# Flood Management Task Force

November 19, 2021



North Central Texas Council of Governments Environment & Development

## **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 <u>August meeting summary</u> is available in the chat.
- Please inform Breanne Johnson of any corrections or additions, at bjohnson@nctcog.org.



### FY2022 Trinity River Common Vision Work Program NFIP/CDC Model Consolidation Team

#### 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.
- Creating the CDC future flows for the FEMA detailed study on the East Fork Trinity and the Trinity mainstem to extend the consolidated model.

The USACE set aside \$485,000 from the Floodplain Management Services (FPMS) fund to complete these scopes. Internal coordination at the USACE is occurring and additional information will be shared with external partners as they become available.



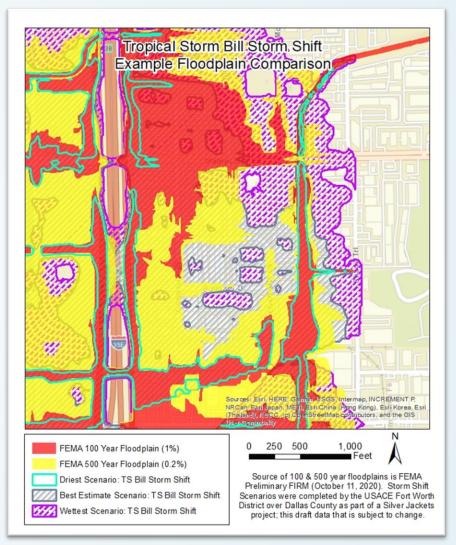
### FY2022 Trinity River Common Vision Work Program Upper Trinity Storm Shift Silver Jackets Study Update

#### Summary:

- \$100K Silver Jackets Project to shift storms that have occurred in/around North Texas and demonstrate their resulting floodplains and impacts if they had occurred in Dallas County
- Silver Jackets application identified NCTCOG, FEMA Region 6, Dallas County, and Texas General Land Office as partners & coordinating with additional stakeholders and partners
- Partnership and community collaboration is essential
  - To provide additional updates at December or January stakeholder meeting

#### Future:

- Anticipate completing study and sharing results in early 2022.
- Texas Storm Study: USACE effort that will provide a list of storms (based on region) that can be used in storm shifting and to inform other projects
- Potential integration with planning & visualization tools such as CHARM (Community Health And Resource Management)
- To complete additional storm shifting studies (San Marcos), continue coordination, integrate with hydrology studies, and possible InFRM product
- Transportation and Stormwater Integration (TSI) project





## Contact

Matt Lepinski, P.E. Water Resources Branch U.S. Army Corps of Engineers <u>Matthew.T.Lepinski@usace.army.mil</u> 817.886.1683

#### Jodie Foster

Silver Jackets Coordinator U.S. Army Corps of Engineers Jodie.R.Foster@usace.army.mil 817.886.1679



- The NFIP-CDC Model Consolidation Team had meetings on September 17<sup>th</sup>, October 22<sup>nd</sup>, and November 12<sup>th</sup> to continue work on the 5<sup>th</sup> edition update.
  - Section 3: The CDC Process, Section 1: Introduction and Section 2: CDC Regulation & Criteria have been reviewed and revised with the final draft proposed.
  - Section 4: CDC Submittal Requirements and Application forms are in the process of being revised and reviewed
- The Team will meet next on December 17<sup>th</sup> to finish review of Section 4 and forms
- Upcoming meetings will discuss Appendices and additional documents (FAQs)
- Updates will be brought to the FMTF throughout the process and your feedback will be requested.



