Chattanooga Low Impact Development Design Competition
A train is coming!

By Don Green, City of Chattanooga

The auditorium was full at the Loose Cannon venue. Rain had temporally hurried the valet boys under an umbrella. The crowd had started streaming in 30 minutes early! Mounir Minkara, Water Quality Manager for the City of Chattanooga, had gone outside to signal us for the Mayor’s arrival for the kick-off. Michael Walton with green|spaces was getting the ball rolling as MC for the Low Impact Development, LID, Design Competition Awards Finale: full house!

Then Dawn Hjelseth, who was responsible for the planning of this event, rushed up to Michael and handed him a note—and he read: “Will someone move their silver Honda Accord. There is a train waiting on you!” A silver Honda Accord. There is a train— guess who would win?). A gentleman, with a red face, snuck out to rescue his miss-placed vehicle.

Mo signaled and the mayor rushed in and he and I stood behind the screen while Michael introduced him.

“This competition is an innovative way to promote and support sustainable practices. Through this partnership, as well as the involvement of numerous talented professionals, we will have solutions to help make neighborhoods stronger throughout Chattanooga,” Mayor Berke said. “With competitions like this one, Chattanooga is becoming a quality-of-life city and will build a sustainable city.”

But I digress:

The idea for LID (green infrastructure) competition, like many great concepts, was to say it politely, stolen; well, I digress again. I’m not sure how we, at Chattanooga Water Quality Program, got on this Cannonball Express, but it was probably Dr. Mo Minkara’s idea and I picked up the ball and ran with it.

I attended a workshop in DC sponsored by Water Environmental Federa-

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The Evolution of a Riparian Buffer Program

By Reggie Reeves, TDA-Division of Forestry

In 2010 the Tennessee Department of Agriculture, Division of Forestry received a federal USDA Forest Service competitive grant to establish a Clean Water from Urban Forest Program. The primary goal of this new program was to promote the protection and improvement of water quality in urban landscapes through forest conservation activities.

Nashville, Tennessee was chosen as the targeted municipality for this Program due to its central and prominent location within the state, existing partner resources, dedication to water quality and open space initiatives, and an elevated national profile due to the historic floods of 2010.

Three strategies were instrumen-tal in the development of the Program and will continue to be closely coordinated with. These include the 2010 Tennessee Division of Forest-ry (TDF) Forest Action Plan; the 2010 Nashville Tree Canopy Assessment; and the 2011 Nashville Open Spaces Plan; as well as the events and outcomes of the 2010 Nashville floods.

Significantly, the TDF Forest Action Plan identified 175 watersheds statewide at the HUC 12 level where 2/3 or more of their streams lacked adequate riparian buffers. Of those, 8 urban watersheds in Da-vidson County are being addressed

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NASHVILLE – The Tennessee Department of Environment and Conservation will once again partner with the Tennessee Stormwater Association (TNSA), the Tennessee Valley Authority and the Tennessee Department of Transportation to offer a grant program designed to help local governments fund green infrastructure and low-impact development projects.

A total of $103,080 in grant funds will be available for allocation this year. Grants ranging from $10,000 to $30,000 will be awarded to local governments through a competitive process for projects such as rain gardens, green roofs, pervious concrete applications, trees and tree boxes, in addition to outreach and education efforts designed to promote green development in Tennessee communities. The grants require a 20 percent local match.

“We are proud to offer this funding resource as an option to help local communities improve Tennessee’s water quality, while working to meet their stormwater management goals through creative design and green development practices,” said Environment and Conservation Deputy Commissioner Dr. Shari Meghreblian.

“Investing in this grants program gives TDOT the opportunity to help local governments implement best management practices and support improvements to local infrastructure that will have economic and sustainable impacts in our Tennessee communities,” said Deputy Commissioner Toks Omishakin, chief of TDOT’s Environment and Planning Bureau.

This year’s grant cycle represents the fourth time the Green Development Grants have been offered to local governments. Communities selected during the 2014 grant cycle will join the cities of Athens, Chattanooga, Lakeland, Memphis, Knoxville and Nashville, Farragut, Morristown, Shelby County, and University of Tennessee which have received funding since the grant’s inception in 2008 for various projects ranging from pervious concrete parking or walking paths to green infrastructure improvements to community recreational areas.

