

# Flood Management Task Force

April 17, 2020



# 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 and Q&A boxes for questions

# Meeting Summary

- The link to the meeting summary is available in the download box.
- Please inform me of any corrections or additions.
- FMTF Members:
  - At any time, a member can make a motion to approve, and another can second the motion. Please state your name when you do so.
  - Please indicate your approval or disapproval via the chat box.

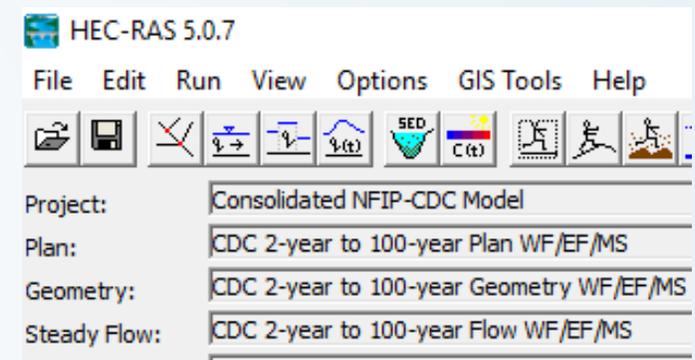
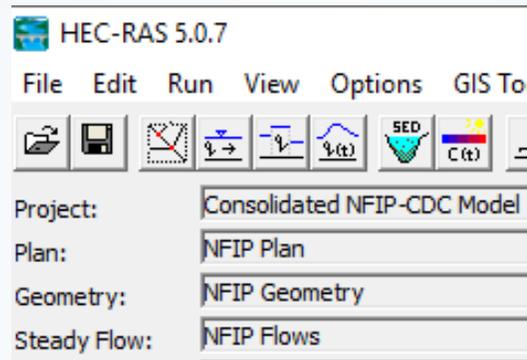
# FY20 Trinity River Common Vision Work Program Activities Discussion

## NFIP/CDC Model Consolidation Team

- ▶ The FMTF approved the Consolidation Team's Memo in January. The USACE has submitted two scopes for work related to the 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.
- ▶ FMTF and Prospective East Fork Communities received an email detailing cost shares for the combined \$485,000 of work.
  - ▶ NCTCOG staff have submitted a request for funding to the USACE from their Planning Assistance to States (PAS) and Floodplain Management Services in hopes to offset the cost to communities. Template letters of support will be sent to FMTF and Prospective Communities very soon.

# Georeferenced CDC Model Update and Consolidation With NFIP Model

- NCTCOG, FEMA, and USACE shared interest in model consolidation and maintenance
- Incorporate approximately 50 CDC projects into the georeferenced model (All approved CDC projects after May 2017)
- Consolidate CDC and NFIP models within a single HEC-RAS project file as per the committee
- Model maintained by USACE and available for download on NCTCOG hosted website
- \$215,000 18 months