#### **Current Manual**

Chapter 1 General Information

Chapter 2 CDC Common

Permit Criteria

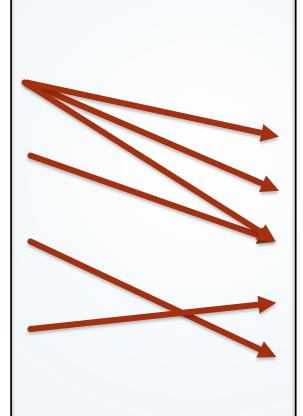
Chapter 3 CDC Application

Requirements

Chapter 4 The CDC Process

Appendices

North Central Texas Council of Governments Environment & Development



#### **Revised Manual**

Summary of Changes			
Glossary			
Section 1 Introduction			
Section 2 CDC Regulation and Criteria			
Section 3 The CDC Process			
Section 4 CDC Submittal Requirements			
Appendices			



- Main Updates and Revisions included in the new manual
  - Updating the CDC Process to include the NFIP-CDC Consolidated Model.
  - Inclusion of new Trinity River CDC website
  - CDC will be valid for two years instead of current five years and one year extensions given instead of three years
  - CDC Cost Recovery Fee renamed to CDC Application Fee
  - Addition of Model Maintenance Fee following completion of project



#### For Discussion

- What are the common questions or concerns that come to you from property owners or developers?
- What questions do you have about the process most often?
- What kind of FAQs or additional documents would you like provided?

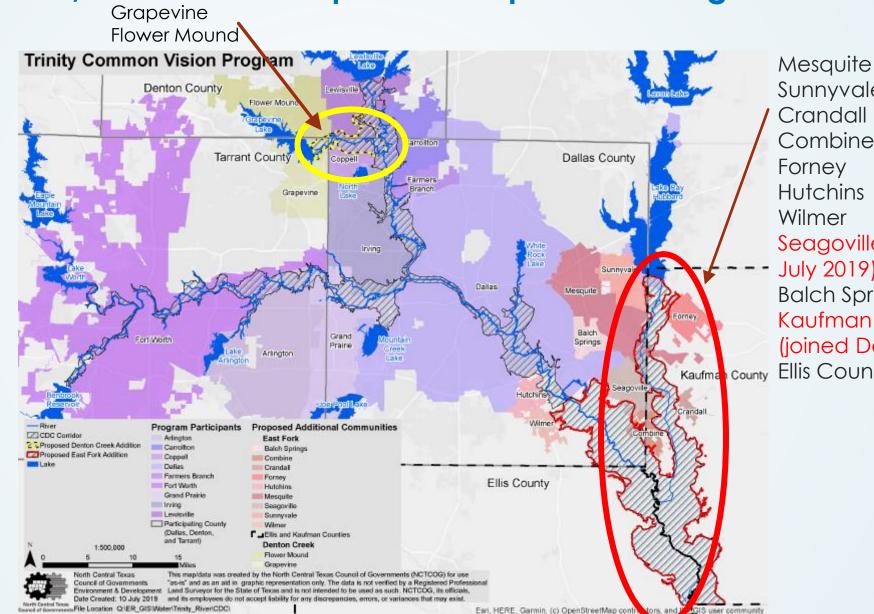


## FY2021 Trinity River Common Vision Work Program

East Fork/Denton Creek Update to Expand the Program

NCTCOG to follow-up with City of Grapevine on interest from September 2021

Still lots of work to do for the East Fork potential participants



Sunnyvale Crandall Combine Forney Hutchins Wilmer Seagoville (joined July 2019) **Balch Springs** Kaufman County (joined Dec. 2019) Ellis County



# Regional Flood Early-Warning Software

www.flooddatantx.com











and the se





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



- 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



#### Shared Tier > Entry & Intermediate

- Agency Branded Web Site
- Visualize & Download Regional Data (as CSV, Excel or Tab Formats)
- Alarm on Shared Regional Rain Stream Level Air Temp Gauges
- Edit Dashboards or Homepage
- Gauge Adjusted Radar Rainfall

Intermediate:

- Collect Visualize Store Alarm Agency-Owned Gauging Data
- Send Data to NWS



#### Dedicated Tier > Advanced 1 & Advanced 2

- Dedicated Cloud Resource
- Collect Visualize Store Alarm Agency-Owned Gauging Data
- Access to Regional Gauges
- Download Regional & Local Data (CSV, Excel, or Tab Formats)
- Agency-Branded Web Site
- API Access for Integrating into 3<sup>rd</sup>-Party Websites
- Send Data to NWS
- Advance Reporting (Network Maintenance & Full Data Download)
- 2-Way Command & Control (High Water Detection System)
- Configurable to Meet Agency Needs

