

Update on the Dallas Floodway & Levee System

"Eventually, all things merge into one, and a river runs through it." -Norman Maclean

The City's Stormwater Management program encompasses activities of over 13 departments, all performing various tasks that focus on managing stormwater, as the runoff travels from our neighborhoods ultimately into the Trinity River. The Trinity Watershed Management Department is a new City department that provides services related to flood protection, floodplain management, and implementation of the Trinity River Corridor Project, which is first and foremost a flood protection project.

A majority of the City of Dallas is protected from flooding by an approximate 30-mile long system of levees, with associated pump stations, pressure sewers, channels, floodways, and other flood control and maintenance facilities. These levees were originally constructed in the late 1920s and early 1930s, with several improvements made across the years. The U.S. Army Corps of Engineers (Corps) took over the levee system in the 1950s and built them to the height of 32 feet for protection from the Standard Project Flood.

The Dallas Floodway and Levee System protect a large area comprised of residential neighborhoods, business districts, and recreational venues, representing a tax base of about 7.3 billion dollars. To date, the levee system has prevented widespread flooding and has provided a 15 percent reduction in annual insurance costs for those properties within this corridor. Each year, the City conducts various activities to maintain and operate the Dallas Floodway and Levee System, in accordance with the Corps' criteria.

The Corps conducts annual and periodic inspections of levee systems. In the past, the Dallas Floodway and Levee System has received good, very good, or excellent ratings

Before



Sump erosion

After



Sump erosion corrected



Levee erosion



Levee erosion corrected



Collected debris along river channel



Debris cleared

The 2010 Census: A Snapshot

What: The census is a count of everyone residing in the United States.

Who: All U.S. residents must be counted—both citizens and non citizens.

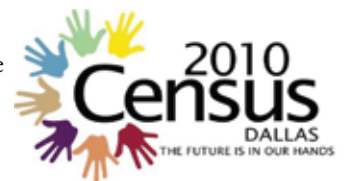
When: You will receive your questionnaire in March 2010 either by U.S. mail or hand delivery. Some people in remote areas will be counted in person.

Why: The U.S. Constitution requires a national census once every 10 years to count the population and determine the number of seats each state will have in the U.S. House of Representatives.

How: Households should complete and mail back their questionnaires upon receipt. Households that do not respond may receive a replacement questionnaire in early April. Census takers will visit households that do not return questionnaires to take a count in person.

A Complete Count: The Importance of Census Data

Every year, the federal government allocates more than \$400 billion to states and communities based, in part, on census data.



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Update: The Levee (page 1)

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Every Issue:

Ask Trinity Trudy (page 3)

Just For Kids (page 3)

Tips & Drops

Upcoming Events

February

14-20 Engineer's Week
www.eweek.org

15 President's Day

March

1 - 31 Texas SmartScape Month
www.txsmartscape.com

3-7 Dallas Auto Show at the Dallas Convention Center
www.dallasautoshow.org

5-7 Dallas Home & Garden Market at Dallas Market Hall
www.thehomeandgardenmarket.com

20 DWU's Water-Wise Seminars at Brookhaven College
www.savedallaswater.com

27 Earth Hour
www.greendallas.net

April

1 Census Day 2010
www.dallascityhall.com/census/index.html



18 Oak Cliff Earth Day at Lake Cliff Park
www.oakcliffearthday.com

22 Earth Day
www.greendallas.net

22 EPA EarthFest Dallas
www.greendallas.net/EarthFest2010.html

Volunteer With Us

You can help us protect local creeks, lakes, and the Trinity River by becoming a Stormwater Management volunteer. Texas Stream Team is a water quality monitoring program, and Storm Drain Marking allows participants to label storm drain inlets with a message aimed at reducing stormwater pollution. Contact the Outreach Team at 214-948-4022, or you can email us at stormwater@dallascityhall.com for more information.

Levees

by the Corps in both annual and periodic inspections dating back to the 1980s.

However, in response to "lessons-learned" from the flooding that occurred during Hurricane Katrina in New Orleans, the Corps implemented the National Levee Safety Program that includes more rigorous and standardized criteria for inspecting and assessing levees. When the Corps inspected the Dallas Floodway Project in December 2007 using the new criteria, the Dallas Floodway Project received an "Unacceptable" rating that was reported March 31, 2009.

