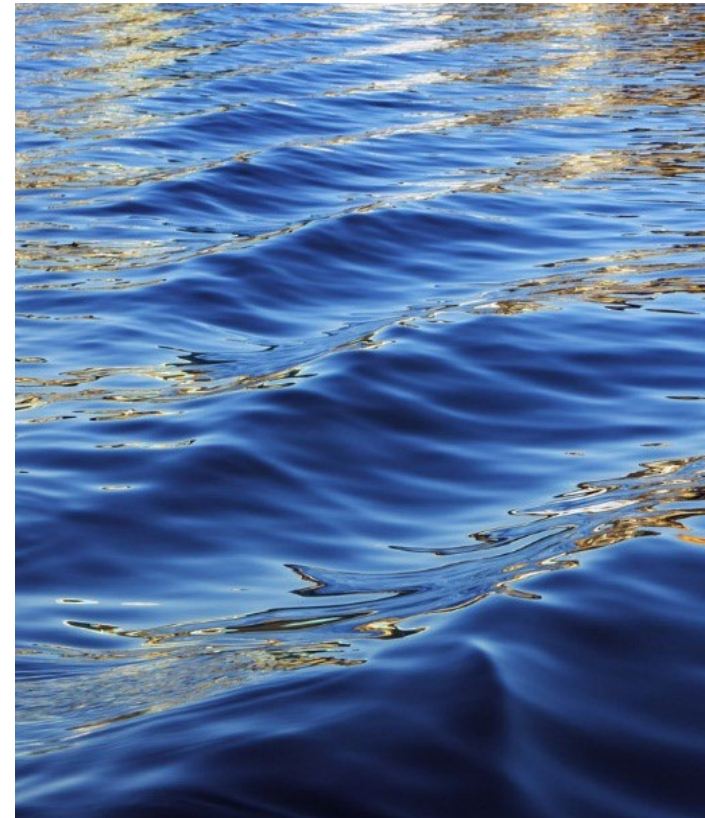





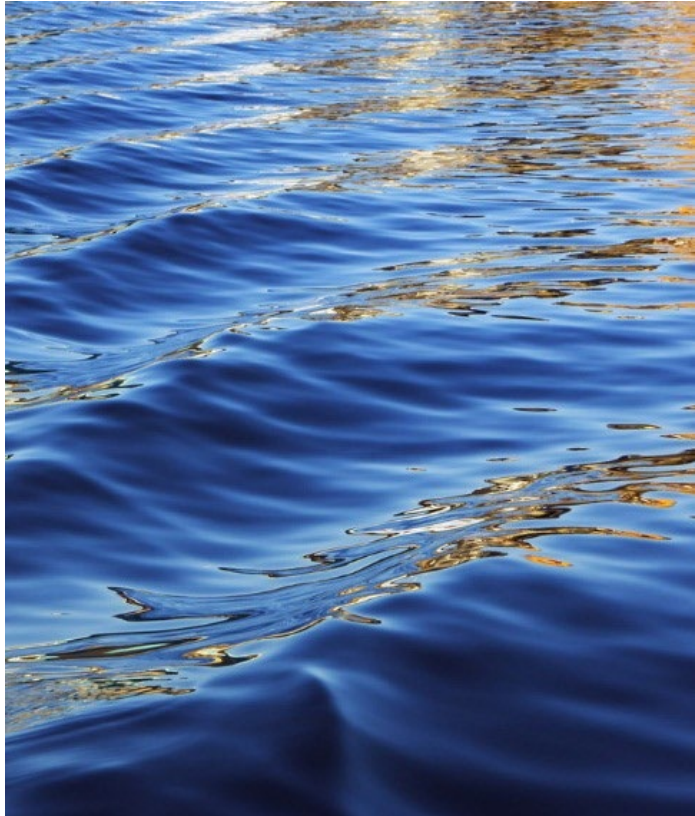
CARROLLTON
TEXAS

Carrollton's Stormwater Management Program





What is Stormwater and Stormwater Pollution?



What is Stormwater?



