

Integrated Stormwater Management (iSWM) Subcommittee Meeting

Staff Planner: Sydni Ligons

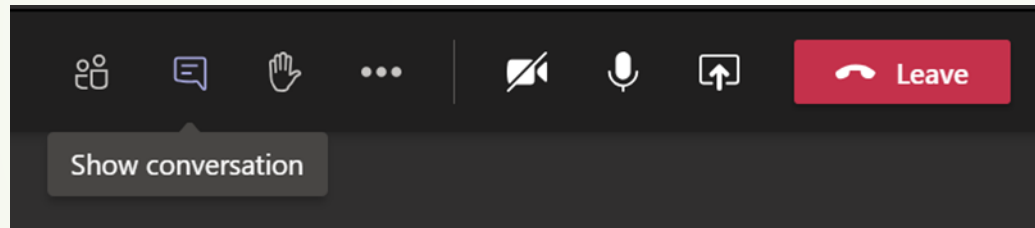
July 14, 2021



North Central Texas
Council of Governments
Environment & Development

WELCOME AND INTRODUCTIONS

- The meeting agenda, presentation and handouts are located on the iSWM Subcommittee webpage - <https://www.nctcog.org/envir/committees/public-works-council/iswm-implementation-subcommittee>
- Please use the chat function to add your name and organization



- Approval of April 23, 2021, [Meeting Summary](#)

TASK 2 – REORGANIZE/RE-EVALUATE SITE DEVELOPMENT CONTROLS: RECOMMENDATIONS

Recommendations

- **Part A**

- Recommended BMPs:
 - Multi-Purpose Detention Areas
 - Organic Filter
 - Green Roof
 - Proprietary Structural Controls
 - Open Conveyance Channel

- **Part B**

- Recommended Action Items:
 - Update vegetation list in the Landscape Technical Manual
 - Table 1.2 Wetland Plants
 - Table 1.4 Commonly used species for bioretention
 - Table 1.6 Common grass species for dry and wet swales and grass channels

TASK 2 – REORGANIZE/RE-EVALUATE SITE DEVELOPMENT CONTROLS

Part A

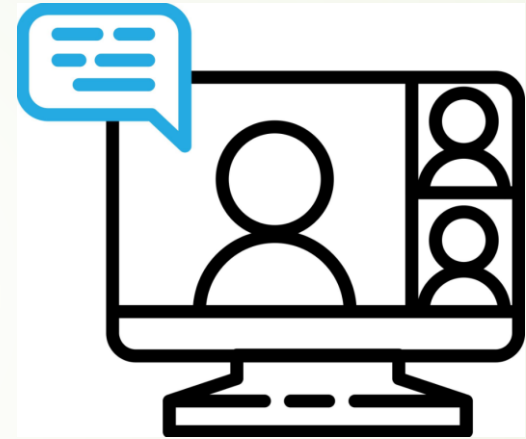
- Remaining BMP Summary Pages
 - Gravity (Oil Grit) Separator
 - Alum Treatment
 - Culverts
 - Inlets
 - Pipe Systems

Part B

- Other feedback considered for implementation:
 - Rework of introduction of manual
 - Addition of new BMPs
 - Addition of the vegetation list
 - Addition of specifications or design check lists
 - Recommendations of public signage and certification/training received

TASK 3 – BMP DESIGN & MAINTENANCE TRAINING

- Plan to host training in September 2021
- Potential topics
 - Recommend Topic: Permeable Pavement design, construction and maintenance
- Other Options:
 - Hydrologic parameterization
 - Modeling/sizing, design and maintenance
 - Treatment trains
 - Common issues that should be incorporated into the design approach



TASK 4 – TECHNICAL MANUAL UPDATES

- Draft of Updates to be available at next Subcommittee Meeting for review.
- Updates are based on feedback received from the Technical Manual Workshop from iSWM Adopters in April 2020.
 - Hydraulic Technical Manual
 - Add guidance for calculations for an on-grade inlet for a parabolic crowned street.
 - Hydrologic Technical Manual
 - Revise wording in Section 1.3.7 Simplified SCS Peak Runoff section to refer to TR 55 for full description.



TASK 5 – GUIDANCE ON FOREBAY DESIGN

- Provide recommendation for additional design guidance for forebays.
- Provide memo to subcommittee of potential improvements that could be implemented to the iSWM program based on research.