“This is a great opportunity for Tennessee Stormwater Association members to implement innovative stormwater management techniques that are designed around green technology and that benefit the local communities,” said TNSA President Andy Best.

“Protecting Tennessee’s watersheds is a shared responsibility,” said Brenda Brickhouse, TVA Vice President, Environment.

“Controlling and filtering stormwater prior to it entering Tennessee’s waterways is a key component to safeguarding our waterways, while ensuring our communities can rely on good, clean water.”

Applications for the 2014 Green Development Grants are due by Oct. 15, 2014, and grant awards will be announced by Dec. 31, 2014. Grant applications will be reviewed and ranked by a team comprised of representatives from each of the partner agencies.

Online application materials and additional information about the Green Development Grants are available on TDEC’s website at http://www.tn.gov/environment/water/green-development.shtml or through the Tennessee Stormwater Association at www.tnstormwater.org.

QLP Status a Determining Factor in Academy Sports' Decision to Build a Distribution Center in Cookeville

Academy Sports and Outdoors announced on Friday, August 8th, that they will be building a Distribution Center in Cookeville, bringing 700 jobs to the region.

One of the reasons Cookeville was chosen was because the City is a Qualifying Local Program (QLP). The City of Cookeville successfully passed through a stringent application process in 2013 to achieve this QLP status.

This accomplishment signifies that the City of Cookeville has been approved by the State of Tennessee, Department of Environment and Conservation, to administer the state’s Tennessee Construction General Permits. The permitting process is streamlined in a QLP: any developers that build within the City’s jurisdiction only have to apply for municipal and state construction permit coverage through the city and do not also have to apply to the state for coverage under the Construction General Permit. This can significantly reduce the turn around time on the permitting process.

In order to assist the prospective industry during the selection process, Civil Engineer Tracy Meggs, also a Qualified Hydrologic Professional, wrote the mitigation proposal for the ARAP and 404 permits and acted as technical consultant on the permitting process. Both permits were obtained within a six-month timeframe.

For more information contact Tracy Meggs (tmeggs@cookeville-tn.org).

Click Here for more info on Academy Sports move.
2nd Annual Urban Runoff 5K & Water Quality Festival

Saturday, October 25th, 1:30 p.m.
Bicentennial Capitol Mall State Park

Building healthier communities through clean water education

Nashville’s Metro Water Services, the Tennessee Department of Environment & Conservation and the Tennessee Stormwater Association have teamed up together to host the 2nd Annual 5K Urban Runoff run in Nashville.

The fun-packed water quality festival will be full of prizes, activities and booths from our sponsors and local partners to communicate the importance of improving stormwater quality in achieving healthier streams, rivers and lakes for our good health, wildlife and recreational enjoyment.

The run begins at 1:30 p.m. at the Bicentennial Mall and weaves its way through downtown past several cool and innovative green stormwater management practices.

Runners/Walkers of all abilities are encouraged to participate. Festivities are for the whole family to enjoy, so feel free to bring children and/or pets.

Registration Info
Active.com: www.active.com/nashville-tn/running/races/2nd-annual-
nashville-urban-runoff-5k-2014

$30 prior to Oct. 22th;
$40 on Race Day

All participants will receive a performance T-shirt. Top three finishers in each category will receive a certificate and prize.

Click Here for more info!

2014 TNSA East Tennessee Development Symposium: Registration is open!

Join us at the Knoxville Convention Center November 4-5, for the 2014 TNSA East Tennessee Development Symposium as we explore challenges and discover solutions to the ever-changing world of land development and stormwater management in East Tennessee.

We will be bringing you presentations focusing on multiple aspects of the development industry in East Tennessee including: planning, design, construction, financing, BMP maintenance, regulatory compliance and environmental law and policy. In addition, you will hear case studies and success stories.


Through this cart you can register one or more participants. In addition, sponsorship and exhibitor space can be purchased through this cart as we well providing a one stop registration shop. Please see the sponsor/exhibitor benefits guide on the website for additional details on sponsorship.

