

Integrated Stormwater Management (iSWM) Subcommittee Meeting

- October 13, 2026





1. Welcome and Introductions

- ❑ Please use the QR code to record attendance
- ❑ All past and current meeting agendas, presentations, and handouts are located on the iSWM Implementation Subcommittee Webpage



AGENDA

Action Items

1. Welcome and Introductions
2. iSWM Implementation Subcommittee Update
3. Discuss Changes to Historical Meeting Procedures
4. Appoint an iSWM Subcommittee Liaison to the Regional Stormwater Management Coordinating Council

Discussion Items

5. Overview of the Regional Stormwater Management Program
6. Manual Update Requests Summary and Discussion

Information Items

7. Regional Stormwater Management Coordinating Council Update
8. Integrating Transportation and Stormwater Infrastructure (TSI) Study Updates

General Information Items & Roundtable Discussion

9. Upcoming Events and Conferences
10. Upcoming NCTCOG Meetings
11. Future Agenda Items and Schedule for Next iSWM Meeting
12. Roundtable Discussion

Adjournment



2. iSWM Implementation Subcommittee Update

- August 18th Regional Stormwater Management Coordinating Council meeting discussed and voted to approve absorbing the iSWM subcommittee from the Public Works Council
- Fiscal Year 2027 Work Program Tasks were discussed, voted on and ultimately approved
- Work Program Tasks are on the [Subcommittee Page](#)

Action Items



3. Discuss Changes to Historical Meeting Procedures



- Voting on approving Summary



4. Appoint an iSWM Subcommittee Liaison to the Regional Stormwater Management Coordinating Council

- Any volunteers?

Discussion Items





5. City of Mansfield's MS4 and Stormwater Program Presentation

- Julian Holmes, City of Mansfield



Regional Stormwater Management Coordinating Council

AN OVERVIEW FOR THE ISWM COMMITTEE

Julian Holmes
FY27 RSWMCC Chair
Supervisor of Environmental Quality -
City of Mansfield

Topics

- RSWMCC overview
- MS4s and NPDES
- MS4 permit requirements
- RSWMCC deliverables and accomplishments
- My personal experience with iSWM

RSWMCC Overview

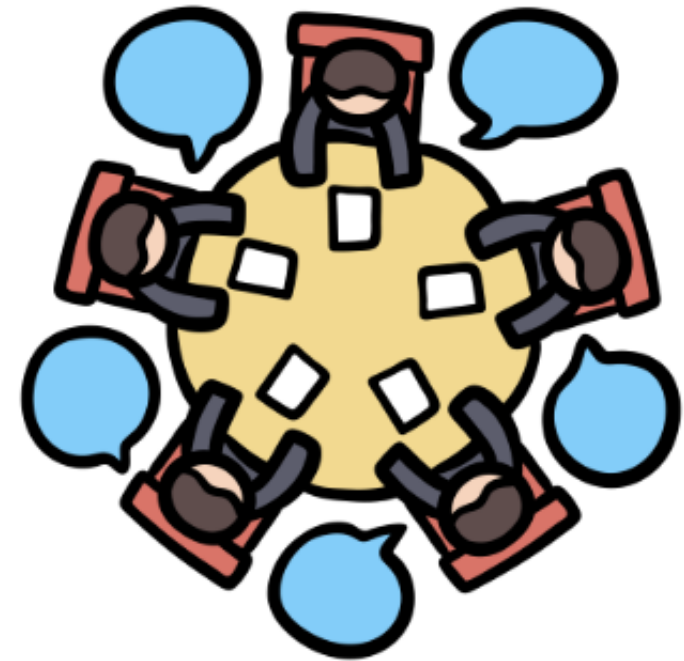
- Established in 2000
- Three Goals:
 - Promote Regional Collaboration
 - Provide Regulatory Compliance Support to Cities
 - Public Education and Water Quality Improvement



**North Central Texas
Council of Governments**

RSWMCC Overview

- 20 council seats
 - 8 for each cost-share Phase 1 MS4
 - 12 at-large for cost share Phase 2 MS4
 - 3 Chair positions
- 4 Subcommittees
 - Construction/Post-Construction Task Force (New)
 - Public Education Task Force
 - Regional Monitoring Task Force
 - Stormwater Pollution Prevention (P2) Task Force
& Illicit Discharge Detection & Elimination (IDDE) Task Force
(Previously two separate committees)