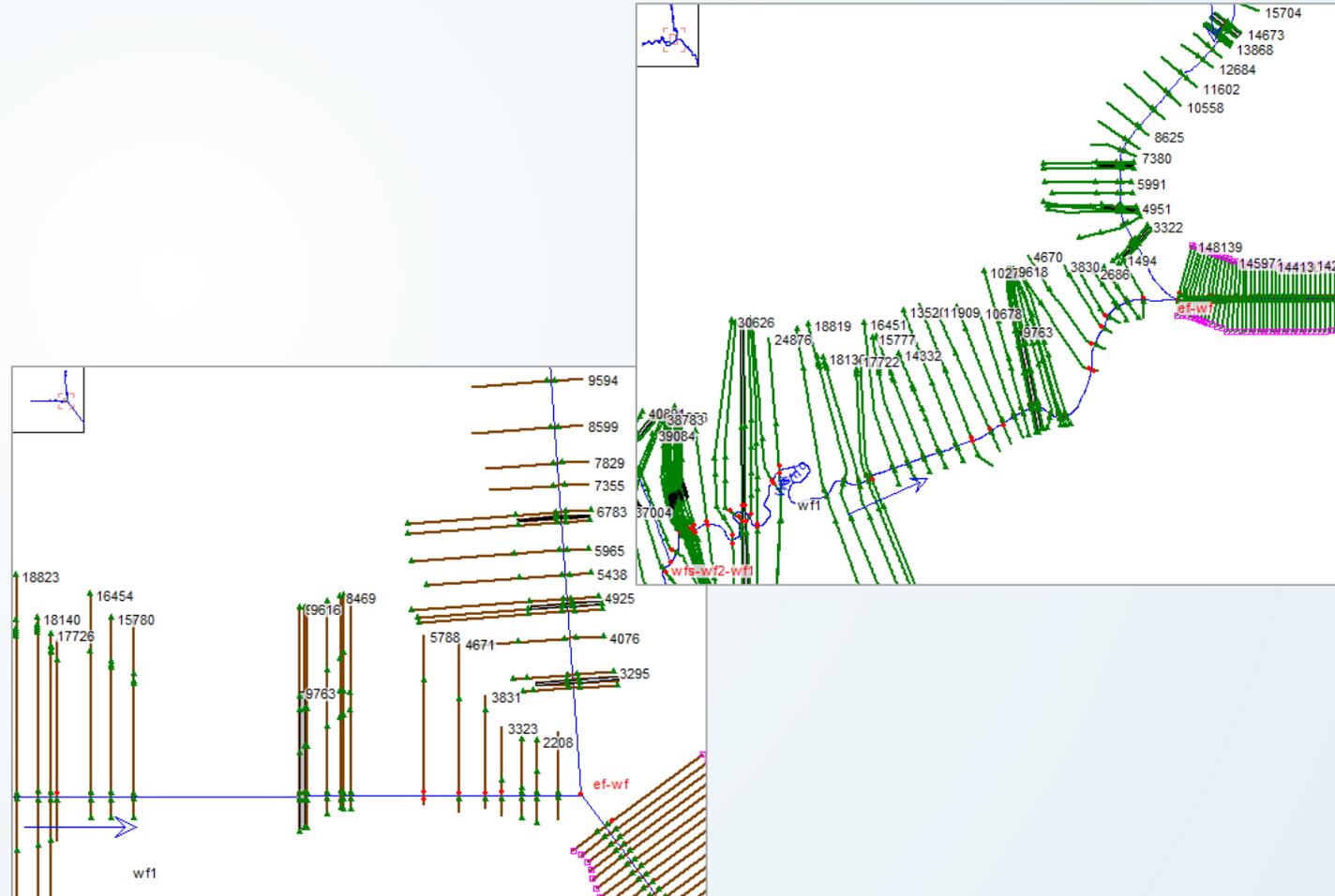
# Georeferenced CDC Model Update and Consolidation With NFIP Model

## Deliverables

- Consolidated NFIP-CDC HEC-RAS model
- Inundation area shapefiles for future 100-yr and SPF events
- Project study report
- CDC tracking chart

