tennessee Stormwater Association would also like to announce the 2020 "Exceptional Quality" Award Winners. TNSA recognizes individuals and stormwater professionals that have devoted time and energy into making TNSA a success and have accomplished great strides within the Tennessee stormwater arena.

Nominations were accepted by TNSA members and voted on by the TNSA Membership and Board Members.

**Person of the Year:** An individual who displays Exceptional dedication and commitment to TNSA. Awarded to Ajuah Jackson with the City of White House



**Organization of the Year:** An MS4 or other Organization that displays Exceptional stewardship of Water Quality in Tennessee and provides Exceptional education and assistance to MS4s. Individuals are not eligible for this award; only a member organization is eligible. Awarded to the City of White House.



**Dr. Bruce Tschantz Lifetime Achievement Award:** TNSA's highest honor for outstanding, longtime stormwater professionals with a minimum of 20 years of service. These individuals' long-term contributions have made a noticeable impact on stormwater management efforts in the State of Tennessee. Board will review nominations from the TNSA Membership and vote on the recipient. The TNSA board reviews nominations from the TNSA Membership and votes on the recipient.

Steve Casey, with Civil & Environmental Consultants, Inc., was recognized for the Dr. Bruce Tschantz Lifetime Achievement Award this year. Amazingly Steve's mentor was Dr. Bruce Tschantz. Steve has a minimum of 20 years of service within stormwater and works with the TN Water Resources Research Center to help train across the state. He has made long-term contributions that have made



a noticeable impact on stormwater management efforts in the State of Tennessee as well as neighboring states. Steve was also the TNSA Board secretary for 4 years and provided a place for the board to meet. He has proven to be invaluable to TNSA

## TENNESSEE STORMWATER ASSOCIATION



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