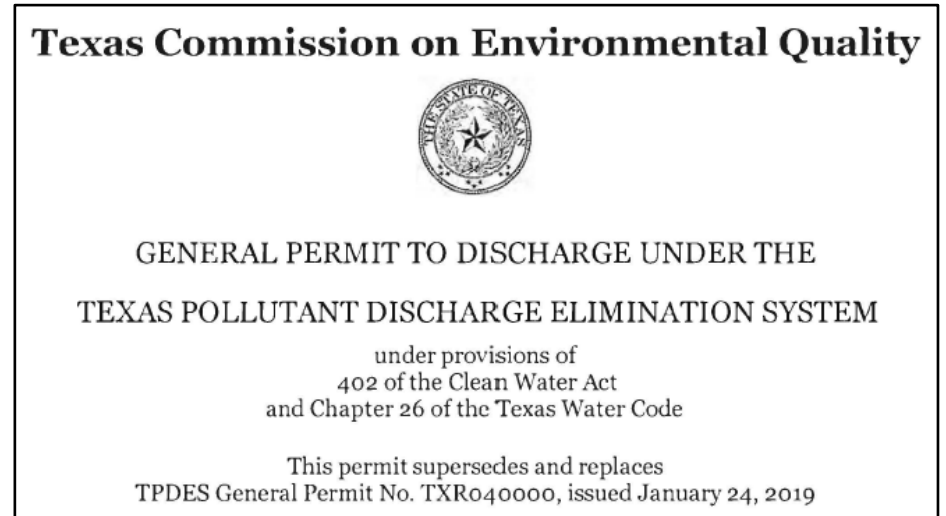
MS4s and NPDES

- 1970 – EPA created
- 1972 – Clean Water Act
 - National Pollutant Discharge Elimination System
 - permit system for regulating discharges to surface waters
 - State delegation – Texas assumed in 1998 - TPDES
- 1987 CWA amended
 - MS4 (Municipal Separate Storm Sewer Systems) now regulated
 - Phase I – cities with 100,000 at 1990 census
 - Phase II - 1999, all cities now included
 - Construction General Permit
 - Regulates construction activity over 1 acre
 - Multi-sector Industrial Permit
 - Regulates based on SIC code and stormwater exposure



MS4 Permit Requirements

- Phase II MS4 Permit Structure – Comprises 8 Minimum Control Measures (MCM)
 - Public Education and Outreach
 - Public Involvement/Participation
 - IDDE (Illicit Discharge Detection & Elimination)
 - Construction
 - Post-Construction – New Development
 - Municipal Operations Good Housekeeping
 - Industrial
 - Construction where MS4 is the Operator
- Phase I is similar, but with individual permits



RSWMCC Deliverables & Accomplishments

Training programs and workshops

- Construction BMPs
- Dry Weather Screening
- Industrial Inspections
- Municipal Good Housekeeping
- Fish Kills

IDDE Dry Weather Screening

🕒 Monday, October 20, 9:30am - 3:30pm (CDT)

NCTCOG Stormwater Program will host a workshop on dry weather screening in partnership with DFW International Airport Stormwater staff and Tarrant County Resource Connection.

The workshop will be hosted at Tarrant County Resource Connection.

Tarrant County Resource Connection
Magnolia Room
1100 Circle Drive
Fort Worth, TX 76119

Lunch will be provided. There is limited space for this workshop.

Register

Please fill out the information below to register for the event.

☒ Going ☐ ? Maybe ☐ X Can't Go



MUNICIPAL BMP "SHOW & TELL"

MAY 11, 2021
MICROSOFT TEAMS

RSWMCC Deliverables & Accomplishments

Texas SmartScape

- Native plant landscaping classes
- Texas SmartScape Website
- Plant Database
- Plant Sale Initiative



RSWMCC Deliverables & Accomplishments

Doo the Right Thing

- Education campaign
- Photo contest
- Resource library
- Social Media



**Meet Defender
Rosie!**

Age: 6 years old
Hobbies: Making new friends (doggos and hoomans), getting booped, and stealing attention

This pup and their owner protect the **Big Fossil Creek West Fork Trinity River** watershed by never leaving behind any poo in Fort Worth, TX!

  @rosie.atlas  **DOO THE RIGHT THING**

RSWMCC Deliverables & Accomplishments

Training and Education Materials



Freddy the Fish Teaches About Stormwater (4:30)

Freddy the Fish teaches kids about what happens to rain after it hits the ground, where storm drains lead to, and what we can do to help prevent water pollution. Intended for elementary school aged audiences. Pairs with the Freddy the Fish science experiment. [Watch on YouTube](#)

Preventing Storm Water Pollution: *What We Can Do*

~Employee Training Series~
Materials Storage and Spill Cleanup

Online Training Portal

Welcome to the NCTCOG Stormwater Pollution Prevention Online Training System.
Select a module below to get started.