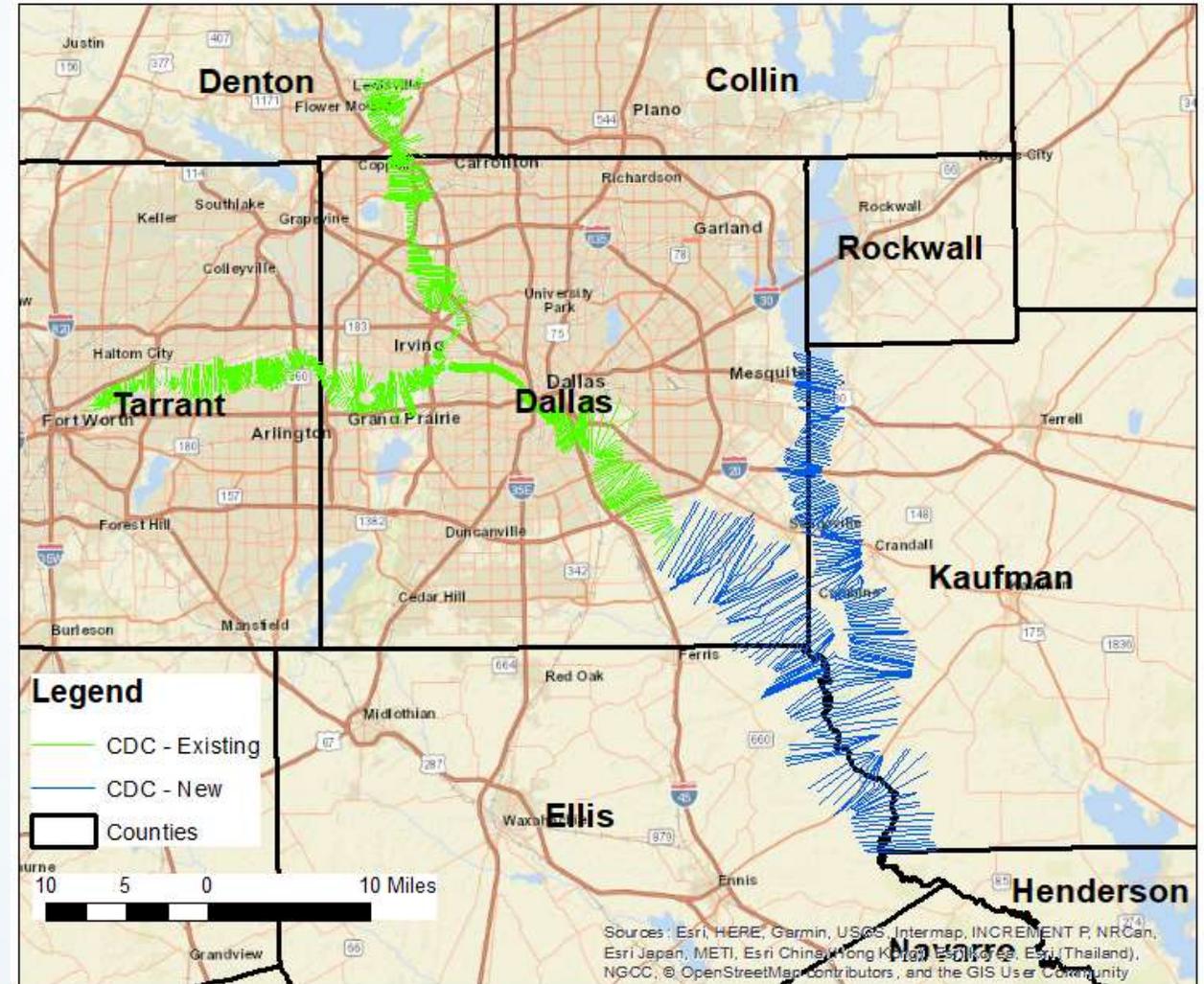
## Benefits

- Better representation of affects of cumulative development
- Consolidated NFIP-CDC model easier to maintain and keep in-sync



# CDC Model Extension – Trinity Main Stem and East Fork Trinity

- Incorporation of East Fork and Main Stem extension into Consolidated NFIP-CDC HEC-RAS model.
  - East Fork below Ray Hubbard
  - Main Stem to Henderson County
- Leverage FEMA modeling being developed by Compass PTS JV
- Develop and incorporate future flows
- \$270,000 24 months



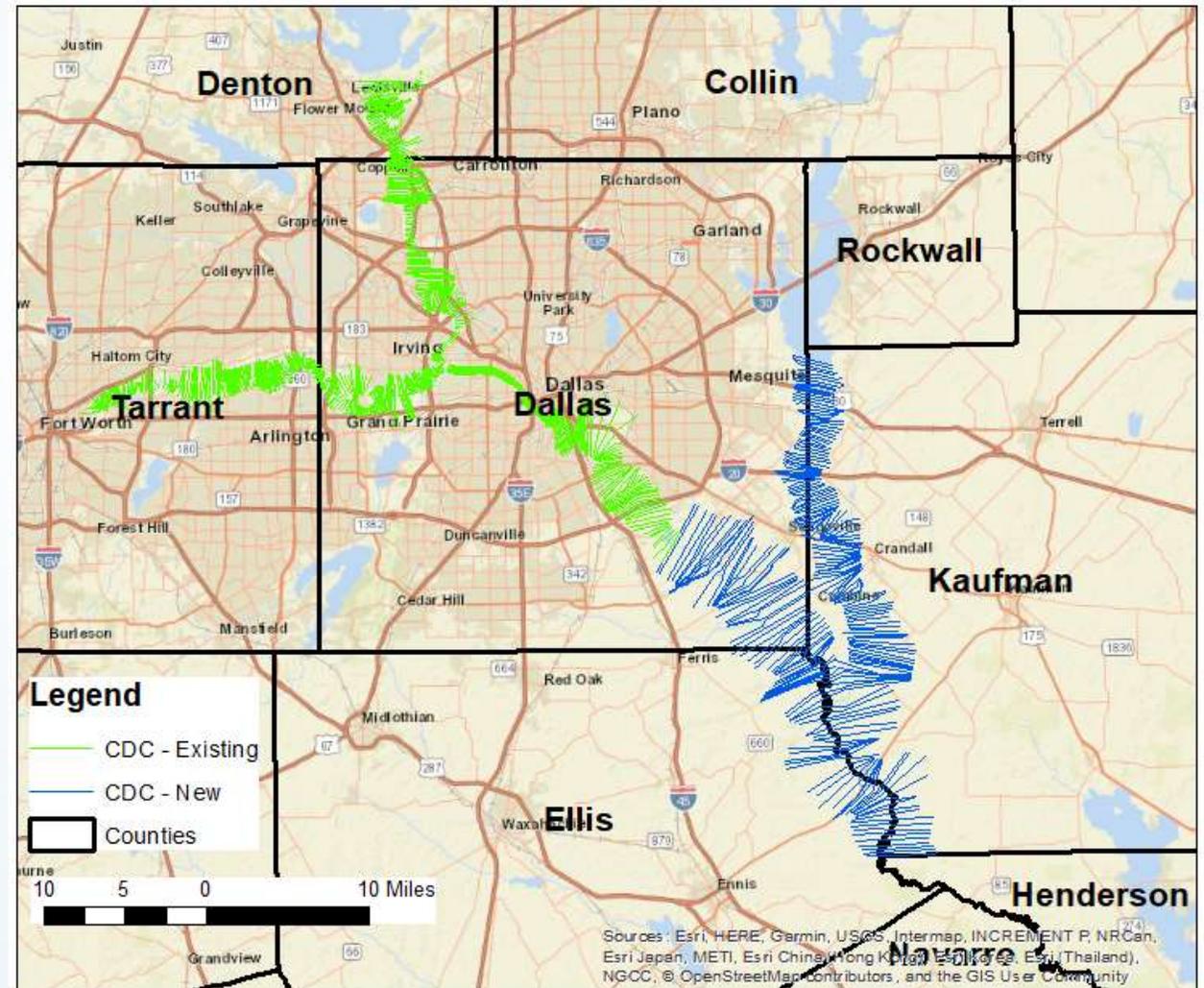
# CDC Model Extension – Trinity Main Stem and East Fork Trinity