Rain Run-Off



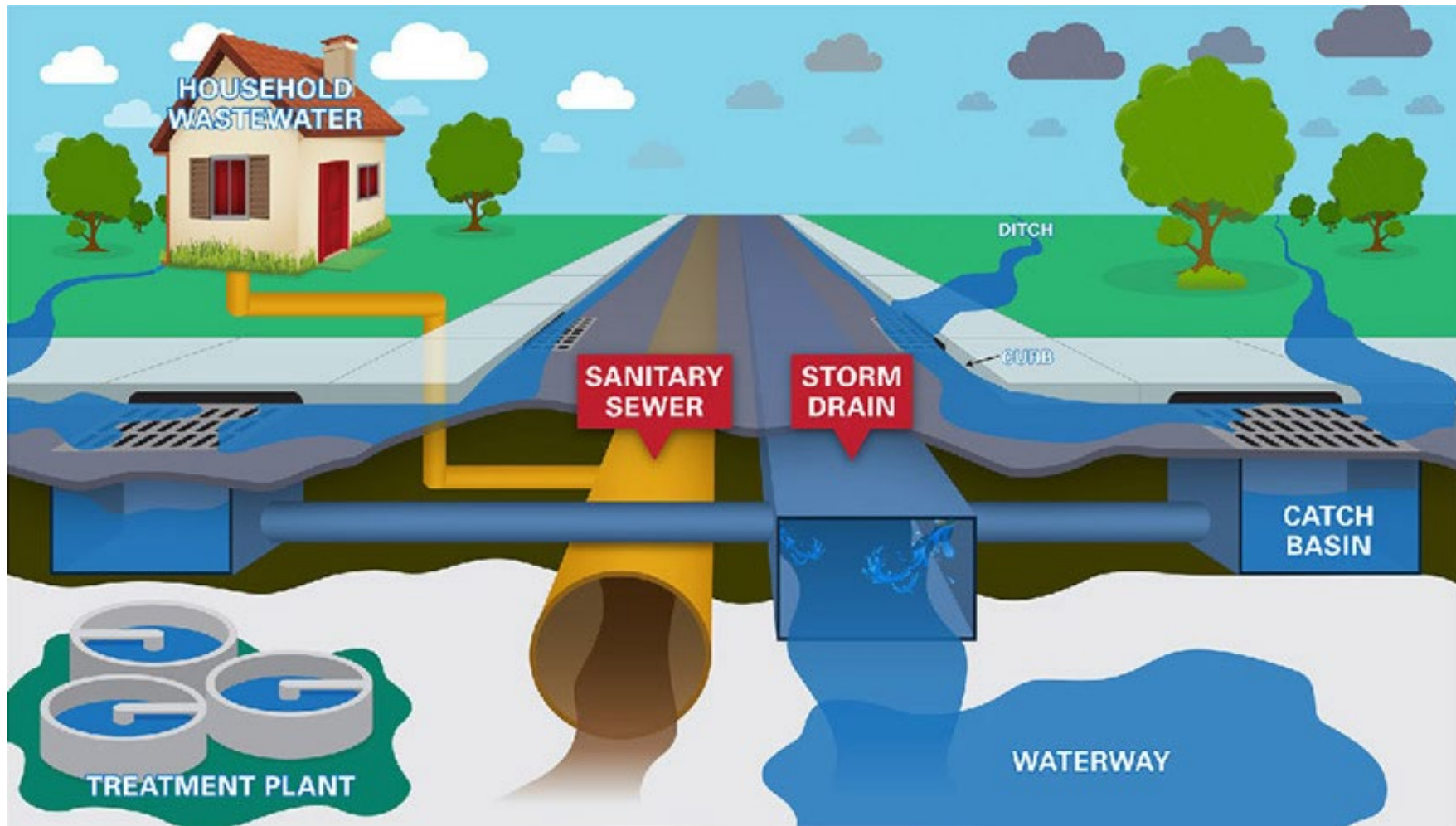
Storm Inlet



Outfall



Surface Water



Gets treated



DOES NOT GET TREATED

Stormwater Pollution

As it flows over surfaces, run-off can pick up contaminants such as:



Stormwater Pollution

Some pollutants are discharged to waterways without the help of rain

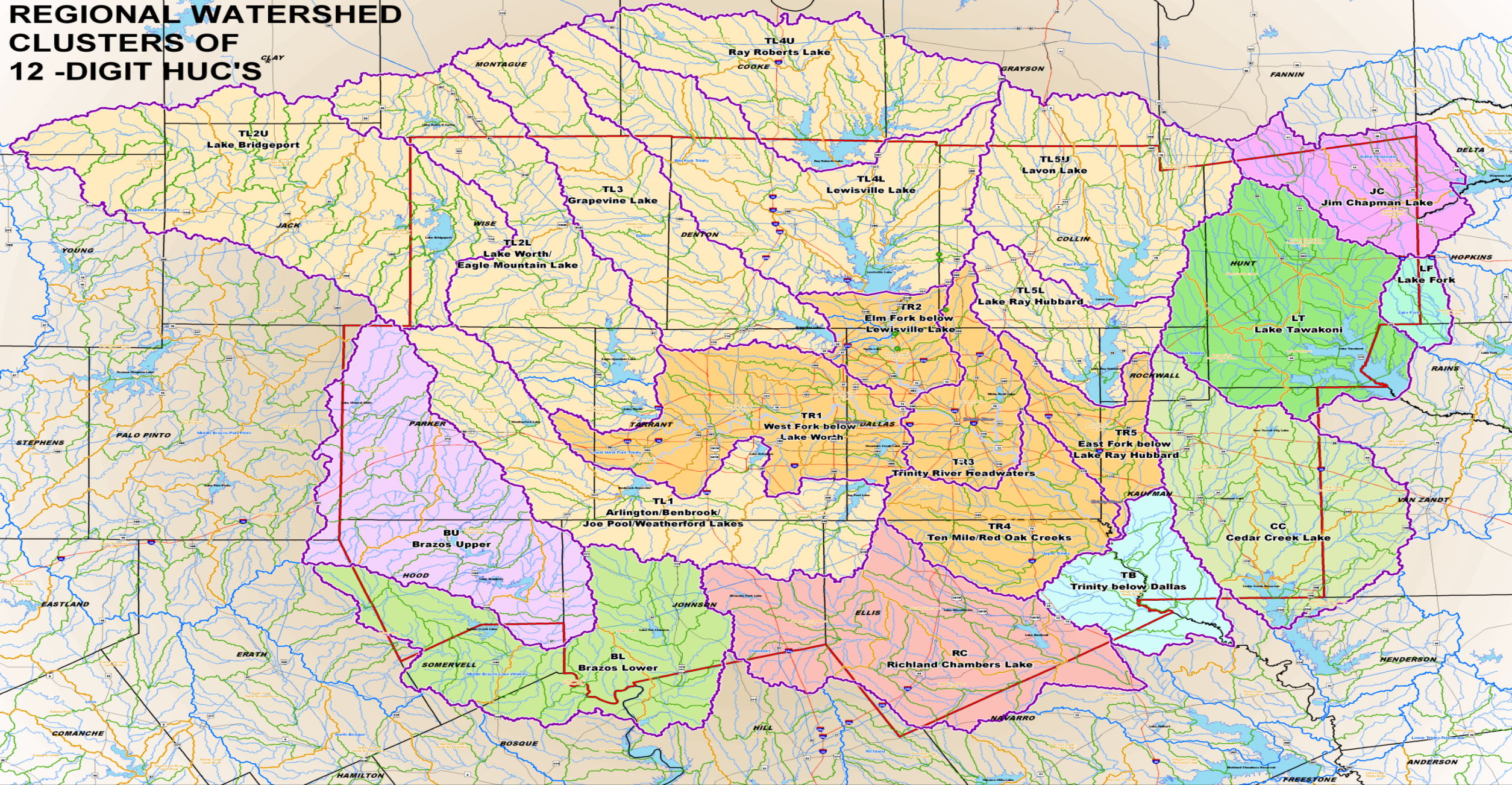


Stormwater Pollution

Causes a wide range of environmental and public health problems



REGIONAL WATERSHED CLUSTERS OF 12-DIGIT HUC'S



- Legend**
- Proposed MPA Boundary
 - Primary Highway
 - Drains to Water Supply Reservoirs
 - Subbasins
 - Counties
 - Secondary Highway
 - Drains to Trinity River
 - Watersheds
 - Trinity River
 - Access Ramp
 - Cluster/Drainage
 - Subwatersheds
 - Major Lakes
 - Major Arterial
 - Streams