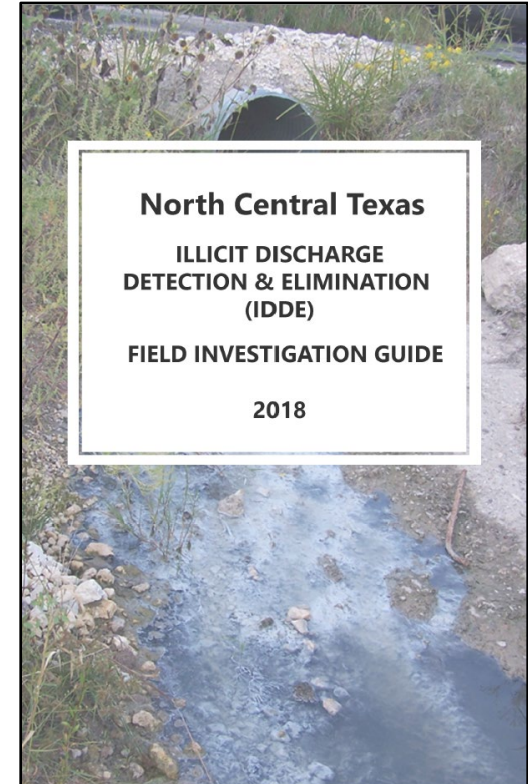
Intro to Stormwater Pollution Prevention 7.5 min • Sources of Pollution • Government Employee Responsibility • Best Management Practices Get Started	Fleet Maintenance and Materials Handling 5 min • General Housekeeping • Material Storage • Leak and Spill Cleanup • Vehicle Fueling and Washing Get Started	Streets and Drainage Maintenance 9.5 min • Pavement Repair • Paint Striping • Storm Drain Inlet Cleaning • Ditch Maintenance • Reporting Pollution Get Started
Construction Activities and Land Disturbances 9 min	Parks and Grounds Maintenance 9.5 min • Plant Selection	Solid Waste Operations 9.5 min • Trash Collection Activities

North Central Texas

ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE)

FIELD INVESTIGATION GUIDE

2018

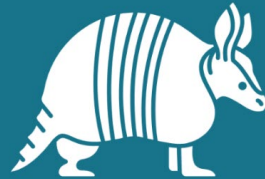


RSWMCC Deliverables & Accomplishments

- Other accomplishments
 - Cost Share Reform
 - Bylaw revisions
 - Creation of new task force and reorganization
 - Community Cleanup Challenge

2026 North Texas Community Clean Up Challenge

The North Texas Community Cleanup Challenge (NTCCC) is an annual region-wide litter cleanup competition among North Texas communities to see who can pick up the most litter per community. We are incredibly excited to collaborate with the North Texas FWC Organizing Committee to make sure North Texas is kept beautiful and clean during the games and beyond! Communities, churches, Boy Scouts, Girl Scouts, companies, activists, or just ordinary citizens can organize litter cleanup events or simply log existing events and efforts as they occur. At the end of the contest, the community with the most litter cleaned up per community will receive the North Texas Community Cleanup Award that they can proudly display in their City Hall.



Texas Litter Database

Discover free public data, tools, and resources from
Keep Texas Beautiful



My Personal iSWM Experience

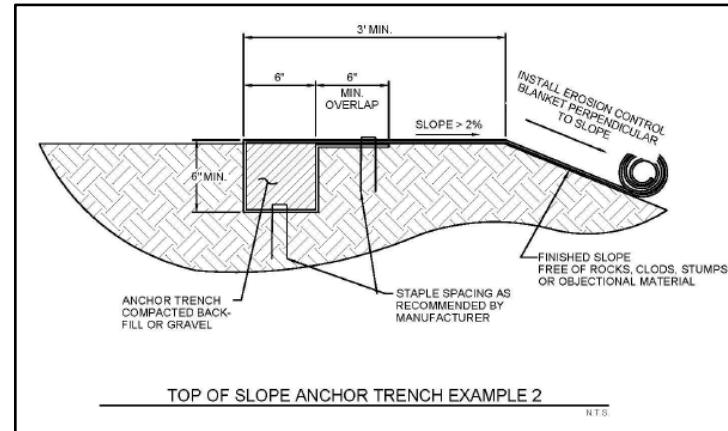
As an MS4 Permit Manager

- SWPPP inspections
- Erosion Control Civil Plan Review
- Post-Construction Structural Control Plan Review