## Deliverables

- Future land use HEC-HMS Model (Trinity Main Stem extension and East Fork)
- Consolidated NFIP-CDC HEC-RAS model
- Inundation area shapefiles for future 100-yr and SPF events
- Project study report

## Benefits

- Stabilization of flood risk along East Fork and Main Stem to Henderson County



# Contact

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# FY20 Trinity River Common Vision Work Program Activities Discussion

CDC Model Repository and Application Website

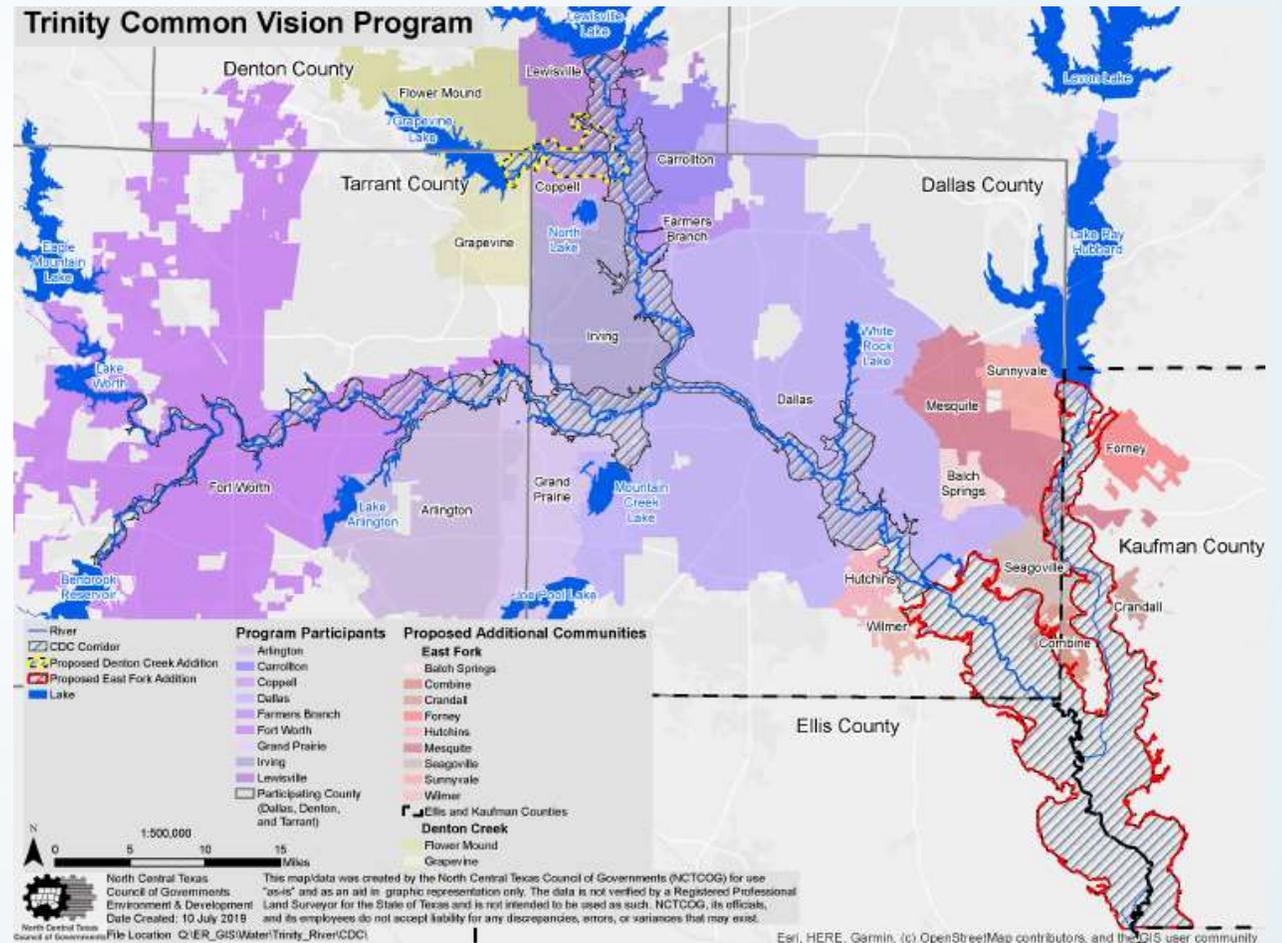
- ▶ Tour of website build and explanation of workflow and functionality
- ▶ Please give us your questions and comments



