

# Flood Management Task Force

February 17, 2023

# Welcome and Introductions

- Thanks for attending!
- Please introduce yourself in the chat box.
- Please mute your line.
- Unmute your line when you would like to speak during question and discussion time.
  - We will also watch the [chat](#) box for questions

# Meeting Summary Approval

- ▶ The link to the [November meeting summary](#) is available in the chat.
- ▶ Please inform Jai-W Hayes-Jackson of any corrections or additions, at [jhayes-jackson@nctcog.org](mailto:jhayes-jackson@nctcog.org).

# Work Program Projects & Activities



# NFIP/CDC Model Consolidation and Extension Efforts

# FY2023 Trinity River Common Vision Work Program

## NFIP/CDC Model Consolidation and Extension Efforts

The USACE funded two ongoing studies related to CDC model consolidation.

- Updating the newly georeferenced CDC model with approved but not yet constructed CDC project geometries from 2017 onward and future flows.
  - USACE and FEMA worked to update their respective models and are sharing this draft of the consolidated NFIP/CDC model to the Trinity FMTF website.
  - Culmination of a collaborative effort to generate a first-ever consolidated NFIP/CDC model.
  - Aligns with CDC manual updates and sharing for FMTF review & feedback.
- Working to generate CDC future flows for the FEMA detailed study on the East Fork Trinity and the Trinity mainstem to ultimately extend the consolidated CDC/NFIP model.
  - Incorporating NCTCOG guidance on future land use data to inform hydrologic modeling. After developing flows, will complete hydraulic model for this area.
  - Anticipate sharing with FMTF for review in 2023.

The USACE set aside Floodplain Management Services (FPMS) funds to complete these scopes and will continue to share information and updates with FMTF members.

# FY2023 Trinity River Common Vision Work Program

## NFIP/CDC Model Consolidation and Extension Efforts

USACE and FEMA worked to update their respective models and are sharing the draft of the consolidated NFIP/CDC model to the FMFT website soon (<https://nctcog.org/envir/committees/trinity-river-common-vision-steering-committee/flood-management-task-force>).

NCTCOG is initially hosting the draft consolidated NFIP/CDC model on the FMFT website for FMFT review in advance of posting to the CDC website, when complete.

- Includes a single consolidated HEC-RAS hydraulic model (.prj) with updated georeferenced NFIP and CDC geometries.

# FY2023 Trinity River Common Vision Work Program

## NFIP/CDC Model Consolidation and Extension Efforts

NFIP geometry notes are as follows:

- Includes constructed CDC project geometries that have gone through the FEMA Letter of Map Change (LOMC) process.
- Represents a FEMA preliminary model that that is NOT YET a regulatory/Effective model and as such is subject to change without notice.
- The end user bears the responsibility for ensuring use of the most appropriate and current model.
- Note that FEMA will require the submittal of the Effective model (with appropriate tie-ins) in addition to the preliminary model for any formal map change requests – until the preliminary model becomes effective.
- Reflects current conditions flows and NOT future (2055) flows.



# FY2023 Trinity River Common Vision Work Program

## NFIP/CDC Model Consolidation and Extension Efforts

CDC geometry notes are as follows:

- Includes approved CDC project geometries (both constructed and not yet constructed).
  - Reflects future (2055) flows.
  - CDC projects approved since 2022 that are not currently reflected in this geometry will be included in future model updates.
- For the East Fork and Mainstem model extension, only the NFIP portion of the model is currently being shared.
  - Additional guidance will be provided in the forthcoming 5<sup>th</sup> Edition of the CDC manual.

**Thank you to our partners for this collaborative effort to generate a first-ever consolidated NFIP/CDC model.**

# Contact

**Matt Lepinski, P.E.**

Water Resources Branch

U.S. Army Corps of Engineers

[Matthew.T.Lepinski@usace.army.mil](mailto:Matthew.T.Lepinski@usace.army.mil)

817.886.1683

# CDC Manual Update to the 5th Edition

# FY2021 Trinity River Common Vision Work Program

## CDC Manual Update to the 5<sup>th</sup> Edition

The NFIP-CDC Model Consolidation Team had a meeting on December 1, 2022, and February 13, 2023, to continue work on the 5<sup>th</sup> edition update.