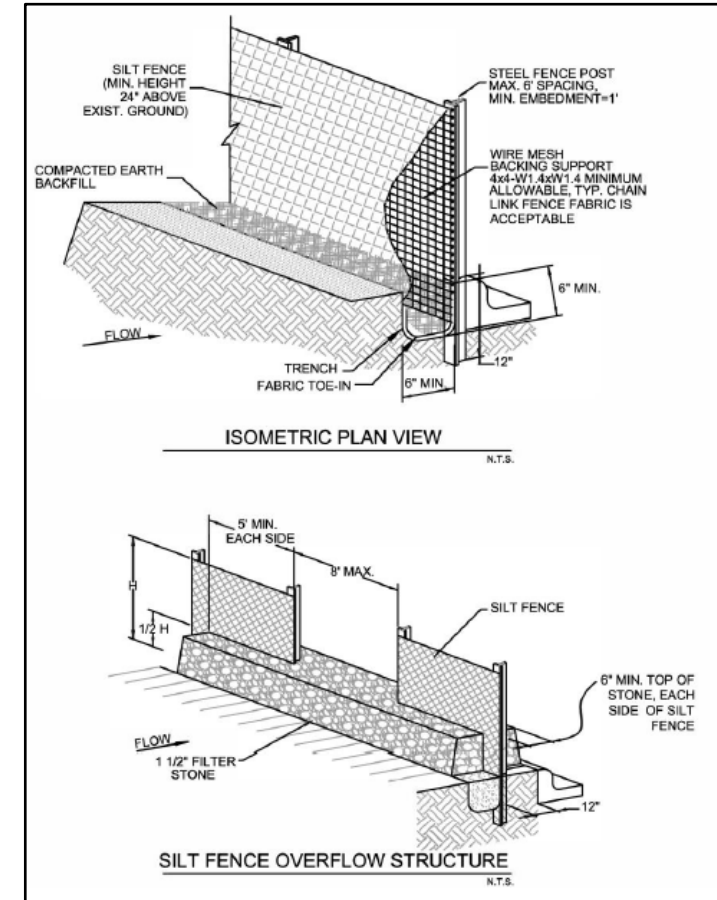
SWPPP Inspections: Construction Schematics