# FY20 Trinity River Common Vision Work Program Activities Discussion

## East Fork/Denton Creek Update

- NCTCOG staff met with Flower Mound and Grapevine staff at the end of January. Both communities were open to joining. We will follow up with them.
- The City of Mesquite is taking the East Fork resolution to a future council meeting and will discuss membership with Forney and Sunnyvale.



# FY20 Trinity River Common Vision Work Program: Ongoing Support Activities

## OneRain Regional Flood Software

- ▶ Regional software requested by FMTF in 2016. Entities currently on the common contract are McKinney, Arlington, Frisco, and TRWD. Fort Worth and Grand Prairie feed their data into the platform.
- ▶ Current contract for services is through North Texas SHARE and expires July 2020.
- ▶ NCTCOG staff met with OneRain staff on February 19 and March 26 to discuss a new pricing structure that allows all entities to join. Current contract has a limit of 100 sensors. NCTCOG Administration is continuing talks with OneRain's Product Manager and CEO to potentially renew the contract with a model more focused on partnership.

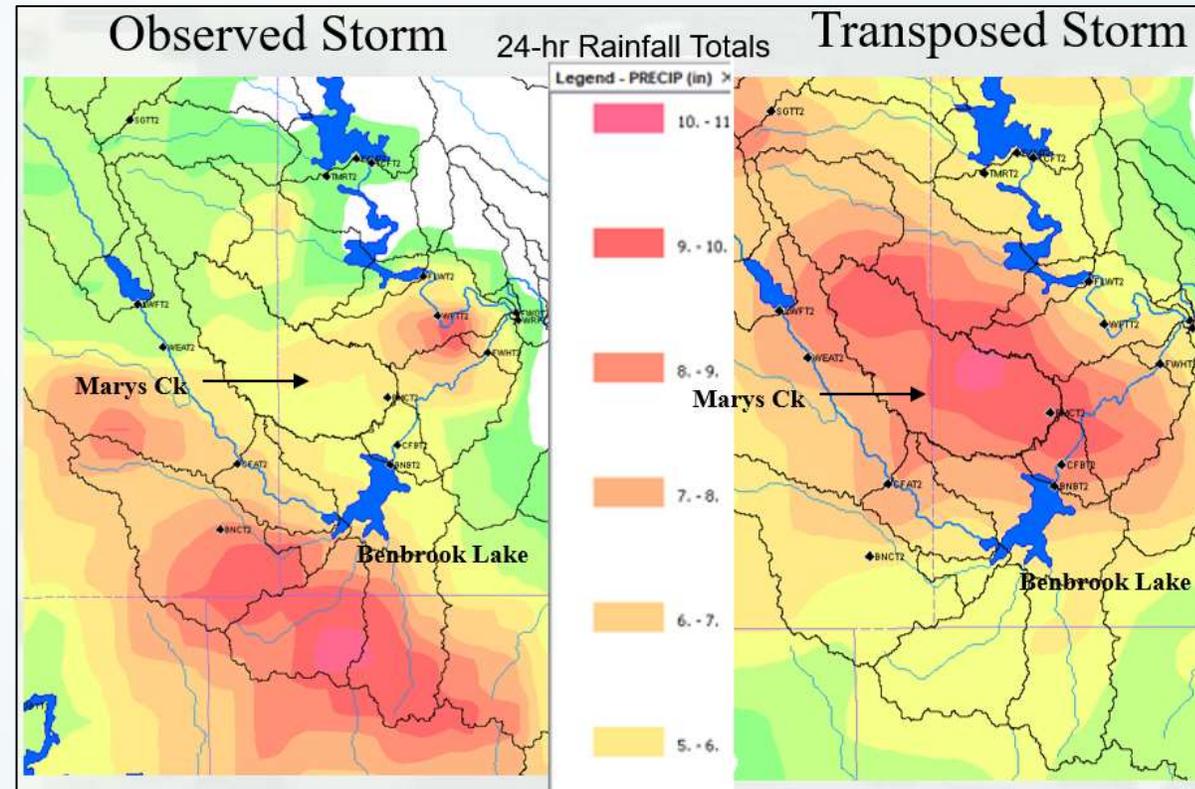


# FY20 Trinity River Common Vision Work Program: Ongoing Support Activities

- USACE Silver Jackets Application for Storm Shifting over the Trinity River
  - At the January FMTF meeting, the USACE discussed the possibility of applying to the Silver Jackets for \$100,000 to perform storm shifting over the Trinity Common Vision corridor.
  - Thank you to the communities that provided letters of support.
  - USACE submitted the application on March 31. A link to the view the scope is in the download box.