During this inspection, a total of 206 items were identified as being either minimally acceptable, or unacceptable. The Corps identified various concerns related to potential seepage, stability, and height of the levees, and issues related to significant encroachments and penetrations in the levees, damaged gate closures, unstable structures, severe desiccation cracking of the levees, erosion, vegetation, siltation, and channel instability. The City and the Corps then categorized these items into two categories: System Study items and Operations and Maintenance (O&M) items.

Dallas City Council approved \$29 million for the System Study. The System Study is being conducted through consulting engineering contracts to address the items related to the structural integrity of the levees and is nearing completion. The study includes geotechnical analyses of the entire floodway system, hydraulic flood modeling of the river, and an environmental impact analysis of any proposed improvements. Currently, HNTB, the City's engineering firm is collecting boring samples to analyze levee stability. Based on this work, the City is formulating a Levee Remediation Plan to be developed in February 2010 and announced March 2010.

O&M items are being addressed by the Trinity Watershed Management Department. Out of the 198 O&M items, 125 have been corrected with continuation of improvements and fixes. (See the next issue for more information.) A budget of \$3.90 million is allotted in Fiscal Year 2009-10 in the Trinity Watershed Management Department to address some of the remaining O&M items. The photos (page 1) are examples of some of the O&M items that have been addressed.

The City of Dallas is making significant progress in

addressing the identified deficient items through the System Study and O&M efforts by the Trinity Watershed Management Department. The City of Dallas is confident that the current projects will accomplish the main goal of strengthening the levees to meet the Corps' new criteria, which continues the City's commitment to public safety and flood protection for Dallas residents and business owners. For more information, visit www.trinityrivercorridor.org or www.discoverthetrinity.org.

Spring "Green" Up

Fertilizer and weed control are two keys to success in your landscape. If you choose to use synthetic fertilizers make sure to follow all label directions, sweep up any excess from sidewalks/driveways, and never apply before a rain event. Several organic fertilizers can also have pre-emergent controls of annual weeds. Organic fertilizers will provide a slow release source of nutrients. Most organic treatments focus on the soil/plant relationship instead of focusing solely on the plant. Remember organic fertilizers still need to be cleaned off hard surfaces. The best weed control for your turfgrass is a strong healthy lawn.

Before the temperature warms up, it is a good idea to thoroughly inspect your irrigation system. Sprinkler heads and piping might have been damaged while the system was not being used. Repairs are much easier on your landscape when there is no demand for irrigation. Also, remember that during periods of rain, there is usually no need for additional water from an irrigation system.

Now is the time to start planning any changes to your garden. There are many options when it comes to adding some excitement to your landscape. Using SmartScape® plants as color accents instead of traditional seasonal color will help you improve stormwater runoff quality, save water, fertilizer, and other maintenance costs. Visit www.txsmartscape.com for more details about the SmartScape® program.

A well maintained landscape can provide many benefits to our community. Landscaping significantly reduces local urban heat islands, helps clean the air that we breathe, and provides space for countless recreational activities. The practices involved in keeping landscape healthy and beautiful have gotten a bad reputation. With a few changes in these practices, landscaping can be more environmentally friendly and still provide high quality results.

JUST FOR KIDS... ...big and small



Is it okay to sweep and/or blow dirt, grass, or other natural products into the storm drain?

NO, it is not okay! The only thing that is allowed to go down the storm drain is stormwater. Stormwater is just rainwater that is not absorbed. Even though dirt, grass clippings, and other materials are natural products, they are still pollutants once they enter the storm drainage system. It is a violation of City Code for any of these things to enter a storm drain.

Dirt takes up valuable space in our water bodies. The more dirt that is in the water body the less space for water and animals. Increased levels of dirt make it hard for fish to see, and can clog their gills. Plants also have a hard time surviving with the decrease in light.

Grass clippings, leaves, and other natural products can also cause damage to water bodies. Once these natural products break down, they release nutrients that act as a fertilizer for algae. The algae then take up space and decrease oxygen levels for other organisms.

Yard waste can clog storm drain inlets and cause localized flooding. Never use a broom or leaf blower to put anything into the storm drain!



If you have a stormwater question for Trinity Trudy email her at stormwater@dallascityhall.com. Look for her responses in future issues of "Inside the Inlet."

Hazardous Waste Sudoku

Fill out the grid so that each symbol and/or its correlating number appears one time in each row, column & 3x3 box. Use its correlating number to fill in the blank boxes.