iSWM Construction Controls
Technical Manual
adopted by ordinance

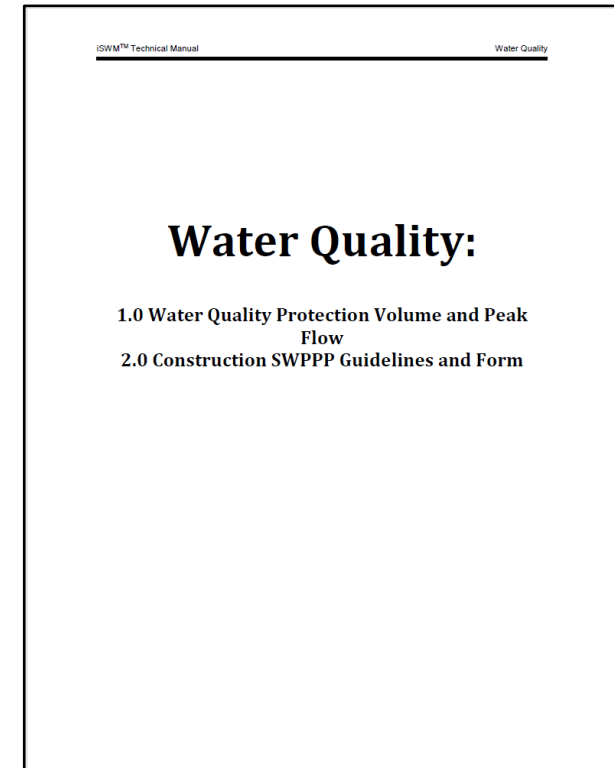
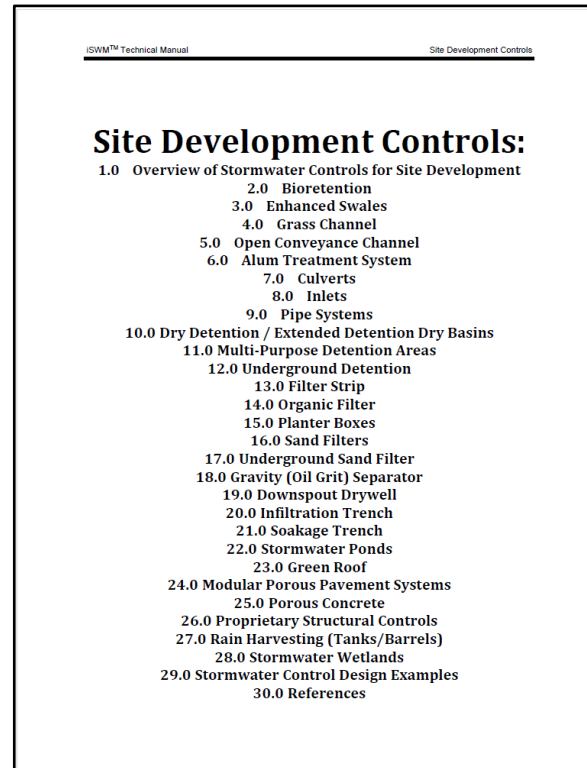
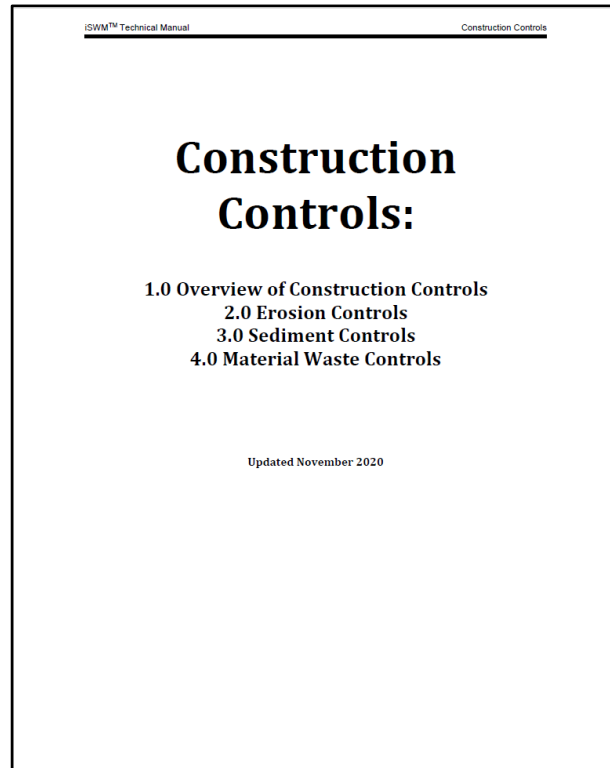


§ 52.40 DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

(A) All operators of construction sites shall use the methodology on best management practices from the most current North Central Texas Council of Government best management practices for construction activities manual...



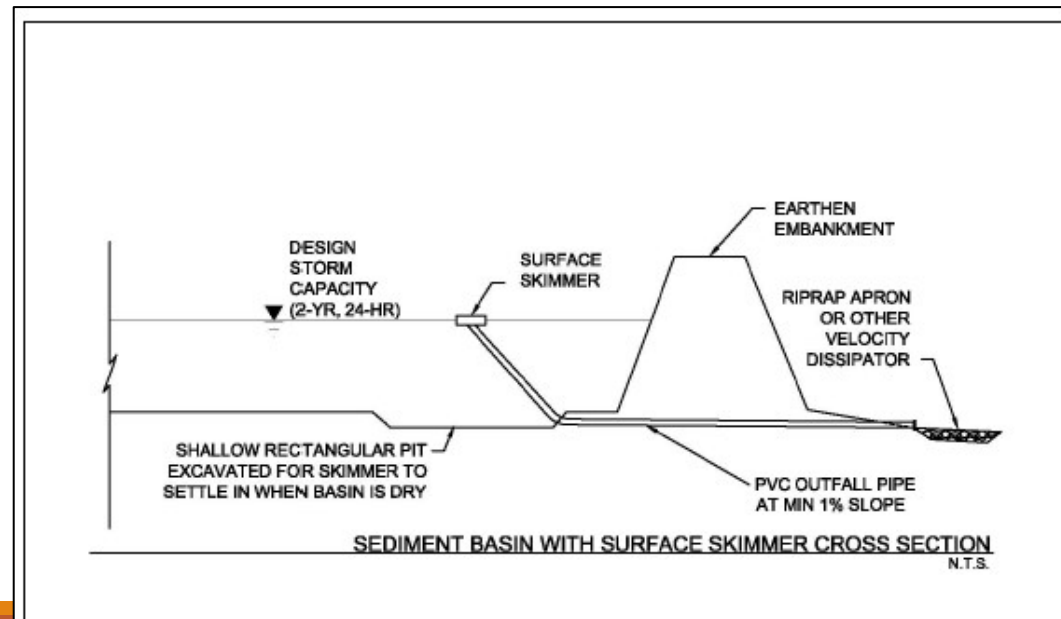
Plan Reviews: Technical Manuals



Erosion Control Plan Review Example: Temporary Sediment Basins

TXR150000 Part III, Section F.2.(c).i.(A).(1):

“...A sedimentation basin or similar impoundment is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time.”