- Completed final drafts of all sections and forms.
- Completing final QC of the Appendices and the FAQs

### Next Steps

- Compile those into a draft of entire manual document
- Provide the complete revised manual to FMTF for review
- Address any comments and finalize the updated manual

The Team will meet as needed to discuss final draft of manual and comments received

Final Goal to have revised CDC Manual completed at same time new consolidated NFIP-CDC Model is ready to be implemented

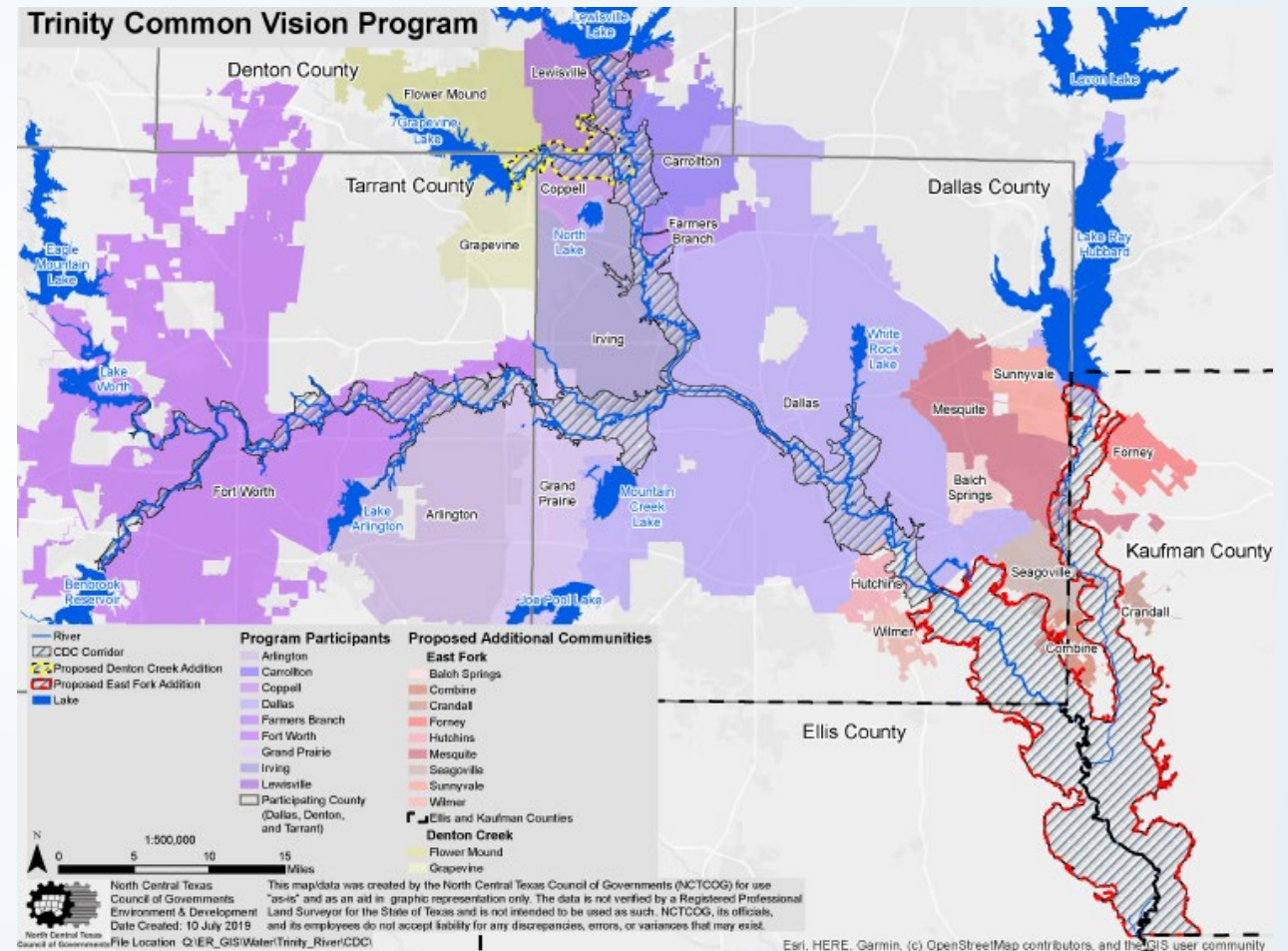


# East Fork/Denton Creek Update

# FY2023 Trinity River Common Vision Work Program

## East Fork/Denton Creek Update

- NCTCOG staff is sending out emails to proposed communities to encourage them to join.
- NCTCOG will continue to advertise the benefits of the COMMON VISION Program with the Consolidated NFIP-CDC Model