# Storm Shifting Study – Upper Trinity River Watershed (Silver Jackets Program)

- Shifting/moving of large storms in the region
- Funded through USACE FPMS program and provides USACE technical and planning support to local, state, and federal entities
- Utilizes existing engineering models and data to produce hypothetical scenarios
- Storm/scenario selection based on collaboration between USACE, NCTCOG, and the Communities.
- HEC-MetVue (Publicly Available)
- \$100,000 12 months
- Study is contingent upon selection

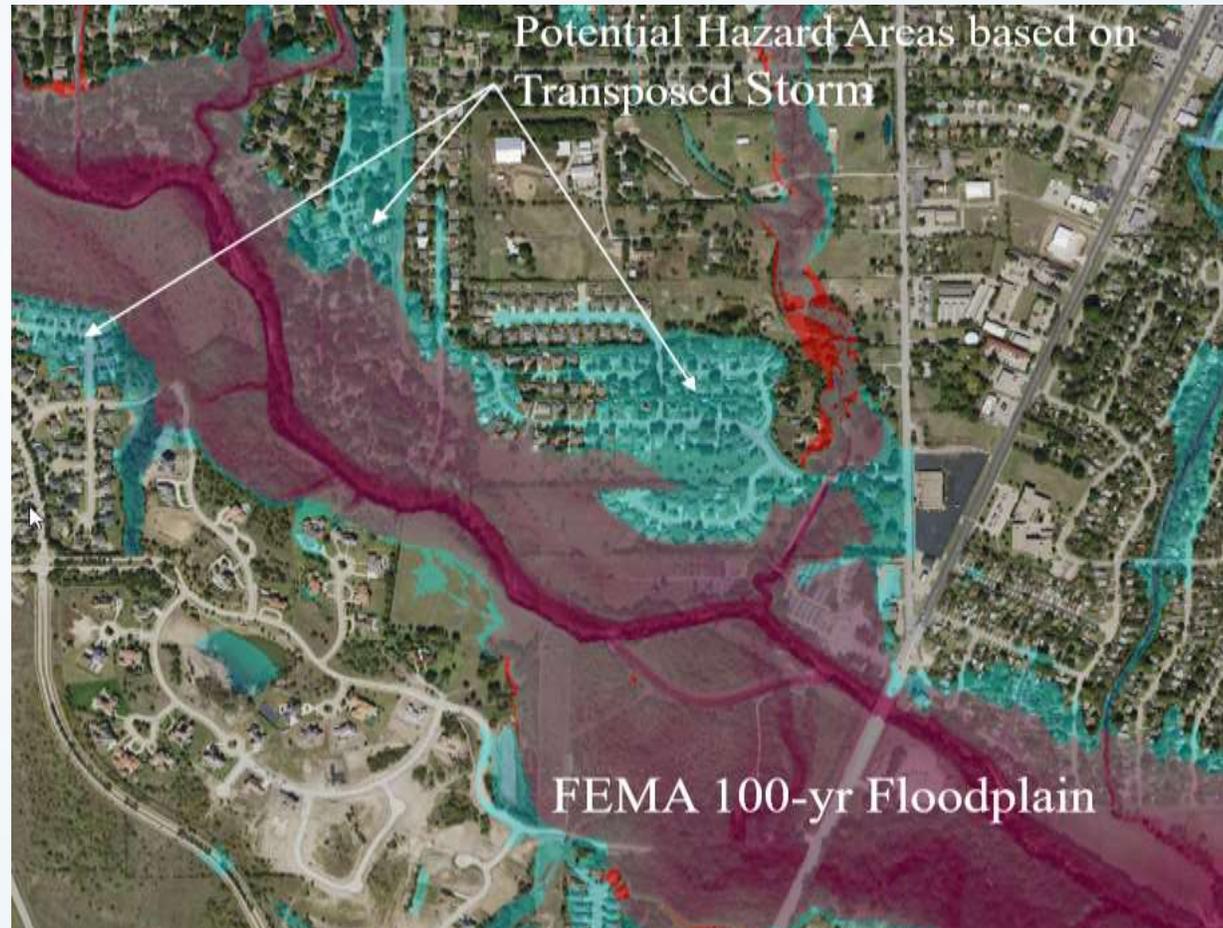


June 2000 storm transposed 15 miles North

# Storm Shifting Study – Upper Trinity River Watershed (Silver Jackets Program)

## Deliverables

- HEC-RAS models with flows from shifted storm
- HEC-HMS models with shifted storm data
- Inundation maps
- Project Study Report
- USACE support in public meetings or tabletop exercises