Note: Tier 1 = 100 Sensors | Tier 2 = Unlimited Sensors



### Mission Critical Tier > Redundancy & High Redundancy

In Addition to Advanced Tier 1 or Tier 2

• Dedicated Cloud Resource & Local Instance

OR

• 2 Cloud Resources in Separate Data Centers & Local Instance

• Collect Additional Data Sources (via Generic Data Agent)



- Client Set-up & Configuration
- Training (WebEx or On-site)
- Optional Tech Services (Historical Data Load, Custom Data Feed)
- Contrail Field Decoder (Verify Field Communication & Configuration)



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



## Thank You

Sue Swenor Gulf Region Hydrology Sales Manager

Da

**Davis Instruments** 

EARTH NETWORKS FTS HIGH SIERRA ELECTRONICS OneRain

The Rainfall Company

sue@hsierra.com

512-931-9530



## FY2022 Trinity River Common Vision Steering Committee Meeting

- The Trinity Common Vision Steering Committee met on September 9th, 2021.
  - Meeting summary and recording are <u>available online</u>.
- Approved the <u>FY22 Work Program</u> as recommended by the FMTF
- Discussions on updated Cost Shares for FY23 to continue over this fiscal year.
  - Steering Committee may vote to approve a Cost Share increase at next annual meeting, so please set aside budget for the updated cost shares during your upcoming budget processes (some of our members start this process in February). As a reminder, these have not changed since 2001.
- Steering Committee roster was updated prior to the meeting thank you for that assistance
- We may need to organize a special off-cycle Steering Committee vote to approve the update to the 5<sup>th</sup> Edition CDC Manual when the updates are complete and recommended for approval by this task force.

North Central Texas Council of Governments

## FY2022 Trinity River Common Vision Steering Committee

#### Updated FY2022 Steering Committee Roster

Arlington Carrollton Coppell Dallas Dallas County **Denton County** Farmers Branch Fort Worth Grand Prairie Irving Kaufman County Lewisville Seagoville Tarrant County Tarrant Regional Water District Trinity River Authority

Jim Ross, Mayor Kevin Falconer, Mayor Wes Mays, Mayor Cara Mendelsohn, Councilmember John Wiley Price, Commissioner Bobbie Mitchell, Commissioner Robert Dye, Mayor Dr. Jared Williams, Councilmember Jorja Clemson, Councilmember Rick Stopfer, Mayor Ken Cates, Commissioner TJ Gilmore, Mayor Dennis Childress, Mayor B. Glen Whitley, County Judge Leah King, Board Member Edward Cary Williams III, Board Member



North Central Texas Council of Governments Environment & Development

## FY2022 Trinity River Common Vision Cost Share Invoices

- FY22 Cost Share invoices have now been sent to all Trinity Common Vision member communities.
- These amounts have not changed from the 2001 Cost Share amounts, but....
- If any member is able to contribute additional funds to support the program beyond their invoiced Cost Share amount, please let NCTCOG know!