# OneRain Regional Flood Warning Software Program

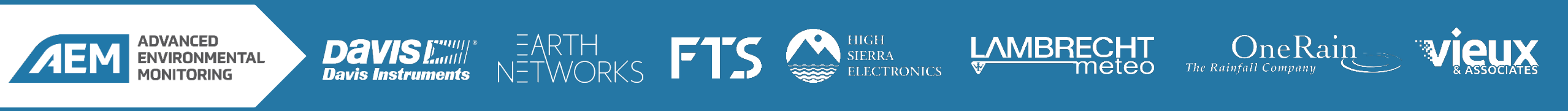


# Regional Flood Early-Warning Software

[www.flooddatantx.com](http://www.flooddatantx.com)

North Texas Share

[https://northtexasshare.org/SHARE\\_partners/onerain-flood-management/](https://northtexasshare.org/SHARE_partners/onerain-flood-management/)





# Overview

Cooperative Contract of North Texas Share created in August 2018 with the NCTCOG Environment and Development Dept & member communities of the Flood Management Task Force.

- Communities can set pre-defined alerts
- Visualize gauge readings to better prepare for storms
- Allows any community to join regardless of system size
- Flexible tiers including ancillary services



Stage Level Map

# Participating Communities

- City of Arlington
- City of McKinney
- City of Frisco
- TRWD
- DCURD
- City of Grand Prairie
- Town of Highland Park



Rainfall Map

- City of Fort Worth feeds data to website

# Flood Data North Texas

Flood Data NTX

Home About Features Contact How to Join

Community Login

## Flood Data North Texas

The Regional Flood Warning Software Platform provides a comprehensive look at rainfall and water levels across the North Texas region through a connected network of flood gauges made possible through partnerships with local municipalities and agencies.

**Rainfall Map**  
View live data of rainfall across the region.  
[View Maps](#)

**Current Stage Level Map**  
View live data of the current stage level of flood gauges across North Texas.  
[View Maps](#)

**How to Join**  
Communities of North Texas can join the program for a cost savings on flood warning hardware and software. Communities can view and integrate all other communities' data for a comprehensive look at the region as a whole.  
[Join North Texas](#)

**Disclaimer:** FloodDataNTX is an interactive mapping application developed by the North Central Texas Council of Governments through a cooperative contract with Chertam, Inc. The data and information presented may not be presented in real-time and should not be assumed to be exact conditions in the indicated area on the map. Further FloodDataNTX nor the sponsoring agencies including the North Central Texas Council of Governments and member municipalities participating in this program assume any legal liability or responsibility, or make any guarantees or warranties as to the accuracy, completeness, or suitability of the information for any specific purpose. The public is urged to closely monitor information provided by local emergency management organizations during emergency situations.

North Central Texas Council of Governments  
Environment & Development

[www.flooddatantx.com](http://www.flooddatantx.com)

# Shared Tier > Entry & Intermediate

SHARED TIER

### Entry Tier

Single, view-only client in a shared resource for agencies **without** a gauging network

- ✓ **Agency-branded website** to direct the public
- ✓ **Visualize and download** regional data as CSV, Excel, or tab formats
- ✓ **Alarm** on shared regional rain, stream level, and air temperature gauges
- ✓ Easily edit **dashboards** or the **homepage** to deliver important information
- ✓ Understand an **approaching storm intensity** with gauge-adjusted radar rainfall
- ✓ Save **bookmarks** for quick links to graphs and webpages

X No agency-owned gauging networks

X No advanced reporting

X No API access

X No advanced options

\$1,579 (5% off)