If you have any questions regarding the 2014 TNSA East Tennessee Development Symposium, please contact Parci Gibson by phone or email. (865) 215-5861 or parci.gibson@knoxcounty.org

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

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Civil & Environmental Consultants, Inc.
through this program.

The most visible part of these efforts is the Urban Riparian Buffer Program. Under this new Program, grant funding and technical assistance is provided to NGOs and local governmental agencies to plan, organize and implement volunteer based riparian buffer plantings on both public and private lands.

These grants cover 100% of the allowable costs to establish or enhance buffers through the planting of native bare root seedlings from TDF’s East Tennessee Nursery. To maximize stormwater benefits, plantings are at a density of 1,210 trees per acre, or one tree approximately every 6 feet. The trees are being planted by volunteers under the oversight of the grant recipient and the TDF Program Manager. In some cases, larger 1” caliper trees and shrubs are being planted along the buffer’s outer edge to help screen it during its early stages of re-vegetation. All buffers are clearly marked with signs to help educate the public about the buffer and to help protect it from mowers.

Outcomes of these efforts through June of 2014 include:

- Total Individual Projects: 110
- Total Planting Sites: 42
- Total Trees Planted: 20,526
- Total Length of Buffer Planted: 26,249 feet or 4.98 miles
- Total Acres Planted: 19
- Total Volunteers Engaged: 1,818
- Total Volunteer Hours Contributed: 5,424
- Total Value of Volunteers Donated Time: $100,816
- Total Value of Partner Agencies Donated Time: $31,086

Importantly, each of these activities has engaged volunteers from all walks of life, providing countless opportunities to engage and educate the public about the importance of riparian buffers.

Lessons learned through these activities are being used to continually improve upon the process, thereby helping develop standard approaches to the planning and implementing of buffer projects that will greatly increase both the efficiency and success of these activities. Additionally, supporting resources for planning, organizing, and documenting such activities are being developed and shared with partners.

Another important component of this Program is developing a simple and useful guidance document for MS4 programs, and others, to provide better information about riparian buffers. This document, being developed in cooperation with the University of Tennessee Water Resources Research Center and peer reviewed by representatives of TDEC, Metro Water Services, and TNSA, will be available in 2015.

Other Program outcomes include: funding the reestablishment of a local watershed association; developing riparian buffer boundary signs and informational kiosk, and providing funding and support for the annual Urban Runoff 5K and Water Quality Festival held in downtown Nashville.

It is hoped that the outcomes of these activities will be helpful to local entities statewide, including MS4 programs, in efforts to improve water quality through forest conservation activities.

Certainly, while the primary focus of this program is the planting of native trees to help address stormwater issues, the benefits of planting trees far exceed stormwater benefits alone, and include improved air quality, helping regulate air temperature, providing for wildlife habitat, improving property values and aesthetics, and increasing forest canopy.

For more information about this program or for assistance with planning local volunteer based riparian buffer activities in your area, please feel free to contact Reggie Reeves at the Tennessee Division of Forestry at 615-837-5430, or at reggie.reves@tn.gov. The Program is funded through a competitive resource allocation grant from the USDA Forest Service.

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City of Portland wins a $94,000 Recreational Trails Program Grant

Congratulations to new MS4, City of Portland, on winning a $94,000 Recreational Trails Program grant to develop 3,000 linear feet of 8’ wide gravel trail, 10,000 linear feet of 3’ wide natural surface trail, trailhead parking and signs.

The Recreational Trails Program is a federally funded program established to distribute funding for diverse recreation trail projects. The funds are available to federal, state and local government agencies, as well as nonprofit organizations that have obtained IRS 501 (c)(3) status and have a written trail management agreement with the agency that owns the property where the trail project is located.