North Central Texas
Council of Governments
Environment & Development



Data Source : Watershed Boundary Dataset (WBD) by
USDA - Natural Resources Conservation Service

Stream Data by National Hydrography Dataset (NHD)

This map/data was created by the North Central Texas Council of Governments (NCTCOG) for use "as-is" and as an aid in graphic representation only. This data is not verified by a Registered Land Surveyor for the State of Texas and is not intended to be used as such. NCTCOG, its officials, and its employees do not accept liability for any discrepancies, errors, or variances that may exist.

*HUC - Hydrologic Unit Code

The Trinity River has 4 Branches in North Texas:

- Clear Fork
- West Fork
- Elm Fork
- East Fork

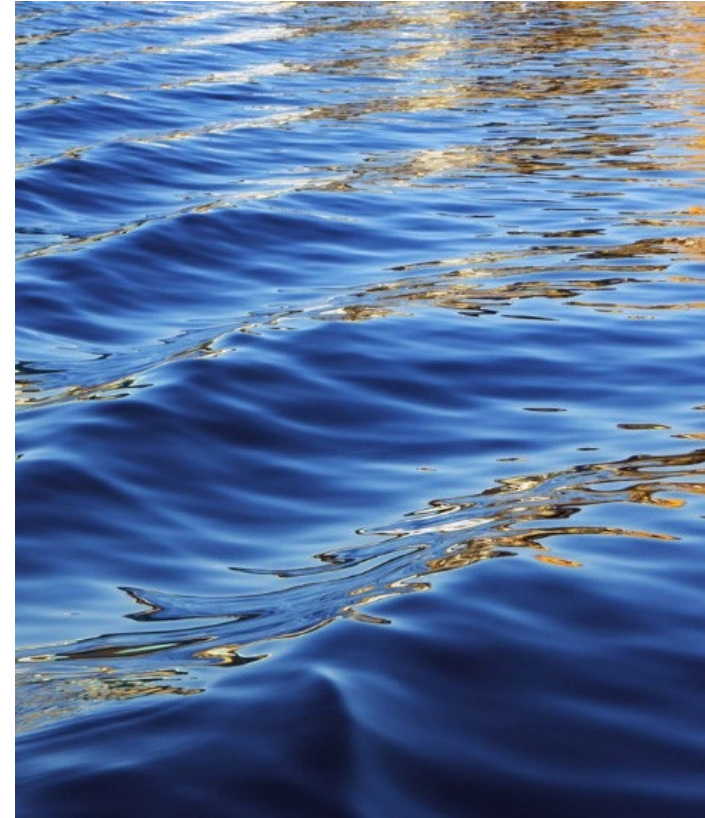


Elm Fork Trinity River Below Lake Lewisville Watershed

- Addison
- Bartonville
- **Carrollton**
- Coppell
- Copper Canyon
- Dallas
- Double Oak
- Farmers Branch
- Flower Mound
- Grapevine
- Hebron
- Irving
- Lewisville
- Plano
- The Colony
- University Park



Stormwater Permits



History

- Federal Water Pollution Control Act
- Waterways were too polluted led to an Environmental Movement
- Clean Water Act and the National Pollutant Discharge Elimination System (NPDES)
 - Goal was to reduce the amount of pollution in our surface waters
 - Stormwater Permits for:
 - Industries
 - Construction Sites
 - Large Cities/Entities
 - Small Cities/Entities



Cuyahoga River Fire in
Cleveland, Ohio
1952/1969

Stormwater Permits for Cities/Entities in North Texas

Phase I Permits

- Medium and Large Cities/Entities with a Population > 100,000 in 1990
- Individual Permits
- Dallas, Fort Worth, Plano, Arlington, Mesquite, Garland, Irving, TXDOT
- Develop and Implement a Stormwater Management Program