\$1,500/year

North Texas

SHARE

Your Public Sector Solutions Center

### Intermediate Tier

Single client in a shared resource for agencies with a gauging network with less than 100 sensors

Everything in Entry tier, plus:

- ✓ Collect, visualize, store, and alarm on **agency-owned gauging network data**
- ✓ Access to **regional gauges** to visualize and alarm
- ✓ **Download** regional and local gauge data as CSV, Excel, or tab formats
- ✓ Send data to **NWS**

Add-on: Contrail API for third-party integration.....\$500/year

X No advanced options

X No advanced reporting

X No two-way control

\$4,684 (5% off)

\$4,450/year

OneRain

The Rainfall Company

AEM

ADVANCED ENVIRONMENTAL MONITORING

Proprietary and Company Confidential Information

20



# Dedicated Tier > Advanced 1 & Advanced 2

DEDICATED TIER	
<b>Advanced Tier 1</b> <i>Dedicated resource for agencies with a gauging network <b>with under 100 sensors</b></i>	<b>Advanced Tier 2</b> <i>Dedicated resource for agencies with a gauging network <b>with unlimited number of sensors</b></i>
<ul style="list-style-type: none"><li>✓ Dedicated cloud resource for maximum performance, flexibility, and resiliency</li><li>✓ Collect, visualize, store, and alarm on <b>agency-owned gauging network data</b></li><li>✓ Access to <b>regional gauges</b> to visualize and alarm</li><li>✓ <b>Download</b> regional and local gauge data as CSV, Excel, or tab formats</li><li>✓ <b>Agency-branded website</b> to direct the public</li><li>✓ <b>API</b> access for integration into third-party websites</li><li>✓ Send data to <b>NWS</b></li><li>✓ <b>Advanced reporting</b> for network maintenance and full data download</li><li>✓ <b>Two-way control</b> module to remotely activate barrier gates or lights</li><li>✓ Collect <b>additional data sources</b> via generic data agent</li><li>✓ <b>Configure</b> the software to meet agency's needs</li><li>X No locally-hosted instance</li></ul>	<ul style="list-style-type: none"><li>✓ Dedicated cloud resource for maximum performance, flexibility, and resiliency</li><li>✓ Collect, visualize, store, and alarm on <b>agency-owned gauging network data</b></li><li>✓ Access to <b>regional gauges</b> to visualize and alarm</li><li>✓ <b>Download</b> regional and local gauge data as CSV, Excel, or tab formats</li><li>✓ <b>Agency-branded website</b> to direct the public</li><li>✓ <b>API</b> access for integration into third-party websites</li><li>✓ Send data to <b>NWS</b></li><li>✓ <b>Advanced reporting</b> for network maintenance and full data download</li><li>✓ <b>Two-way control</b> module to remotely activate barrier gates or lights</li><li>✓ Collect <b>additional data sources</b> via generic data agent</li><li>✓ <b>Configure</b> the software to meet agency's needs</li><li>X No locally-hosted instance</li></ul>
<p><b>Under 100 sensors</b> \$7,000 (5% off) <b>\$6,650/year</b></p> <p><b>North Texas SHARE</b> Your Public Sector Solutions Center</p>	<p><b>Unlimited sensors</b> \$12,000 (5% off) <b>\$11,400/year</b></p> <p><b>OneRain</b> The Rainfall Company</p>

# Mission Critical Tier > Redundancy & High Redundancy

MISSION CRITICAL TIER

Redundancy Tier

Dedicated cloud resource and **local instance** for agencies with mission critical need

- ✓ Dedicated **cloud resource** and **local instance** for maximum flexibility, resiliency, and redundancy
- ✓ Ideal for agencies that need to view data during power outage or internet failure
- ✓ Collect, visualize, store, and alarm on **agency-owned gauging network data**
- ✓ Access to **regional gauges** to visualize and alarm
- ✓ **Download** regional and local gauge data as CSV, Excel, or tab formats
- ✓ **Agency-branded website** to direct the public
- ✓ **API** access for integration into third-party websites
- ✓ Send data to **NWS**
- ✓ **Advanced reporting** for network maintenance and full data download
- ✓ **Two-way control** module to remotely activate barrier gates or lights
- ✓ Collect **additional data sources** via generic data agent
- ✓ **Configure** the software to meet agency's needs