Sizing and calculations

TXR150000 Part III, Section F.2.(c).i.(A).(1):

“...A sedimentation basin or impoundment may be temporary or permanent, and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained...”

Does not prescribe:

- Method
- Draw down time



1.2 Rational Method

Q = CIA (1.2)

where:

Q	=	maximum rate of runoff (cfs)
C	=	runoff coefficient representing a ratio of runoff to rainfall
I	=	average rainfall intensity for a duration equal to the t _c (in/hr)
A	=	drainage area contributing to the design location (acres)

Table 1.6 Recommended Runoff Coefficient Values

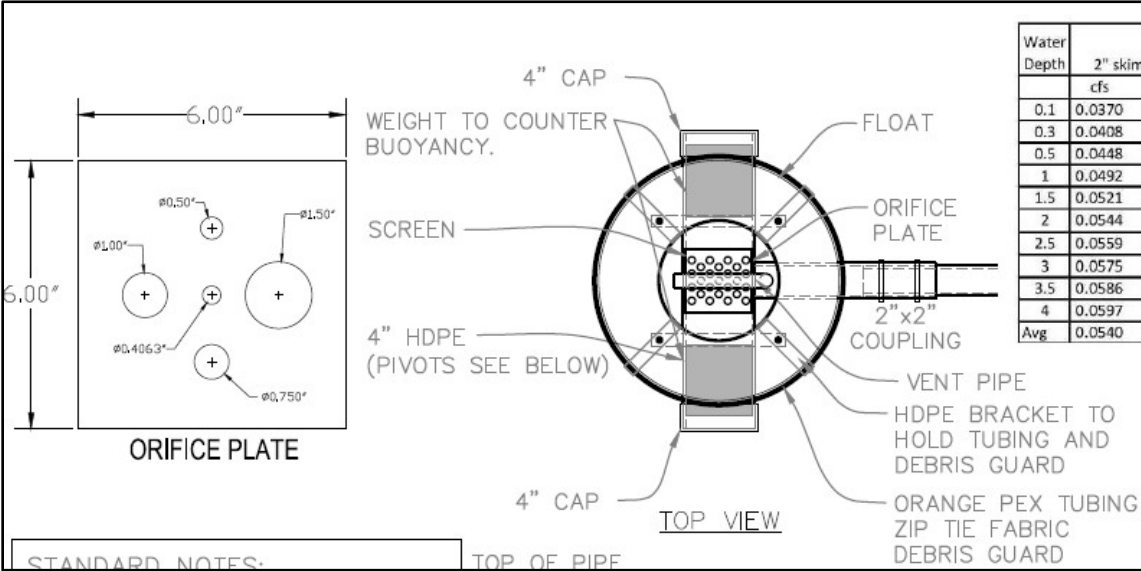
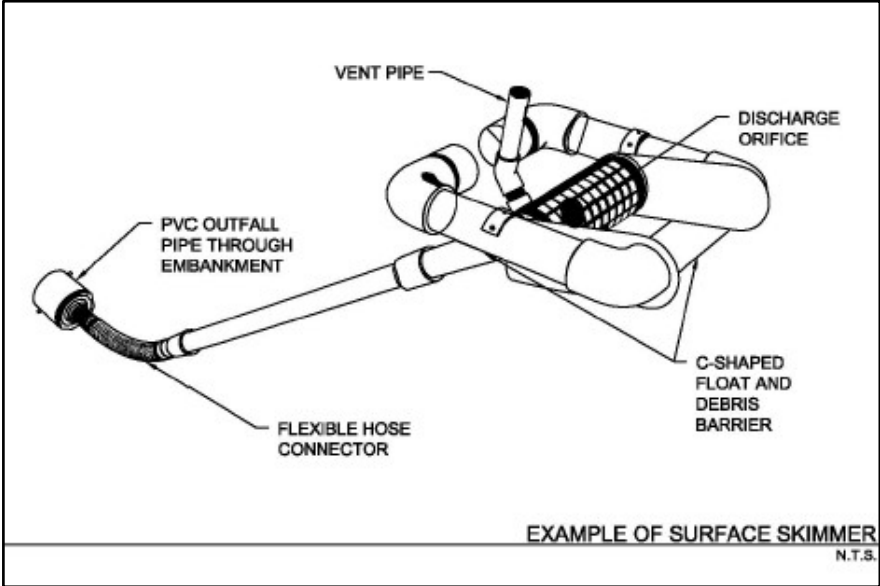
Description of Area	Runoff Coefficients (C)
Lawns:	
Sandy soil, flat, 2%	0.10
Sandy soil, average, 2 - 7%	0.15
Sandy soil, steep, > 7%	0.20
Clay soil, flat, 2%	0.17
Clay soil, average, 2 - 7%	0.22
Clay soil, steep, > 7%	0.35
Agricultural	0.30
Forest	0.15
Streams, Lakes, Water Surfaces	1.00
Business:	
Downtown areas	0.95
Neighborhood areas	0.70
Residential:	
Single Family (1/8 acre lots)	0.65
Single Family (1/4 acre lots)	0.60
Single Family (1/2 acre lots)	0.55
Single Family (1+ acre lots)	0.45
Multi-Family Units, (Light)	0.65
Multi-Family, (Heavy)	0.85
Commercial/Industrial:	
Light areas	0.70
Heavy areas	0.80
Parks, cemeteries	0.25
Playgrounds	0.35
Railroad yard areas	0.40
Streets:	
Asphalt and Concrete	0.95
Brick	0.85
Drives, walks, and roofs	0.95
Gravel areas	0.50
Graded or no plant cover:	
Sandy soil, flat, 0 - 5%	0.30
Sandy soil, flat, 5 - 10%	0.40
Clayey soil, flat, 0 - 5%	0.50
Clayey soil, average, 5 - 10%	0.60