Phase II Permits

- Small Cities/Entities
- Small Municipal Separate Storm Sewer System (MS₄) General Permit
- 101 Permits including Carrollton, Grand Prairie, Frisco, Farmers Branch, DART
- Develop and Implement a Stormwater Management Program

Phase II Permits for Small Cities

- Third Permit Term
- Permit Term:
 - January 24, 2019
 - 5 years
- Carrollton - Level 4 City
- Six Minimum Control Measures (MCM):
 1. Public Education, Outreach, and Involvement
 2. Illicit Discharge Detection and Elimination
 3. Construction Site Stormwater Runoff Control
 4. Post-construction Stormwater Management in New Development and Redevelopment
 5. Pollution Prevention/Good Housekeeping for Municipal Operations
 6. Industrial Stormwater Sources





STORMWATER MANAGEMENT PROGRAM

To prevent or reduce pollutants from getting carried by storm water into creeks, ponds, lakes, and rivers.

MCM 1: Public Education and Outreach

- Educate public service employees, businesses, and the general public
- Hazards associated with illegal discharges & improper disposal of waste
- Impact stormwater discharges have on waterways
- Steps you can take to reduce pollution



MCM 1: Public Involvement - allows all members of the public to participate.



Help Protect Our Creeks, Lakes, and Rivers

When we keep stormwater drains free of trash, the flow of rainwater keeps the City's surface water free of debris.

cityofcarrollton.com/stormwater

Report Polluters: 972-466-3060 or 972-466-3425 (after hours)



Includes: Adopt-A-Spot, Waterway Clean-up, Community hotline, Storm Drain Marking Program, Citizen's Advisory Committee, etc.

MCM₁: Public Involvement: Citizen Stormwater Advisory Committee

Representatives from:

- Carrollton-Farmers Branch ISD
- Lewisville ISD
- Industry
- Resident
- Neighborhood Advisory Commission (NAC)



No New measures for Public Education, Outreach, and Involvement

- We will continue to work hard by getting the community the outreach they need and allowing anyone to participate!

MCM2: Illicit Discharge Detection and Elimination



Detect, investigate, and eliminate illicit discharges.

- Storm Sewer System Map
- Stormwater Pollution Prevention Ordinance and Enforcement Response Guide
- Spill/Emergency Response
- Illicit Discharge Reporting Line
- Construction Plans Review and Site Inspection for Illicit Connections
- Illegal Dumping
- Liquid Waste Program
- Maintenance Program for Sanitary Sewers
- Pet Waste Management
- Dry Weather Discharge Screening
- Household Hazardous Waste Program
- Water Main Breaks Response
- Employee Training for Illicit Discharges
- Floatables (NEW!)



MCM2: Illicit Discharge Detection and Elimination – New Activities

BMP 2.14 Floatables

- Trash and debris letters mailed to all residents and businesses in violation of ordinance
- 100% of food establishment's dumpsters inspected
- Parks picks up trash at least 200 days per year
- Inspect 3,154 storm inlets per year
- Public Works to collect 9,000 pieces of trash from roadways per year
- Install and maintain structural controls



MCM₃: Construction Site Stormwater Runoff Control

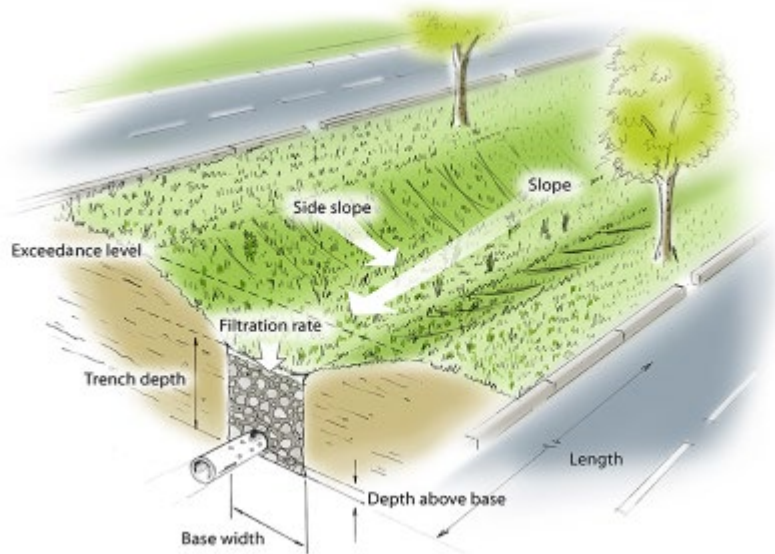


Includes: Ordinance for erosion and sediment control and pollution prevention measures, review construction site plans, site inspections & enforcement, education & training for site operators