Year 1

\$32,000 (5% off)

\$30,400

Year 2 forward

\$17,000 (5% off)

\$16,150/year

North Texas

SHARE

Your Public Sector Solutions Center

\*Agencies with existing Contrail services will be onboarded with year 2 price

High Redundancy Tier

Two dedicated cloud resource and **local instance** for agencies with mission critical need

- ✓ **Two cloud resources** are run in **separate data centers**, as well as a **local instance** for ultimate flexibility, resiliency, and redundancy
- ✓ Ideal for agencies that need to view data during power outage or internet failure
- ✓ Collect, visualize, store, and alarm on **agency-owned gauging network data**
- ✓ Access to **regional gauges** to visualize and alarm
- ✓ **Download** regional and local gauge data as CSV, Excel, or tab formats
- ✓ **Agency-branded website** to direct the public
- ✓ **API** access for integration into third-party websites
- ✓ Send data to **NWS**
- ✓ **Advanced reporting** for network maintenance and full data download
- ✓ **Two-way control** module to remotely activate barrier gates or lights
- ✓ Collect **additional data sources** via generic data agent
- ✓ **Configure** the software to meet agency's needs

Year 1

\$44,000 (5% off)

\$41,800

Year 2 forward

\$29,000 (5% off)

\$27,550/year

OneRain

The Rainfall Company



# Ancillary Services

ANCILLARY SERVICES

One-time Services

Required

☐ Implementation Services: Client Setup and Configuration.....\$1,500

Pick One:

☐ Learning Services: Initial Onboarding Training (4 hr WebEx).....\$1,015

☐ Learning Services: Initial Onboarding Training (Onsite 2-day).....\$2,500

Optional

☐ Implementation Services: OneRain Custom Serial to IP Kit.....\$1,000

☐ Technical Services: Historical Data Load.....OneRain to quote

☐ Technical Services: Custom Data Feed .....OneRain to quote

Contrail Field Decoder

*Troubleshoot gauge sites before driving away—receive and decode ALERT and ALERT2™ radio signals directly onto your laptop. Verify that transmitter and configuration is correct before leaving a site.*

✓ Simultaneous decoding multiple frequencies and protocols

✓ See the decoded message content. You can verify the Source Address, Sensor Configurations, Transmitted Data Types and Values

✓ Display standard P, N, C, and A messages per the ALERT2 specification

✓ Built-in decoder tool on the display allows you to covert and P,N,C or A message into its decoder components

✓ Free software updates for one year included with your purchase of Contrail Field Decoder software

✓ Message creation and transmission for two-year testing of ALERT and ALERT2 field components

Annual Recurring\$250

—— (5% off)

**\$237.50/license**

North Texas

**SHARE**

Your Public Sector Solutions Center

OneRain

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AEM

ADVANCED  
ENVIRONMENTAL  
MONITORING

Proprietary and Company Confidential Information

23

# Summary

Features:	
View sensor data	✓
Display & view alerts	✓
Create & modify station parameters	✓
View station health data	✓
Access to regional gauge data	✓
Send data to NWS	✓
Agency branded web site	✓
Configure to meet agency needs	✓



# Other Related Projects & Activities

# Other Program Related Efforts

## North Texas Floodplain Administrators/CRS Users Group

- Next Community Rating System Users Group Meeting
  - February 24, 2023, 9:30 – 11:30 a.m. at NCTCOG offices
  - [Click Here](#) for an agenda and to RSVP
- For questions about the CRS Users Group, or to suggest future meeting topics, please contact Erin Blackman at [Eblackman@nctcog.org](mailto:Eblackman@nctcog.org) or (817) 608-2360

Keep up with NCTCOG E&D meetings and events here:  
<https://nctcog.org/envir/events>