Recreational Trails Program grants may be used for non-routine maintenance and restoration of existing trails, development and rehabilitation, trailside or trailhead facilities such as restrooms, kiosks and parking lots, construction of new trails and land acquisition for recreational trails or corridors. For more information, click Here.
NRDC Issues 2 Papers on Urban Water Conservation as a Clean Water Act Compliance Strategy and State Revolving Funds as a Climate Resiliency Opportunity

The NRDC has issued two papers - "Waste Less, Pollute Less: Using Urban Water Conservation to Advance Clean Water Act Compliance" and "Using State Revolving Funds to Build Climate-Resilient Communities." The former paper explains how urban water conservation can help address water quality and water supply needs at the same time, while keeping costs down for ratepayers. The paper shows how programs and policies that reduce indoor and outdoor water use can help achieve cost-effective compliance with sewer overflow, sewage collection and treatment, and stormwater obligations. The latter paper explains how the Clean Water State Revolving Funds and Drinking Water State Revolving Funds can better support and incorporate measures to make communities more resilient to climate change risks. It demonstrates to local, state, and federal decision makers how water efficiency, green infrastructure, and flood resiliency policies can maximize the effectiveness of State Revolving Fund investments.
fessionals was the next challenge, which, come to find out, was not a challenge—everyone said yes. When you’ve been in this business (and life) as long as I have, you learn that relationships are what it’s all about; and during this process, we made some great new partners and enforced some existing relationships.

These folks were instrumental in developing the process and were our first round Technical Committee: Heather Shank and Karen Hunds, Chattanooga Regional Planning Agency; Crystal Piper, Hamilton Co Stormwater; Jim Williamson, River City Company; Harry Hawkins, Thompson Engineering; Mark Heinzler and Karma Levitt, City of Chattanooga Land Development Office; Mrs. Tyler T. Jeffrey, TDEC - Regional Director - External Affairs; Gene Hyde, Chattanooga Urban Forester; Mary Beth Sutton, Caribbean Student Environmental Alliance; Dawn Hjelseth, Michael Walton and Ani McClain, green]spaces; Minkara Mounir and Don Green, City of Chattanooga Water Quality Program; Macon Toledano, Lyndhurst Foundation; Dodd Galbreath, Assistant Professor of Lipscomb University’s Institute for Sustainable Practice and Roger Tuder, AGC.

After a few weeks, and much deliberation, the committee came up with four challenge sites: Broad Street (urban down town road); Cherokee Blvd (a suburban road), and two redevelopment sites: Northgate Mall and a residential/commercial site off Bonny Oaks Blvd. These sites were selected based upon their value to the creation of exemplary innovative green infrastructure as well as their broader value in the context of place-making and neighborhood revitalization. (Thanks to all the property owners for working with us!). We wanted to make sure to the property owners and the competing teams understood that this was only a ‘design’ competition and there were no guarantees that any of the concepts would be built.

Thirteen Design Teams submitted registrations. These Teams were made up of the area’s top engineers, landscape architects, designers planners, architects, and students, etc.—we received nine, extraordinary incredible, submissions; and needless to say, it was a job for the Technical Committee to judge the first round, but they did. The Design Teams focused their projects on conservation of natural resources, development of practical designs and incorporation of urban design and traditional neighborhood development.

To get back to the train, the second round of judging of the Low Impact Development Design Competition Awards Finale was held July 10, 2014 at Loose Cannon. We had over 200 attendees!

We had some incredible Celebrity Judges for that night:

1. Robert Goo, Environmental Protection Specialist at US EPA Office of Wetlands, Oceans and Watersheds, Washington DC.
2. Dodd Galbreath, Founding Director and Assistant Professor at David Lipscomb University’s Institute for Sustainable Practice (ISP).
3. Tisha Calabrese-Benton, TDEC Director, Division of Water Resources.
4. Russell Moorehead, Chattanooga Office Manager at Barge Waggoner Sumner Cannon Engineering and Architectural Firm.
5. Philip Grymes, Executive Director at Outdoor Chattanooga.
6. Doug Stein, President at Stein Construction Co., Inc.
7. Linda Harris, Senior Watershed Representative at TVA (retired).

After the car was moved from the train and the mayor’s welcome, each Design Team proceeded to made presentations at the awards event— they were limited to no longer than 7 minutes; so you had to come early and listen fast! After much deliberation, our astute Celebrity Judges selected the first, second and third place winners, and the public’s help was sought to select the People’s Choice Award—“The closest to American Idol any of these people will ever get”, Michael quipped.