iSWM is not perfect...

Unless infeasible, when discharging from sedimentation basins and impoundments, the permittee shall utilize outlet structures that withdraw water from the surface.



Skimmers



Skimmer sizing and calculations

The primary outlet shall have a minimum design dewatering time of 36 hours for the temporary control design storm (2-year, 24-hour).

 **CALCULATE FAIRCLOTH SKIMMER® SIZE & PRINT DETAIL DRAWING**

Use the following calculator to create a detail drawing in PDF format. You can then print or save the PDF document and easily add it to your plan set. **Note:** You can calculate multiple skimmer basins with this tool! — simply click “Add Row” to add a basin to the detail.

Project Name

Type of Basin

☒ With outlet structure

☐ With embankment

Basin Name	Required Basin volume in cubic feet ?	Days to Drain ?	
		1	ADD ROW

SUBMIT

Alternative Minimum?

TXR150000 Part III, Section F.2.(c).i.(A).(2):

“Where rainfall data is not available, or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.”

iSWMTM Technical Manual										Hydrology
Table 5.15 AMS-based precipitation frequency estimates for Tarrant County (inches)										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.405	0.439	0.572	0.673	0.807	0.909	1.012	1.117	1.261	1.371
10-min	0.649	0.704	0.919	1.081	1.297	1.462	1.627	1.791	2.008	2.171
15-min	0.807	0.875	1.137	1.336	1.601	1.801	2.004	2.212	2.493	2.711
30-min	1.117	1.210	1.570	1.842	2.203	2.475	2.752	3.041	3.436	3.746
60-min	1.449	1.572	2.047	2.408	2.888	3.248	3.619	4.011	4.553	4.983
2-hr	1.773	1.935	2.555	3.031	3.671	4.159	4.669	5.215	5.977	6.588
3-hr	1.966	2.154	2.871	3.423	4.173	4.752	5.361	6.013	6.930	7.668
6-hr	2.323	2.558	3.446	4.135	5.077	5.810	6.586	7.419	8.591	9.536
12-hr	2.733	3.016	4.089	4.919	6.051	6.928	7.852	8.840	10.224	11.336
24-hr	3.191	3.522	4.776	5.747	7.069	8.096	9.175	10.321	11.921	13.201
48-hr	3.692	4.063	5.447	6.532	8.033	9.225	10.488	11.816	13.663	15.136
3-day	4.018	4.417	5.901	7.067	8.686	9.976	11.348	12.792	14.805	16.411
4-day	4.258	4.680	6.252	7.488	9.204	10.573	12.030	13.569	15.716	17.433
7-day	4.771	5.249	7.037	8.438	10.375	11.908	13.541	15.281	17.726	19.693
10-day	5.216	5.736	7.688	9.211	11.306	12.950	14.699	16.573	19.213	21.343
20-day	6.739	7.340	9.640	11.404	13.780	15.588	17.492	19.564	22.505	24.891
30-day	8.012	8.684	11.283	13.257	15.883	17.846	19.898	22.138	25.318	27.899
45-day	9.755	10.569	13.712	16.103	19.289	21.690	24.175	26.822	30.508	33.449
60-day	11.294	12.248	15.917	18.720	22.477	25.346	28.296	31.362	35.554	38.840

Welcome to RSWMCC!