# Other Program Related Efforts

## Trinity River National Water Trail Task Force



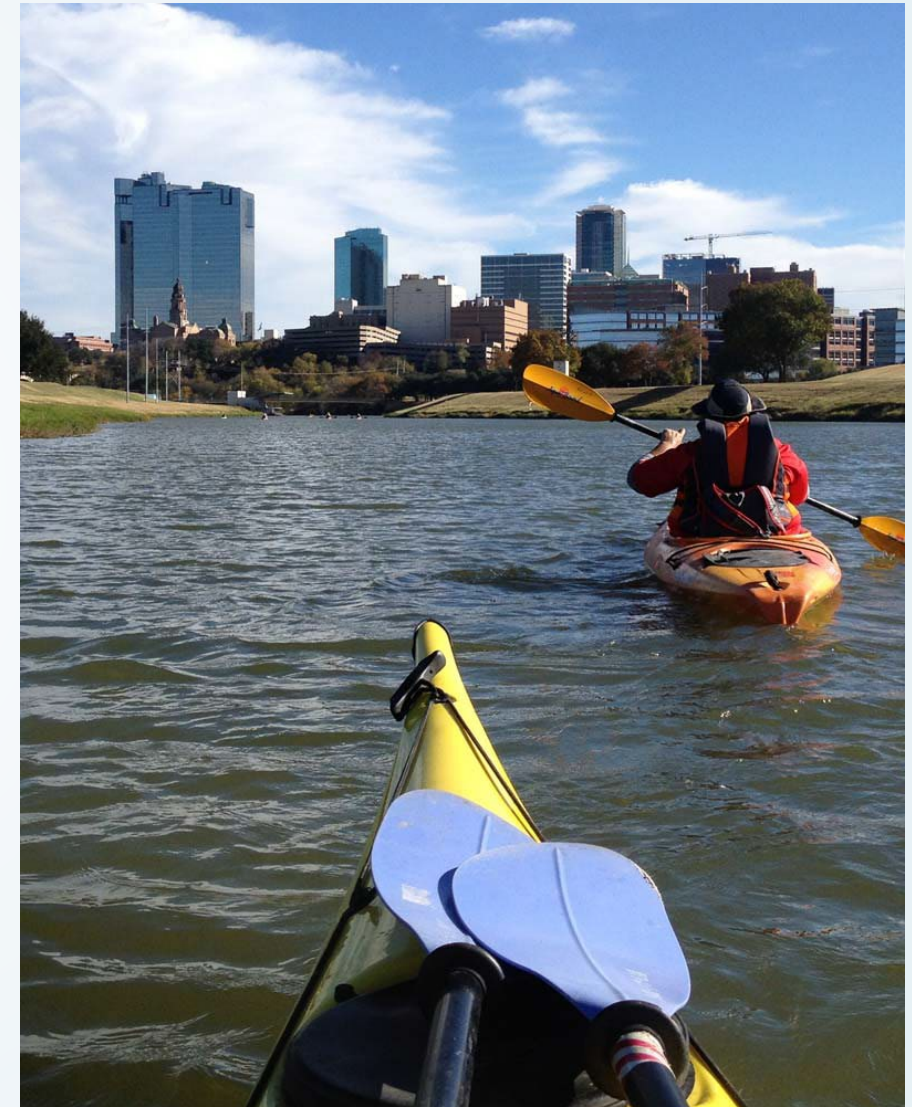
**The Task Force met on February 14, 2023.**

- ▶ Lewisville Lake Paddling Trail Update – City of Denton
- ▶ Trinity River National Water Trail Master Plan – NCTCOG
- ▶ Trinity River National Water Trail Master Plan – Trinity Coalition

[View meeting materials here.](#)

**The next Task Force meeting is planned for May 2023.**

- ▶ For more information, please contact Erin Blackman at [Eblackman@nctcog.org](mailto:Eblackman@nctcog.org) or (817) 608-2360.