MCM₄: Post-Construction Stormwater Management in areas of New Development and Redevelopment.



- Stormwater and Flood Protection Ordinance, and General Design Standards
- Long-Term Operation and Maintenance Plan for Structural BMPs
- Construction Site Plan Review
- Neighborhood Green Space Preservation
- Tree Preservation Ordinance
- Inspection of Structural BMPs during Construction
- Limited Mowing Height



MCM 5: Pollution Prevention/Good Housekeeping for Municipal Operations



Best Management Practices for Measure 5:

- Parks and Open Space Maintenance
- Road and Bridge Maintenance
- Fleet Maintenance
- Municipal Buildings and Parking Lots Maintenance
- Storm Sewer System Maintenance
- Waste Reduction of Information Technology and Communications Operations
- Grease, Sand, and Grit Interceptor Maintenance
- Structural Control Maintenance and Waste Disposal
- New Construction and Land Disturbance
- Employee Stormwater Training Program
- Flood Control Projects **(NEW!)**

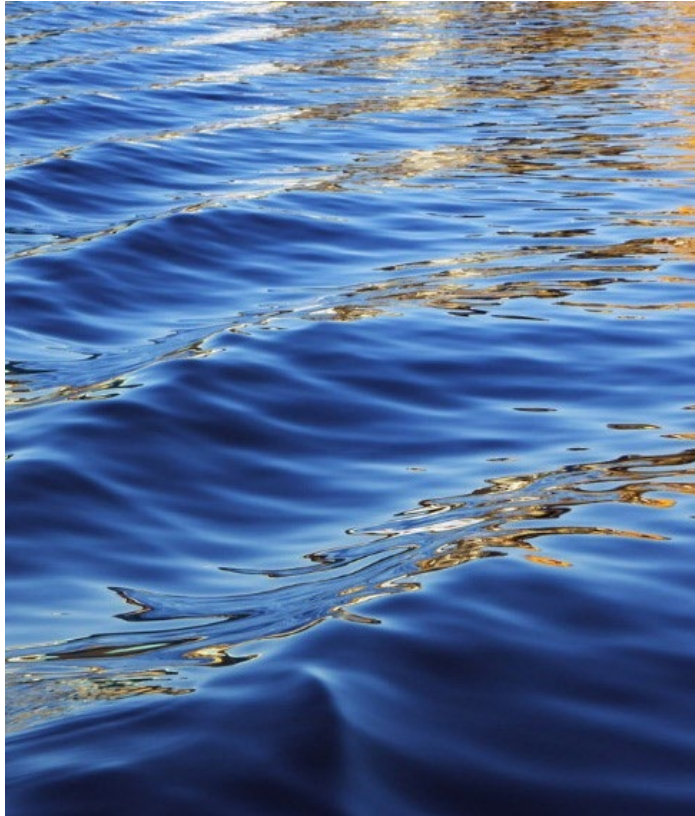

MCM 5: Pollution Prevention/Good Housekeeping for Municipal Operations – New Activities

Flood Control Projects

- Develop a list of all city-owned structural flood control devices.
- Evaluate all structural control devices to determine if they can be retrofitted to provide additional pollutant removal.
- Assess the impacts of receiving waters for all flood control projects.
- All new flood control structures will be designed, constructed, and maintained to provide erosion prevention and pollutant removal.

MCM 6: Industrial Stormwater Sources





Renewal of the Small MS₄ General Permit



STORMWATER MANAGEMENT PROGRAM

Updates:

- Compliance
- Revising the Phase II permit and permitting process



What YOU Can Do to Prevent Pollution

Only UNPOLLUTED Stormwater Into Storm Drains!