## **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 Kickoff (Fall)

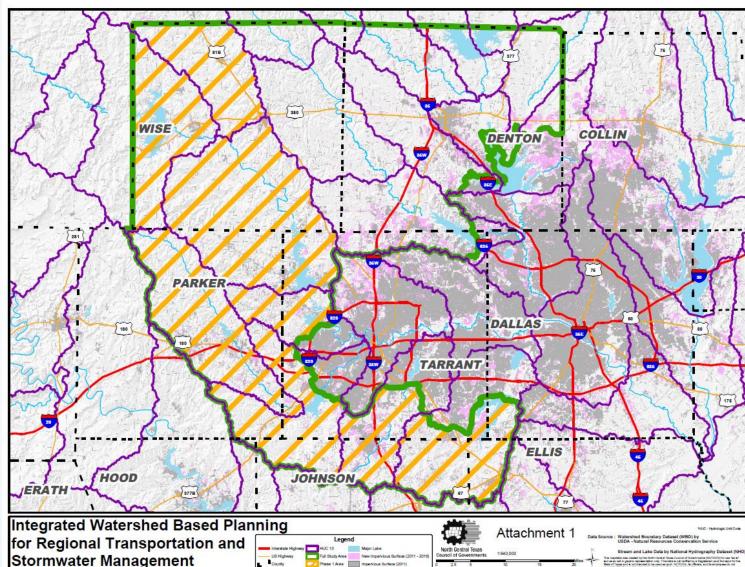
- Initial community survey completed
- Project lead and partner organization meetings ongoing to discuss contracting
- NCTCOG is preparing CHARM for use in planning and engagement activities

#### **Project Website:**

https://www.nctcog.org/envir/watershedmanagement/upper-trinity-rivertransportation-and-stormwater



North Central Texas Council of Governments Environment & Development



## Funding for Integrated Transportation and Stormwater Planning

	Submitted Applications	CONFIRMED FUNDS			ANTICIPATED FUNDING
Funding Agency/ Funding Opportunity Name	USACE ( <b>Various</b> Authorities)	TWDB (Flood Infrastructure Fund)	Regional Transportation Council <b>(Transportation Dollars)</b>	FEMA (Community Outreach and Mitigation Strategies)	General Land Office (CDBG MIT or Other Funding Category)
Requested Funding	\$3.0 Million	\$3.0 Million	\$3.0 Million	\$80,000	\$4.0 Million
Current Status	Submitted to USACE Fort Worth District in 2020.	Approved by TWDB May 27th; working to finalize Grant Agreement process with TWDB by Nov. 30.	STBG Match funding for the TWDB FIF Grant – Agreement in process of finalization.	Award received; Phase 1 engagement is in the early stages.	USACE to receive funding from GLO with NCTCOG as a partner for the North project area.



### Other Program Related Efforts North Texas Floodplain Administrators/CRS Users Group

- CECs should have now been administered by TFMA for the July 29<sup>th</sup> Combined CRS Users Group/Elected Officials Seminar.
  - If you are still missing your CECs from this event, please contact Breanne Johnson at <u>bjohnson@nctcog.org</u>.
- NCTCOG will begin planning the next CRS Users Group meeting to be held in early 2022.
- Please send any topic/speaker ideas for future CRS Users Group meetings to Breanne Johnson.



### Other Program Related Efforts 25<sup>th</sup> Annual FEMA L-273 Four-Day Course

- The Annual L-273 Course for floodplain managers was hosted by FEMA, TWDB, and NCTCOG from November 8-11, 2021, at NCTCOG's offices in Arlington.
  - 30 attendees
- NCTCOG hosted two sessions of the CFM exam on November 12<sup>th</sup>.
  - Thanks to City of Dallas and Halff Associates for proctoring the exams!
  - Exam results will be emailed to participants by TFMA



### Other Program Related Efforts Cooperative Technical Partnership (CTP) Program

- FY18 Flood Risk Projects
  - Complete: Mary's Creek (Parker County) flood risk identification is complete.
- FY19 Flood Risk Projects
  - Harriet Creek (Denton County, 7 miles) Survey is ongoing and hydrologic and hydraulic analysis is underway.
  - Waxahachie Creek (Ellis County, Midlothian, Waxahachie; 19 miles) Survey complete and hydrologic and hydraulic analyses underway.

#### FY20 Flood Risk and Outreach Projects

Catherine Branch (Denton County) – Survey complete and hydrologic and hydraulic 40% Complete analyses underway.

100% Complete

60% Complete

 In Progress: Transportation and Stormwater Integrated Project Engagement – Community survey complete; stakeholder list developed; initial community meetings in early 2022.