TASK 6 – HYDROLOGIC MIMICRY RESEARCH

- Scope – Provide memo to subcommittee summarizing:
 - Research of previous hydrologic mimicry case studies.
 - What innovations and guidelines are other communities implementing in the region?
 - Recommendation of next steps for potential mimicry guidance for iSWM Program.

TASK 7 - TECHNICAL ASSISTANCE FOR CASE STUDIES

NCTCOG will complete two case studies this fiscal year. The following are initial options for case studies.

Why are case studies important? Raise awareness of the program's implementation around the region. Showcases active iSWM design practices in the regions.

Potential Case Studies to be drafted and added to the iSWM website.

- Viridian – Storm Park – Arlington
- UT Dallas – Bioswales
- Denton Hickory Street – Multiple iSWM BMP's - Denton

If you have recommendations for case studies, please submit it to Sydni Ligons at sligons@nctcog.org

TASK 8 – ECONOMIC BENEFITS OF ISWM

Scope

- Review existing data from previous projects for economic benefits of BMPs.
- Research strategies to maximize economic benefits of BMPs.
- Locate recommendations of sites in North Texas region for future triple bottom line analysis.

Options for deliverable for this task

- a. Provide memo as of summary of research; or
- b. Host training/discussion to gather input

DISCUSSION OF OUTCOME NO. 17 - WATER QUALITY

Background: In 2014, the iSWM contractor was tasked with meeting with community members. NCTCOG learned that communities did not like the point system, and that the pass/fail grade was perceived as a barrier to communities becoming certified. The subcommittee determined that the point system would not be used moving forward. It was recommended that the water quality option 1 be revised or replaced.

17	Water Quality Protection				Require integrated site design practices; treat the water quality volume; and/or enact regional water quality programs	Section 1.3, Table 1.3; Section 3.2
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Questions for subcommittee

- Is there a conflict with the text in the iSWM Criteria Manual and how this outcome is evaluated?
- Is clarity needed to address the language on the Tiered Measurement Form for Outcome 17?
- Should the manual be updated to reflect the intent?

Documents to consider

- [Outcome 17 - Criteria manual, Section 1.3 page 4, 3.2 page 18 and, table 1.3 page 6](#)
- [iSWM Implementation Tiered Measurement Form](#)
- [Certified iSWM community's implementation of outcome 17](#)

FUTURE ISWM PROGRAM CONTRACT

The iSWM contract will expire on April 30, 2022. During the current contract, the program has accomplished the following:

- 4 + Education and Training Workshops
- Construction Control Details
- Several guidance memos (Re-evaluate 85th percentile rainfall, Update Rainfall Intensities, Guidance on regional detention program etc.)
- BMP Installation Video
- iSWM Principal Regional Review
- 5-year outreach and implementation start

Question: Would the iSWM subcommittee like to recommend continue supporting for the iSWM program through a contract for engineering services to the Public Works Council?

Proposed:

- 3-year contract (with the options of up to two 1-year extensions) not to exceed \$80,000 per year
- Scope of Work will continue to be determined on a work-order basis through “Task Orders”

FUTURE ISWM PROGRAM CONTRACT

iSWM Promotion

- Website Updates
- Case Studies

Community Engagement

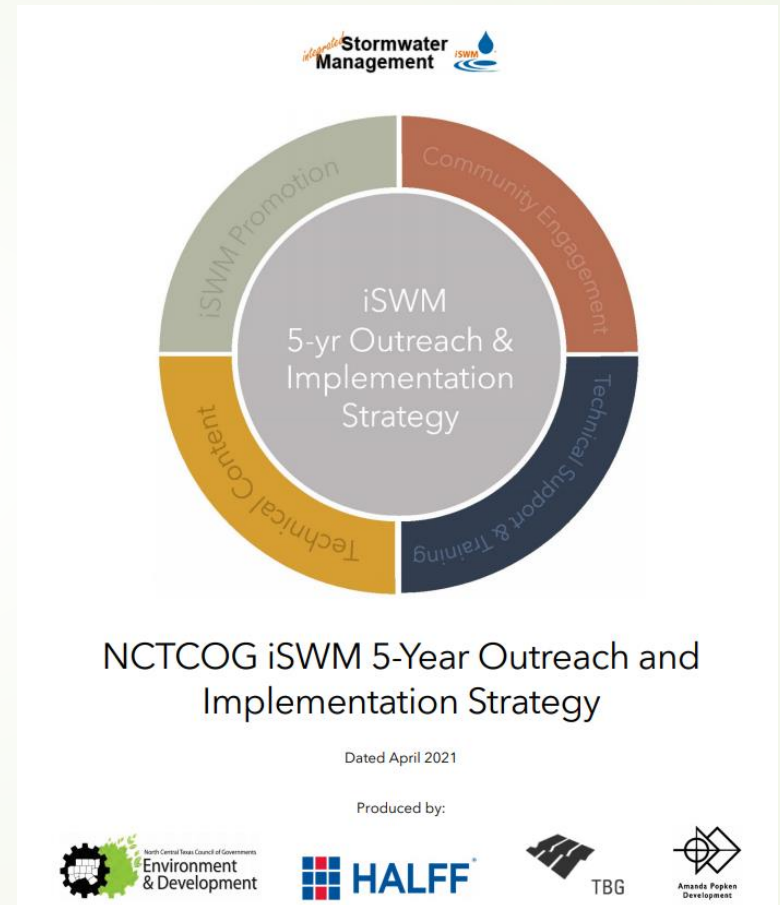
- City Council Outreach & Training
- Developer Outreach
- Education Outreach Plan