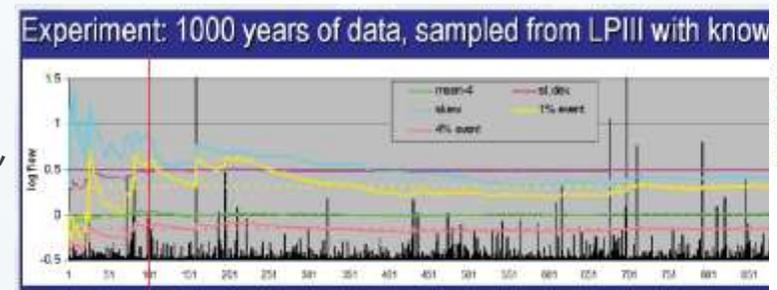
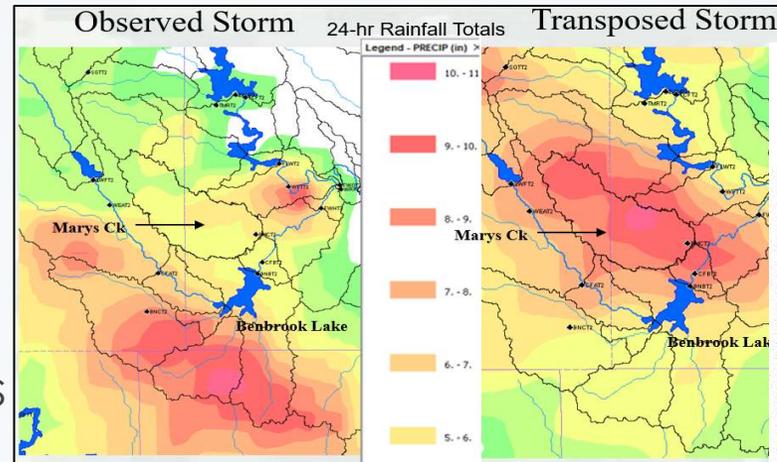


Resulting floodplain from shifted June 2000 storm

# Storm Shifting Study – Upper Trinity River Watershed (Silver Jackets Program)

## Benefits

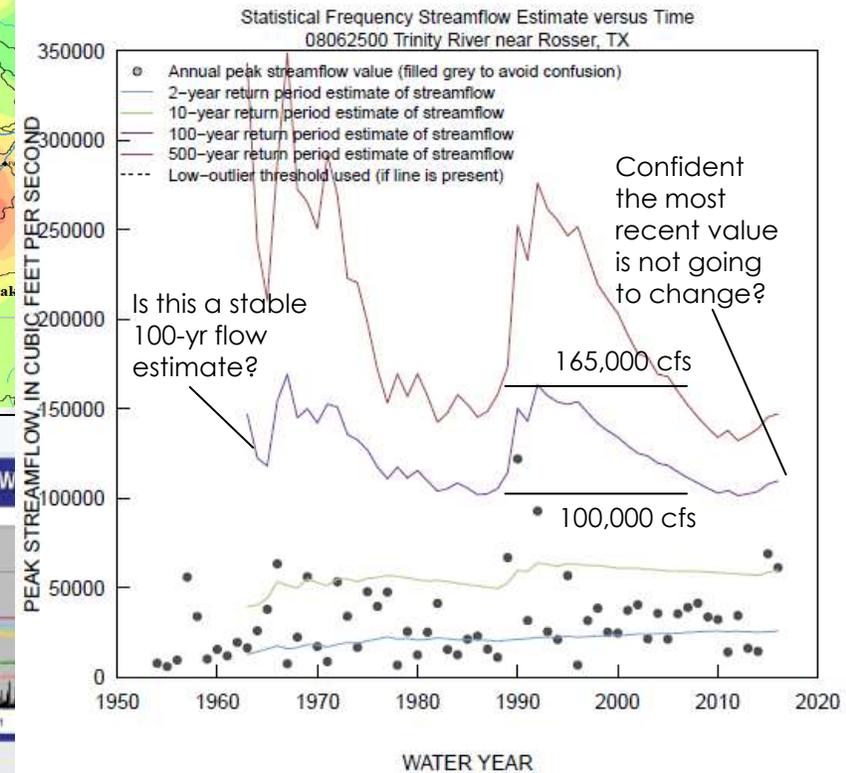
- Tool to show plausible impact scenarios from a major flooding event that occurs below the USACE dams
- Transportation impacts for ingress and egress in flooded areas
- Impacts to critical infrastructure such as electrical sub-stations, water treatment plants, hospitals, fire stations, and other first responders
- Support for higher standards