#### FY21 Flood Risk Projects

 NCTCOG was awarded FY21 CTP grants for five projects including: Program Management; Hog Branch (Denton County); East Fork (Lowery Crossing and McKinney); Upper West Fork Discovery; COMS Project (CHARM Outreach Workshops)



### **Other Program Related Efforts**

#### integrated Stormwater Management (iSWM)

Integrated Stormwater Management (iSWM) Subcommittee

- Task Order 6 Update: The iSWM Subcommittee approved the following work scope for Task Order #6:
  - Task 2 Reorganize/Re-evaluate Site Development Controls
  - Task 3 BMP Design and Maintenance Training
  - Task 4 Technical Manual Updates
  - Task 5 Guidance on Forebay Design
  - Task 6 Hydrologic Mimicry Research
  - Task 7 Technical Assistance for Case Studies
  - Task 8 Economic Benefits of iSWM Research
- At their July meeting, the subcommittee discussed Outcome 17 (Water Quality) on the iSWM Tiered Implementation Form and created a volunteer group to review and bring forward new language to clarify the documentation. The volunteer group met and requested that Halff Associates, as the consultant, come up with some language for the group to review. The proposed language will be reviewed by the volunteer group prior to bringing it forward to the subcommittee.
- Next Meeting: January 12, 2022 at 1:30 p.m.
- RFPs for iSWM consultant selection for the next 5-years will be initiated in the near future.



### Other Program Related Efforts Trinity River National Water Trail Task Force

#### What is the Task Force?

- Coordinated effort between the Trinity Coalition, NCTCOG, and the communities and organizations situated on the Upper Trinity River to support the Paddling Trail's National Water Trail designation by the National Park Service.
- Goal: to advance recreation, tourism, and economic development along the Trinity River and to maintain and expand the physical features of the Water Trail.
- The next Task Force meeting will be held in January 2022.





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



## NCTCOG Floodplain Management Task Force Region 3 Trinity RFPG Update November 19, 2021

Glenn Clingenpeel Chairman, Region 3 Regional Flood Planning Group



## **Regional Flood Planning**



- Region 3 information
- Recent activities
- Current activities
- Upcoming activities
- Public participation



TASK			
Regional Flood Planning Task No.	Flood Description		
1	Planning Area Description		
2A	Existing Condition Flood Risk Analysis		
2B	Future Condition Flood Risk Analysis		
3A	Evaluation and Recommendations on Floodplain Management Practices		
3B	Flood Mitigation and Floodplain Management Goals		
4A	Flood Mitigation Needs Analysis		
4B	Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigations Projects		

4C	Prepare and Submit Technical Memorandum
5	Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects
6A	Impacts of Regional Flood Plan
6B	Contributions to and Impacts on Water Supply Development and the State Water Plan
7	Flood Response Information and Activities
8	Administrative, Regulatory, and Legislative Recommendations
9	Flood Infrastructure Financing Analysis
10	Public Participation and Plan Adoption



.

### **Recent Activities**

- Added hybrid option for public meetings
- Performed intense data collection effort
- Developed planning area description
- Established region-wide floodplain management standards
- Approved draft goals
- Submitted preferred future (range of) conditions approach to TWDB
- Public participation





## Recommended Floodplain Management Standards

- Participate in the NFIP or adopt equivalent standards
- Regulate development in the FEMA floodplain or other local floodplain designated by local jurisdiction
- Establish higher standards (more stringent than the NFIP) for development or freeboard above the floodplain
- Drainage corridor preservation
- Land use standards to reduce future flood risk
- Compensatory flood storage



### Flood Mitigation and Floodplain Management Goals

- 1. Improve Flood Warning & Public Safety
- 2. Improve Flood Analyses
- 3. Reduce Property Damage and Loss
- 4. Floodplain Preservation
- 5. Flood Infrastructure Improvements
- 6. Expand Flood Education & Outreach
- 7. Expand Funding



These goals guide the selection of FME/P/S (flood risk reduction activities)