Help Protect Our Creeks, Lakes, and Rivers

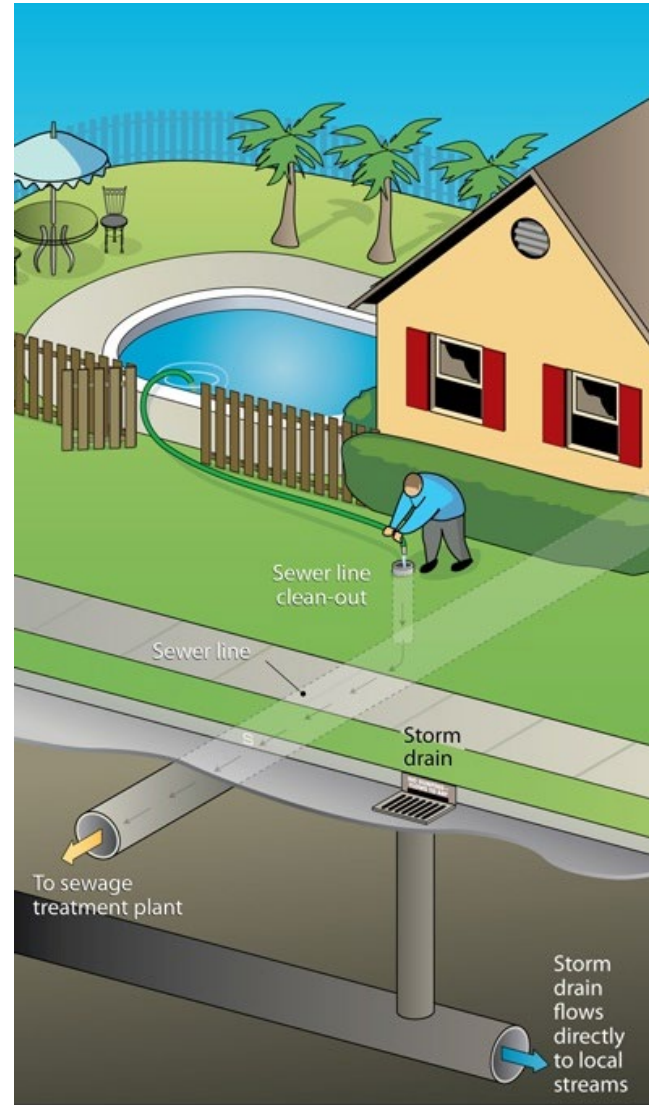
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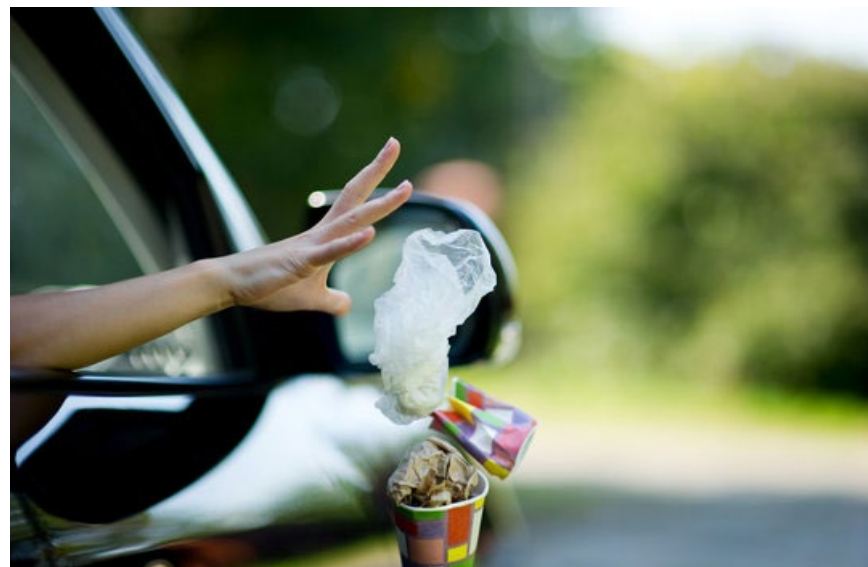
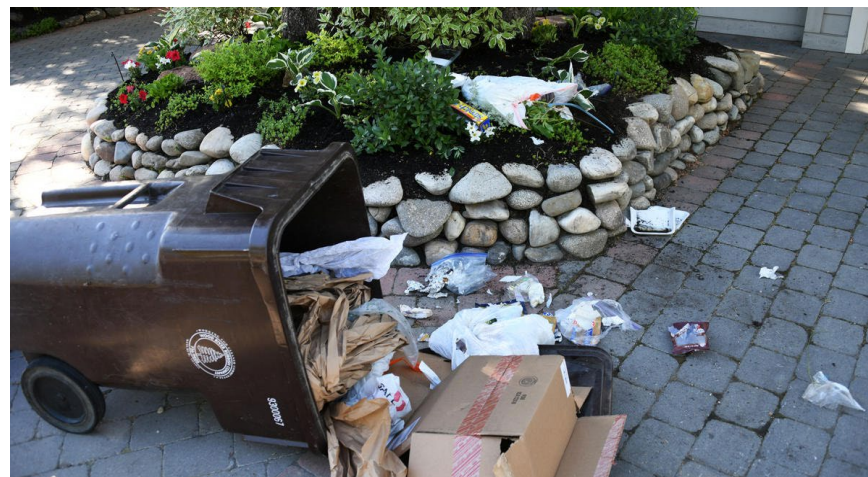
Drain Your Pool to the Sanitary Sewer NOT to the Street