Dashed Yellow Line = Actual 100-yr (1%) Discharge  
 Solid Yellow Line = Estimate of 100-yr (1%) Discharge based on previous years of record

**300 to 400 years of Record before 100-yr Estimate Converges**

Credit: Beth Faber at USACE-HEC



# Contact

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# Other Program Related Efforts

North Texas Floodplain Administrators/CRS Users Group

- ▶ Special Virtual Edition!
- ▶ Monday, May 4, 2020, 8:30 a.m. to 12:00 p.m.
- ▶ In partnership with TFMA, 3.5 CECs are available to CFMs
- ▶ FEMA Region 6 and guest speakers from Harris County Engineering, City of Dallas, and City of Fort Worth will discuss substantial damage determinations, in addition to updates on the CRS Manual, DRRRA 1206, and other FEMA updates.
- ▶ Space still available but limited. Register at <https://www.addevent.com/event/Db4779112>

# Other Program Related Efforts

## Cooperative Technical Partnership (CTP) Program

### ➤ FY17 Projects

- Flood Resilience meetings postponed and rescheduled via webinar for Town Creek (Weatherford) and Stream CF-5 (Benbrook).
- Richland-Chambers Post-Discovery Webinar was held April 2nd. The recording and Draft Discovery Report are available: <https://www.nctcog.org/envir/watershed-management/cooperating-technical-partners/discovery>

### ➤ FY18 Projects

- Flood Risk ID on Marys Creek in Parker County is ongoing. Hydrology is nearly complete. Partner meeting was postponed.

### ➤ FY19 Projects

- Waxahachie Creek and Harriet Creek kickoff meetings held virtually in April.

### ➤ FY20 Projects

- NCTCOG is in the process of applying for flood risk identification projects on Catherine Branch and Hog Branch in Denton County following FEMA feedback on the final business plan.

# Other Program Related Efforts

## Integrated Stormwater Management (iSWM) Subcommittee

- Reorganize/Re-evaluate Site Development Controls Manual
  - The second workshop was held on February 5th. Addressing feedback regarding potential technical information updates, reorganization and design/construction
- iSWM Designation Implementation Workshop
  - Third and final workshop was held on February 11th. Discussed iSWM implementation with Denton, DFW Airport, and Dallas County.
- Technical Meeting of iSWM Adopters
  - Webinar held March 30<sup>th</sup>. Addressing Feedback received on technical manuals for: Construction Control, Hydrology, Hydraulics, iSWM Implementation & Enforcement, Site Development Controls
- Updating Technical Manual rainfall intensities
  - The draft Atlas 14 implementation approach memorandum was approved by the subcommittee in January; work is in progress towards incorporating the new rainfall data into the iSWM technical manual.
- iSWM BMP Installation Videos - installation of a biofiltration system in Downtown Roanoke
  - Continuing efforts on a short video to give an overview of the use, installation process, and maintenance of the BMP. The video footage will be utilized by COG in the future as a case study.
- Next Meeting: April 27<sup>th</sup>, 1:30 p.m. via UberConference: <https://www.uberconference.com/nctcogenv>

# Other Program Related Efforts

## Trinity River National Recreation Trail Update

- ▶ In 2018, the Trinity Nature Conservancy (now the Trinity Coalition) began working with NCTCOG and communities along the Trinity River and its branches to achieve National Recreation Trail designation from the National Park Service (NPS).
  - ▶ 27 letters of support were sent in from all the communities along the trail and several state and regional agencies.
- ▶ The application has completed the NPS vetting process and will be submitted to the Secretary of the Interior for consideration. The goal is to have all designations announced by National Trails Day on June 6, 2020.
- ▶ The trail is 130 miles with 21 launches (more launches planned in the future). The NPS logo will be used in conjunction with the trail upon designation.



# Corridor Development Certificate Applications

- New Applications Received Since Last FMTF Meeting
  - DC 040120 – Langdon Connector
- Final Action Forms Received Since Last FMTF Meeting
  - GP 111519 – Sunset Soccer Fields (Exemption)
  - GP 072219 – MacArthur Reclamation
  - ARL 040319 – Viridian Project Tract C-8
- Technical Review Completed Since Last FMTF Meeting
  - LEW 090519 – Riverview Park

# Roundtable



# Next FMTF Meeting Date

**Friday, June 26, 2020**

9:30 a.m.

In-person or webinar to be determined.

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