Go to www.wheredoesitgo.com for the solution.
Go to www.flowstobay.org/cs_kids.php for the source.



Earth Day 40th Anniversary

Earth Day is on April 22, 2010 and Stormwater Management encourages everyone who lives and/or works in Dallas to attend at least one Earth Day celebration this year.

Earth Day turns 40 this year so expect to see some amazing events and booths that will teach and inspire you to reduce your impact on our environment.

EarthFest is the largest Earth Day event in Dallas. EarthFest 2010 will take place on April 22 in downtown Dallas, and is sponsored by the City of Dallas, the Environmental Protection Agency, and Keep Dallas Beautiful. For more information, visit <http://www.greendallas.net/EarthFest2010.html>.

To find out where other Earth Day celebrations are taking place, look at our community calendar in this edition of Inside the Inlet and visit the Green Dallas website http://www.greendallas.net/community_calendar.html. Be sure to look for the Stormwater Management booth at the different events!

Volunteer Spotlight



Julie Collins

Julie Collins has been volunteering with Stormwater Management and the Texas Stream Team program since February 2007. Julie was motivated to become a Texas Stream Team volunteer so she could “learn the importance of water quality and monitoring” and “to learn (by use of data) if there are seasonal changes in the water values.”

After nearly three years of monitoring, Julie still enjoys going in the field to collect data. She remarks, “I’m not always up to monitoring, especially after a hectic day, but once I’m at my site, I really just relax and enjoy watching wildlife in and around the water. I get to observe first hand how a local ecosystem works in coordination with all the elements; to see how everything really is connected.”

Julie monitors a section of Knights Branch in Weichsel Park, which is in the Dallas East Bank subwatershed. Knights Branch is a creek that flows from Weichsel Park south until it flows into Elm Fork Creek. Elm Fork Creek then flows into the Trinity River.

In addition to volunteering with Stormwater Management, Julie is a member of the North Texas Master Naturalist (NTMN) program. She enjoys volunteering at the Buckeye Trail in Rochester Park, along the Trinity River. Julie says, “It’s fascinating to observe the power of water in this bottom-land hardwood forest.”

Julie is not the only member of the NTMN to be involved in our Texas Stream Team program. There are six NTMN members who monitor four sites in Dallas. These members have joined together to create a subgroup within NTMN called the Aquatic Alliance.

Stormwater Management extends a big thank you to Julie Collins for her continued commitment to water quality monitoring and to learning about the environment.

Learn more about the North Texas Master Naturalist by visiting www.ntmn.org.

The 2010 Census

A Complete Count: The Importance of Census Data

Census data is used to determine locations for retail stores, schools, hospitals, new housing developments, and other community facilities. Census data determines boundaries for state and local legislative and congressional districts.

2010 Census Questionnaire: Easy, Important, and Safe

With only 10 questions, the 2010 Census questionnaire takes approximately 10 minutes to complete. Households are asked to provide key demographic information including whether a housing unit is rented or owned, the address of the residence, and the names, genders, ages and races of others living in the household. By law, the Census Bureau cannot share an individual’s responses with anyone, including other federal agencies and law enforcement entities.

Visit www.dallascityhall.com/census/index.html for more information.

Met a Member of Stormwater



Ellen Tan started working for the City of Dallas Stormwater Management section in August of 2005. She works on the Industrial compliance team. Her primary responsibility is performing site inspections of industrial facilities; she also inspects construction sites when needed. During her inspections, she looks for any potential pollutants that could enter the storm drainage system. She reviews and evaluates stormwater pollution prevention plans (SWP3) and any other related documents. She also monitors the submission of sampling results. Ellen assists with the training of new employees and performs emergency response as needed.

She enjoys visiting facilities that manufacture unique products and learning all the possible routes to get around the Dallas area. In her spare time, she likes to window shop at outlets, craft, and department stores.

Dallas Stormwater Management Leadership

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Jeff Murriel, R.E.M.

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William Gase

Water Quality/Enforcement Manager

Hazel Roper

Program Support Manager

FYI for our readers:

Stormwater Management is here to serve and meet the needs of our valued readers.

For additional information regarding the following:

- General stormwater information
- Construction and/or Industrial workshop schedules
- Presentations about stormwater pollution prevention or permitting requirements
- Added to or deleted from the newsletter’s email distribution list

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