**Task Force Website:** <https://nctcog.org/envir/committees/trinity-river-national-water-trail-task-force>



# Other Program Related Efforts

## Efforts Toward Integrated Transportation & Stormwater Planning

### What is the TSI project?

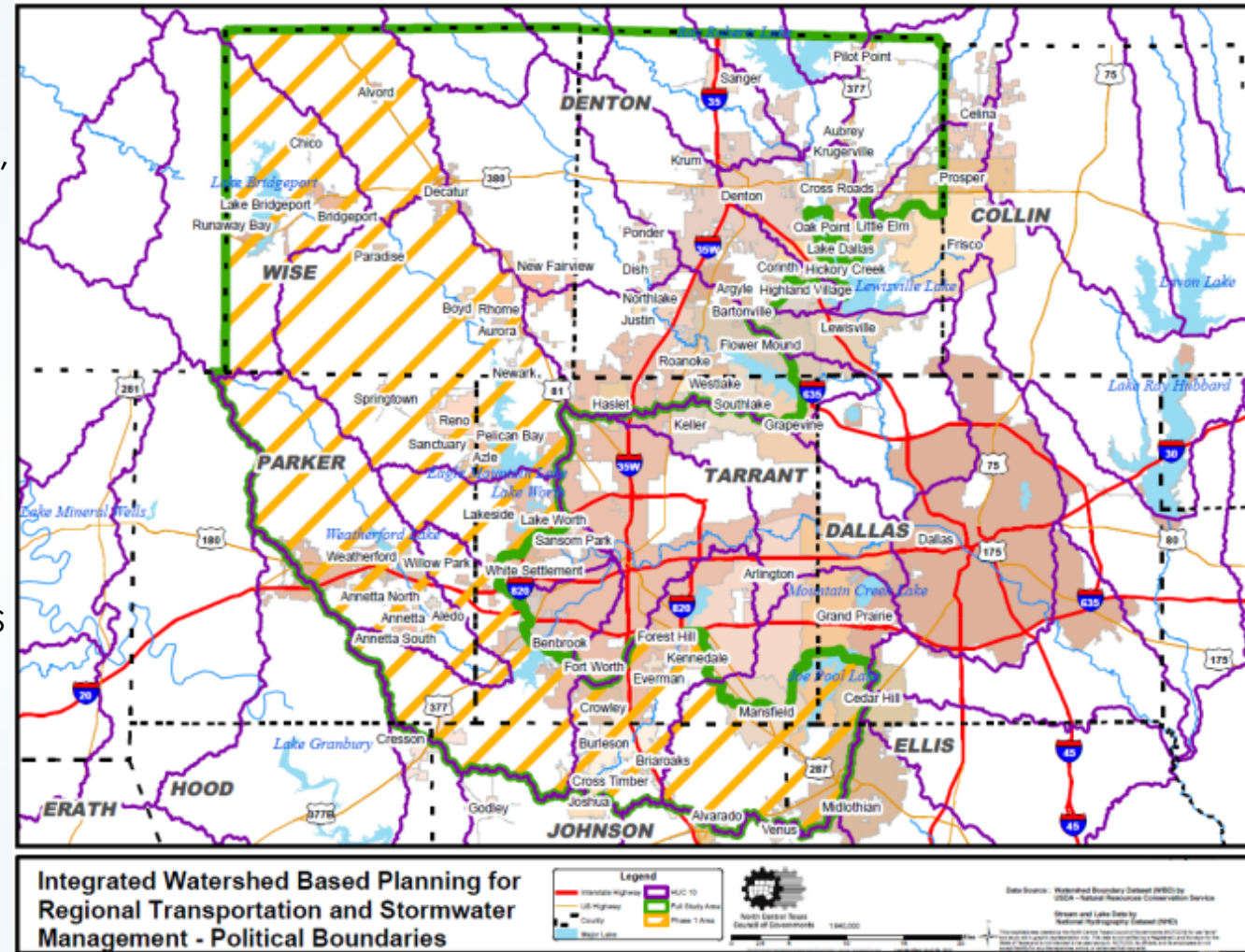
- Integration of regional stormwater management, urban development, transportation, and environmental planning: a collaborative effort with regional Transportation planners
- Proactive Prevention vs. Response

### Project Updates

- Technical Advisory Group Meeting tentatively scheduled for March 6.
- Planning subarea community outreach meetings tentatively for April 2023
- Form steering committee.