All the Teams were winners, but this is how they were placed at the Awards Finale:

**Broad Street:**

- Winner: W.M. Whitaker & Associates Landscape Architects | GeoSyntec | Garth Brown Designers
- Second: Stantec Consulting Services
- Third: LDA Engineering| Ross Fowler

**Cherokee Blvd:**

- Winner: Arcadis
- Second: Farmer Morgan
- Third: Ragan Smith | URS | Kennon | Calhoun Workshop

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Upcoming Events

Please email Jennifer Watson with your upcoming events:

AUGUST

August 22—East Tennessee TNSA Regional Meeting, TDOT Auditorium, 7345 Region Lane, Knoxville, TN (Strawberry Plains) 8:30AM. For More info contact Parci Gibson: parci.gibson@knoxcounty.org

August 27—Sumner/Wilson Co Stormwater Group Meeting: 11:30 AM Millersville Community Center. Contact Amy Murray

SEPTEMBER

September 2—West Tennessee Regional TNSA meeting, 1:30 pm at the City of Germantown. Economic and Community Development building 1920 South Germantown Road. For more info contact Don Fent: dfent@cityofbartlett.org

September 6—Cumberland River Dragon Boat Festival 8:00 AM - 3:30 PM, Riverfront Park, Nashville, TN

September 9—Southeast Regional TNSA Meeting, DRC 1A. 1250 Market St, Chattanooga, TN 37402 from 10AM-2PM

For more info, contact Leah Crisp: leahc@hamiltontn.gov

September 23-25—TNSA Annual Conference, Henry Horton State Park, 4209 Nashville Highway, Chapel Hill, TN 37034

September 26-27 – Bartlett Fall Festival, Freeman Park (The City of Bartlett will have a stormwater booth with a simple quiz and a prize (you’ve seen our visors, stress balls, lip balm, etc.) for each correct answer).

September 27-October 1 WEFTEC: The Water Quality Event

OCTOBER

October 8-10—SESWA Annual Regional Conference, Charleston, S.C.

October 25, 1:30 PM 2nd Annual Urban Runoff 5K, Bicentennial Capitol Mall State Park

Presentations from EPA Climate Showcase Communities Replication Workshop Now Available

In April 2014, EPA hosted the first Climate Showcase Communities Replication Workshop in Baltimore, Maryland. The workshop highlighted successful local and tribal government climate and energy projects and programs that can be replicated in communities across the United States. Local government staff gave presentations that shared best practices, tools, and resources that can be used to catalyze similar actions in other communities. To learn more about the projects, visit: http://www.epa.gov/statelocalclimate/local/showcase/workshop-presentations.html.

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Proud Sponsor of TNSA
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.

Tennessee Department of Agriculture, Division of Forestry
Seedlings available!

The Tennessee Department of Agriculture, Division of Forestry is celebrating a century of forest conservation, protection and enhancement.

Throughout that time period, the Division of Forestry has offered tree seedlings to meet the conservation needs of Tennessee’s landowners and communities.

This year, 55 different hardwood species and 6 different softwood species are available to help meet timber, wildlife, soil conservation and water quality protection objectives. The Division’s seedlings can now be purchased on-line in minimum bundles of 25 seedlings for an individual species. Visit PlantTNtrees.org to order seedlings or find out more information about the Division’s reforestation program.

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Northgate Mall:
Winner: DH&W Architects | March Adams | Casey Neal Landscape Architects
Second: Volkert | Neuhoff Taylor Architects
Bonny Oaks
Winner: Ragan Smith | URS | Kennon | Calhoun Workshop

On that night, we also gave out awards for the City’s Low Impact Development/ Green Infrastructure Excellence Awards, which was sponsored by a grant from Tennessee Stormwater Association.

Winners were:
1) The Crash Pad
2) Fairmount Avenue Townhomes
3) Jarnigan Medical Center

Other applicants were:

- 18 Market Street
- New Covenant Fellowship Church
- EPB
- Normal park Museum Magnet School
- Fairfield Inn and Suites
- Goodwin Road

The competition was sponsored by the City of Chattanooga, Lyndhurst Foundation, River City Company, Regional Planning Agency, green|spaces, Hamilton County Water Quality Program and sponsored by AquaShield and Belgard. - See more at: http://www.chattanooga.gov/designchallenge

To get back to the train, these new MS4 permit requirements are like that train—if you don’t take heed of it coming you might not have time to move your silver Accord out of the way.

For more information contact:
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