Pool Repairs – Ensure Contractors Dispose of Waste Properly



Take Care of Texas - Dispose of Trash Properly



Wash Your Vehicle on the Grass or at a Commercial Car Wash



Blow/Sweep Grass Clippings and Leaves Back onto the Grass



Fertilizers and Pesticides

- Follow directions – more is not better!
- Don't apply before a rain event
- Sweep up fertilizer



Pick up After Your Pet



Wash Paint Brushes and Equipment in an Indoor Sink



Properly Dispose of Household Hazardous Waste

Home Chemical Collection Centers Typical Household Hazardous Waste

- Paint, automotive fluids, fertilizers, pesticides, cleaning chemicals, swimming pool chemicals and electronics

Carrollton:

- Free Door-to-Door pickup from Republic Services
- Call (469) 451-3713
- They send you materials to package your waste
- Place by your door/garage on the scheduled day
- Republic will come by and pick it up



Vehicle Fluids

- Place containers under leaking vehicles
- Clean up oil spills
- Recycle used motor oil



Fat Free Sewers

Grease builds up in your sanitary sewer lines and the city lines and can lead to this:



Fat Free Sewers and Cease the Grease

DO:

- Pour oil and grease in containers
- Scrape food scraps into trash cans
- Avoid using garbage disposal
- Prewash dishes before loading dishwasher
- Cover kitchen sink with a strainer to catch food debris
- Recycle your used grease – Carrollton holds a recycling event the Monday and Tuesday after Thanksgiving

DON'T:

- Don't pour oil and grease down the drain
- Don't put food scraps down the drain
- Don't run water over dishes and pans to wash oil and grease down the drain



**CEASE THE GREASE
FREE COOKING OIL DISPOSAL**

Sponsored by **Metro Grease Service**

Grease sticks to the insides of pipes, so this season, recycle the grease from holiday meals instead of pouring it down the drain.

**November 28 & 29
8 a.m. to 6 p.m.**

**Central Service Center
2711 Nimitz Lane**



For more information:
972-466-3425 | cityofcarrollton.com/FatFreeSewers |   



Landscape Using Texas Smartscape

- Plant native and adapted plants
- Use less water – saves you money
- Use less fertilizers and pesticides – saves you money and reduces pollution
- Your garden can look good all year round with little effort
- Design tool can help you design your landscape
- Visit txsmartscape.com



Volunteer Opportunities



Please submit questions and comments to:

Andie McClure

Stormwater Coordinator

972-466-3035

andrea.mcclure@cityofcarrollton.com