### Project Website:

<https://www.nctcog.org/envir/watershed-management/upper-trinity-river-transportation-and-stormwater>



Phase One Project Area hatched in yellow - TWDB Commitment No. G1001314, North Central Texas COG Grant Agreement coverage area (remaining balance of Full Study Area to be undertaken with alternate funding sources/TxGLO provided to USACE)



# Other Program Related Efforts

## Cooperating Technical Partnership (CTP) Program

### FY20 Flood Risk Mapping Projects

- **Catherine Branch (Denton County) – 67% Complete**
  - Hydrologic and Hydraulic analysis QA/QC underway. Preliminary mapping is in progress.

### FY21 Flood Risk Mapping Projects

- **Hog Branch (Denton County) –36% Complete**
  - Terrain Data Capture and draft TSDN are underway.
- **East Fork (Lowry Crossing and McKinney) –28% Complete**
  - Terrain Data Capture and draft TSDN are underway.
- **Upper West Fork Discovery – 43% Complete**
  - Hosted Discovery Meeting January 17, 2023. Continue work on draft Discovery Report and figures



# Other Program Related Efforts

## integrated Stormwater Management (iSWM)

### Integrated Stormwater Management (iSWM) Subcommittee

- ▶ The iSWM program issued an RFSQ for technical consultant services in October 2022. The Evaluation Committee scored responses and selected Halff Associates, Inc. as the technical consultant. This item is pending approval from the NCTCOG Executive Board, which is set to meet February 23, 2023.
- ▶ The iSWM FY23 Work Program Tasks have been posted online.
  - ▶ iSWM Manual Revisions
- ▶ Next Meeting: April 12, 2023, at 1:30 pm via Microsoft Teams. More information available online.

# Other Program Related Efforts

## integrated Stormwater Management (iSWM)

- ▶ EWRI LID Conference, August 2023, in Oklahoma City, OK
  - ▶ NCTCOG & Halff Associates, Inc. abstract on iSWM has been accepted for presentation
- ▶ StormCon, August 2023, in Dallas, TX
  - ▶ NCTCOG, Halff Associates, Inc., & City of Dallas have submitted an abstract to present on the iSWM Program
- ▶ For more information on iSWM, please contact Casey Cannon at (817) 608-2323 or [ccannon@nctcog.org](mailto:ccannon@nctcog.org).



# Corridor Development Certificate Applications

Progress Since Last FMTF Meeting (as of 2/10/23): Currently making updates to the website.

## New CDC Applications

- LEW 081522-1
- DAL 111020-1

## Final Action Forms

- FW 091322-1

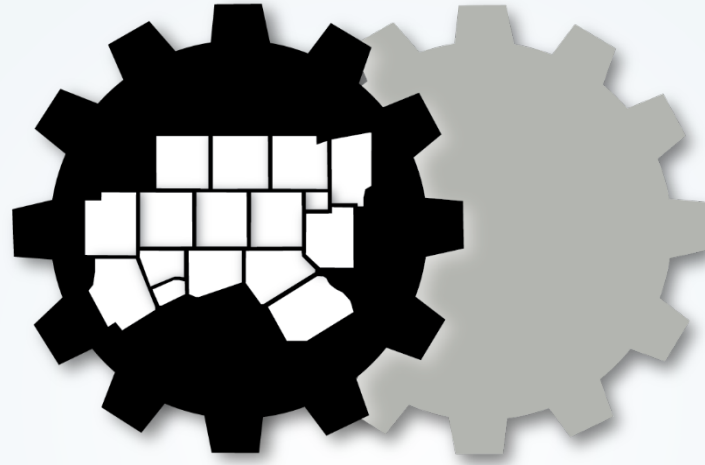
## Technical Review Under Process

- GP 061422-1
- GP 092922-1
- LEW 081522-1
- DAL 111020-1

## Exemptions

- ARL 103122-01
- GP-20221014-1
- ARL 092622-01

During the Roundtable, please share any new CDC applications you anticipate being submitted soon.



# ROUNDTABLE

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# CLIDE

Celebrating Leadership In Development Excellence  
*Awards 2023*

Applications accepted February 1– March 1, 2023

[www.developmentexcellence.com](http://www.developmentexcellence.com)



# Next FMTF Meeting Date

**Friday, May 19, 2022**

9:30 a.m.

Meeting Format is TBD.

# Contact

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# Connect



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youtube.com/user/nctcoged



EandD@nctcog.org



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