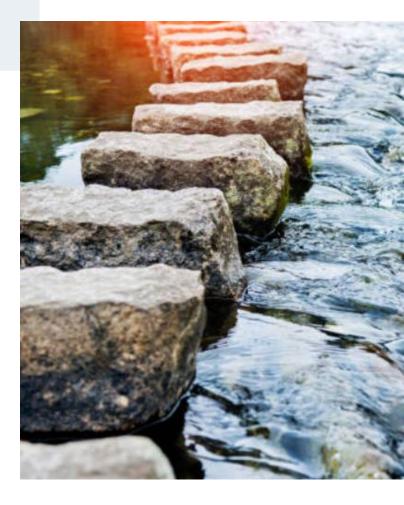
### **Current Activities**

- Approve process to identify potential flood risk reduction activities (FMEs, FMPs, and FMSs)
- Determine current and future flood risks using recent TWDB data
- Determine knowledge gaps in flood risk
- Identify flood mitigation needs
- Developing process to identify flood risk reduction activities (FMEs, FMPs, and FMSs)
- Public participation input on draft chapters



### **Upcoming Activities**

- Approve Technical Memo (due Jan 7, 2022)
- Approve Tech Memo Addendum (due March 7, 2022)
- Determine recommended FMEs, FMSs and FMPs
- Consider impacts on other regional flood and water supply plans
- Incorporate 3 additional tasks into existing scope of work
- Public participation and plan approval
- Draft Regional Flood Plan due August 1, 2022
- Final Regional Flood Plan due January 10, 2023
- Final Amended Regional Flood Plan due July 14, 2023



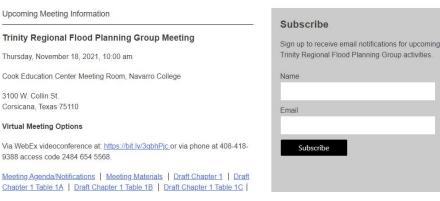


### trinityrfpg.org

The website has valuable resources, including:

- Meeting notifications, agendas, minutes and meeting materials
- Planning documents
  - Draft Chapter 1 Planning Area Description
  - Draft Chapter 3 Floodplain Management Practices and Goals
- A link to the group's Twitter handle: @TrinityTRFPG











## Questions?

Glenn Clingenpeel Chairman, Region 3 Regional Flood Planning Group

clingenpeelg@trinityra.org



## **Corridor Development Certificate Applications**

#### **Progress Since Last FMTF Meeting (8/13):**

- New CDC Applications
  - GP 083121-1 Hunter Ferrell Warehouse Development
  - FB 092121-1 John F Burke Nature Preserve Phase 1 improvements
  - ARL 092221-1 J. Childress South Addition
  - FW 111121-1 Maintenance Building Expansion
  - GP 110421-1 PowerTech
- Under Technical Review
  - IRV 062121-1 2800 Glenwick Lane
- Final Action Forms
  - FW 031921-1 Wyatts Towing Impoundment Facility (Exemption)
  - FW 072821-1 East 1<sup>st</sup> Street Phase 1 (Exemption)
  - FW 091321-1 Fort Worth Biosolids 4-inch Service Line (Exemption)
  - GP 060721-1 Bear Creek Interceptor (Exemption)

**Reminder**: For CDC projects submitted on or after 10/01/20, the \$2,500 Model Maintenance Fee should be paid when the applicant requests the LOMR from the community. Applications submitted as exemptions are not subject to this fee.



nvironment & Developmen

## Roundtable





North Central Texas Council of Governments Environment & Development

## **Next FMTF Meeting Date**

#### Friday, February 25, 2022

#### 9:30 a.m.

### Meeting Format is TBD.

# Add to Calendar: <u>https://www.addevent.com/event/Ae10003463</u>



## Contact

#### **Breanne Johnson**

Environment & Development Planner North Central Texas Council of Governments bjohnson@nctcog.org 817.695.9148

#### **Edith Marvin**

Director of Environment & Development North Central Texas Council of Governments <u>emarvin@nctcog.org</u> 817.695.9211

## Connect

**f** Facebook.com/nctcogenv



- o n
  - nctcogenv
  - youtube.com/user/nctcoged
- EandD@nctcog.org

www nctcog.org/envir