Technical Support

- iSWM Implementation Training
- BMP Design and Maintenance Training
- Developer Training

Training Technical Content

- Site Development Controls Technical Manual Updates
- Construction Controls Technical Manual Updates
- Pipe utility crossings BMP guidance.



OTHER ISWM PROGRAM UPDATES

Website updates

- Technical Manual Updates
 - Notice of Revisions – June 2021
 - Site Development Controls – Addition of summary pages and schematics
- Task Order 4 documents can be found on the Other iSWM Related Documents page
 - Guidance on Developing a Regional Detention Program
 - Research of Volumetric Detention and Channel Protection Volume Design Guidance State of Practice
 - Re-evaluation of 85th Percentile Rainfall Requirements
 - 5-year Outreach and Implementation Strategy

Ongoing iSWM Certification Review

- In May 2021, the City of Plano submitted application for Silver iSWM Certification.

PUBLIC WORKS PROGRAM UPDATE

- Sustainable Public Rights-of-Way Subcommittee (SPROW), July 13th 1:30pm
 - SPROW will meet with private utility representatives to write BMPs for the Utility Coordination chapter of the BMP Guidebook.
- Standard Drawings Subcommittee, July 21st 10am
 - The Subcommittee will begin reviewing Division 5000: Wastewater Collection.
- Public Works Council (PWC), August 19th 9:30am
 - The Council will vote on new Council members, the FY21 Work Program, and approval of Division 2000, 4000, 5000, and 6000 of the Public Works Construction Standards.
- Upcoming trainings and event:
 - New Inspector Training, TBD
 - Public Works Workforce Needs, Retention, and Recruitment, TBD
 - Construction Contracts Administration Workshop, July 29th 9am
 - Public Works Roundup, September 2nd 8:30am

For more information on the Public Works program please contact Olivia Kale at okale@nctcog.org or (817) 695-9213.

UPCOMING EVENTS, CONFERENCES AND OPPORTUNITIES

- **SW3P for Plan Reviewers**, July 20, 2021 NCTCOG Offices
 - Link to register - <https://form.jotform.com/211583642067153>
- **SW3P for Field Inspectors**, July 21, 2021, NCTCOG Offices
 - Link to register - <https://form.jotform.com/211583642067153>
- **2021 EPA Region 6 Stormwater Conference**, August 8-12, 2021, New Orleans Louisiana
 - For more information and to register, please visit <https://tamuk-isee.com/wp-content/uploads/2021/03/2021savethedate.pdf>
- [International Erosion Control Association \(IECA\) Texas Regional Conference](#), October 19th – 20th, San Antonio
 - Link to register - <https://form.jotform.com/211583642067153>

ROUNDTABLE DISCUSSION

NOW, IT'S YOUR TURN...

UPCOMING NCTCOG MEETINGS

Next iSWM Meeting: October 14, 2021 at 1:30 p.m.

- Public Works Council Sustainable Public Rights of Way, **July 13, 2021**
- Public Works Council Standard Drawings Subcommittee, **July 21, 2021**
- Regional Stormwater Management Coordinating Council, **August 18, 2021**
- Public Works Council Meeting, **August 19, 2021**

Meeting Information at: <https://www.nctcog.org/envir/committees>

Contact

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<http://iswm.nctcog.org/>



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