Questions?

Julian Holmes
Supervisor of Environmental Quality
City of Mansfield
817-276-4241
Julian.holmes@mansfieldtexas.gov





6. Manual Update Next Steps

- Online form and additional resources for providing feedback
- Discuss workshop agenda and date





6. Manual Updates Requests Summary

Manual Overhaul vs. Targeted Updates

- Staff discussed options internally
- Consultant estimates for a complete manual overhaul exceeds budget
- A targeted revision process is more realistic and manageable





6. Manual Updates Requests Summary

Key Themes Identified

- New user training and resources
- Manual usability
- BMP updates
- Construction and maintenance guidance
- Communication and consistency



6. Manual Updates Requests Summary

Moving from Feedback to Action

More detail is needed to determine how to revise the manual

Examples:

Outdated BMP Options: Update the manual with more flexible, modern solutions, such as perforated risers and surface skimmers, to replace outdated or overly restrictive BMPs.

- *Which BMPs are outdated that need to be updated?*

Proprietary BMPs Not Included: Add new, generic proprietary BMPs (e.g., Marley Float) to the manual to increase options.

- *Which Proprietary BMPs would you like to see?*



6. Manual Updates Requests Summary

Moving from Feedback to Action

Examples:

Lack of Updated Information: Update outdated engineering drawings and BMP information throughout the manual.

- *Which engineering drawings are outdated?*

Incorrect or Misleading Information: Correct inaccurate or misleading information (e.g., specific materials) to prevent confusion.

- *Which information needs clarity?*



6. Manual Updates Requests Summary

Structured Revision Process

Using the Construction Standards Manual process as a model:

1. Identify priority manual sections, information, or details
2. Collect comments through an online form
3. Compile and review recommendations
4. Present revisions for approval

Website Updates



Information Items



7. Regional Stormwater Management Coordinating Council Update

- **Contact:** Keeara Brown, E&D Planner III, KBrown@nctcog.org
- RSWMCC FY26-27 approved budget for all programming: \$483,131



8. Integrating Transportation and Stormwater Infrastructure Study Update

- West Study Area Final Plan Draft submitted
- North Study Area Final Plan Draft submitted by year-end
- Updated resources and study findings available at:
www.nctcog.org/tsi

Other Business





9. Upcoming Events, Conferences, and Opportunities

- SW3P Plan Review and Field Inspector Training Courses
(Registration closes October 21)

Link to register:

<https://pci.jotform.com/form/261463998844172>

Plan Reviewers: November 4, 8:30am-12:30pm

Field Inspectors: November 5, 8:30am-12:30pm



9. Upcoming Events, Conferences, and Opportunities

- 2026 Texas MSGP Training- MS4

Link to register: <https://pci.jotform.com/form/262016743743153>

October 19-20, 9:00am- 4:00pm



9. Upcoming Events, Conferences, and Opportunities

- November 16, 2:30-4:30pm- [TWDB Financial Assistance Workshop](#)
- December 2, 2026- [Texas Living Waters Policy Summit: Defining Our Water Future Together](#)



10. Upcoming NCTCOG Meetings

- October 14, 10:30am-12:30pm- [Water Resources Council](#)
- October 29, 11:00am-1:00pm- [Public Education Task Force Meeting](#)
- November 3, 11:00am-1:00pm- [Regional Stormwater Management Coordinating Council Meeting](#)
- November 9, 10:00am-11:30pm- [Pollution Prevention + Illicit Discharge Detection and Elimination Task Force Meeting](#)





11. Upcoming iSWM Agenda Topics and Next iSWM Meeting

- Conflict with Tuesdays and propose moving future iSWM meetings to Wednesdays
- [Next meeting: January 13, 2027, 1:30pm Virtual via Microsoft Teams](#)
- Topics of interest?

12. Roundtable Discussion



“Now, it is your turn.”

Contact & Connect

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