Welcome
Floodplain Management Seminar

SEPTEMBER 26, 2014

NCTCOG OFFICES

Agenda

9:00 am	Welcome and Introductions	*Edith Marvin, NCTCOG*
9:15 am	Floodplain Management Fundamentals	
	What is Floodplain Management?	*Gabe Johnson, Celina*
	Regional Perspective on the Trinity COMMON VISION Program	*Jack Tidwell, NCTCOG*
	Twenty-five years of successful cooperation	*Jerry Cotter, USACE*
	Where are we going from here?	*Edith Marvin, NCTCOG*
10:00 am	Community Partnerships/Associations	
	Common challenges facing a Certified Floodplain Manager	*Garry Fennell. Irving*
	Regional & State Partnerships	*Ben Buchanan, Texas Water Development Board*
	Training and Service	*Jessica Baker, Texas Floodplain Management Association*
10:30 am	Community Programs	
	Section 404 Permitting Basics	*Chandler Peter, USACE*
	National Flood Insurance Program Map Basics	*Dale Hoff, FEMA*
	Community Rating System	*Mike McKay, Carrollton*
	Cooperating Technical Partnership	*Bill Brown, Arlington*
11:00 am	Working Together	
	Wrap Up & Thank You	*Edith Marvin, NCTCOG*

What is Floodplain Management?

FLOODPLAIN MANAGEMENT SEMINAR

SEPTEMBER 26, 2014

GABE JOHNSON, PE, PH, CFM

CITY OF CELINA

DIRECTOR OF ENGINEERING AND PUBLIC WORKS

What is Floodplain Management?

- Floodplain management is the operation of a community program of corrective and preventative measures for reducing flood damage. These measures take a variety of forms and generally include zoning, subdivision, or building requirements, and special-purpose floodplain ordinances.

Facts About Texas

1. Central Texas has been identified as the most flash-flood prone area in the United States by the National Weather Service.
2. Texas leads the nation in flood-related deaths most every year – averaging twice the next nearest state: California.
3. Texas leads the nation in flood-related damages most every year – sharing this distinction with Florida and Louisiana.
4. Some 20 million of Texas' 171 million acres are flood-prone – more than in any other state.
5. Texas has approximately 8 million structures in floodplains. 3 million of these (~37%) have no flood insurance.
6. Texas is among the top four states with repeat flood losses to the same properties.
7. From 1986 to 2000, Texas experienced 4,722 flash flood events.

History of the National Flood Insurance Program (NFIP)

Prior to1968:

- Flood control predominantly consisted of dams, waterway channeling and levees.
- Floodplain development was not regulated.
- As disasters continued to occur, it became apparent that the U.S. needed a more comprehensive method of floodplain management.
- Flood insurance availability was limited.

National Flood Insurance Act of 1968

Congress established the National Flood Insurance Program (NFIP), a nationwide effort to help communities protect against flooding.

NFIP goals are to:

- reduce loss of life and property caused by flooding;
- reduce flood disaster relief costs;
- make federally-backed flood insurance coverage available to property owners that live in participating communities (purchase was VOLUNTARY);
- begin comprehensive floodplain mapping.

Flood Disaster Protection Act of 1973

- Flood insurance is required as a condition of securing a federally backed loan on any structure located in the Special Flood Hazard Area (SFHA).
- Required participation by communities in the NFIP as a condition to receive Federal Disaster Assistance.

National Flood Insurance Reform Act of 1994

Implemented requirements to strengthen the program.

- Introduced monetary penalties for noncompliance for lenders.
- Required lenders to escrow for flood insurance.
- Responsibility of the lender to determine if a building is located in the SFHA and to notify the owner.
- Mandated provisions for lender placement of flood insurance.

Texas Senate Bill 936

The 77th Texas Legislature amended the Water Code, effective September 1, 2001, to authorize all political subdivisions to:

- adopt more comprehensive floodplain management regulations which are necessary for planning and appropriate to protect public health and safety;
- participate in floodplain management and mitigation initiatives such as the NFIP's Community Rating System (CRS);
- collect reasonable fees to cover administrative costs incurred by the administration of a local floodplain management program;
- provides for criminal and civil penalties and injunctive relief.

Biggert-Waters Reform Act of 2012

- Removes subsidized rates (pre-FIRM rates) for a variety of property types, including non-primary residences and commercial properties.
- Changes other rate and penalty structures.
- Increases the limit of annual rate increases from 10% to 20%.
- Includes changes to mapping and mitigation programs.
- Establishes a Flood Protection Structure Accreditation Task Force.

NFIP in a Nutshell

Participation in NFIP allows communities to:

- protect life and property through ordinances;
- identify areas at risk through mapping;
- prohibit or restrict new development through permitting;
- enable citizens to purchase flood insurance through the federal government.

Partnerships

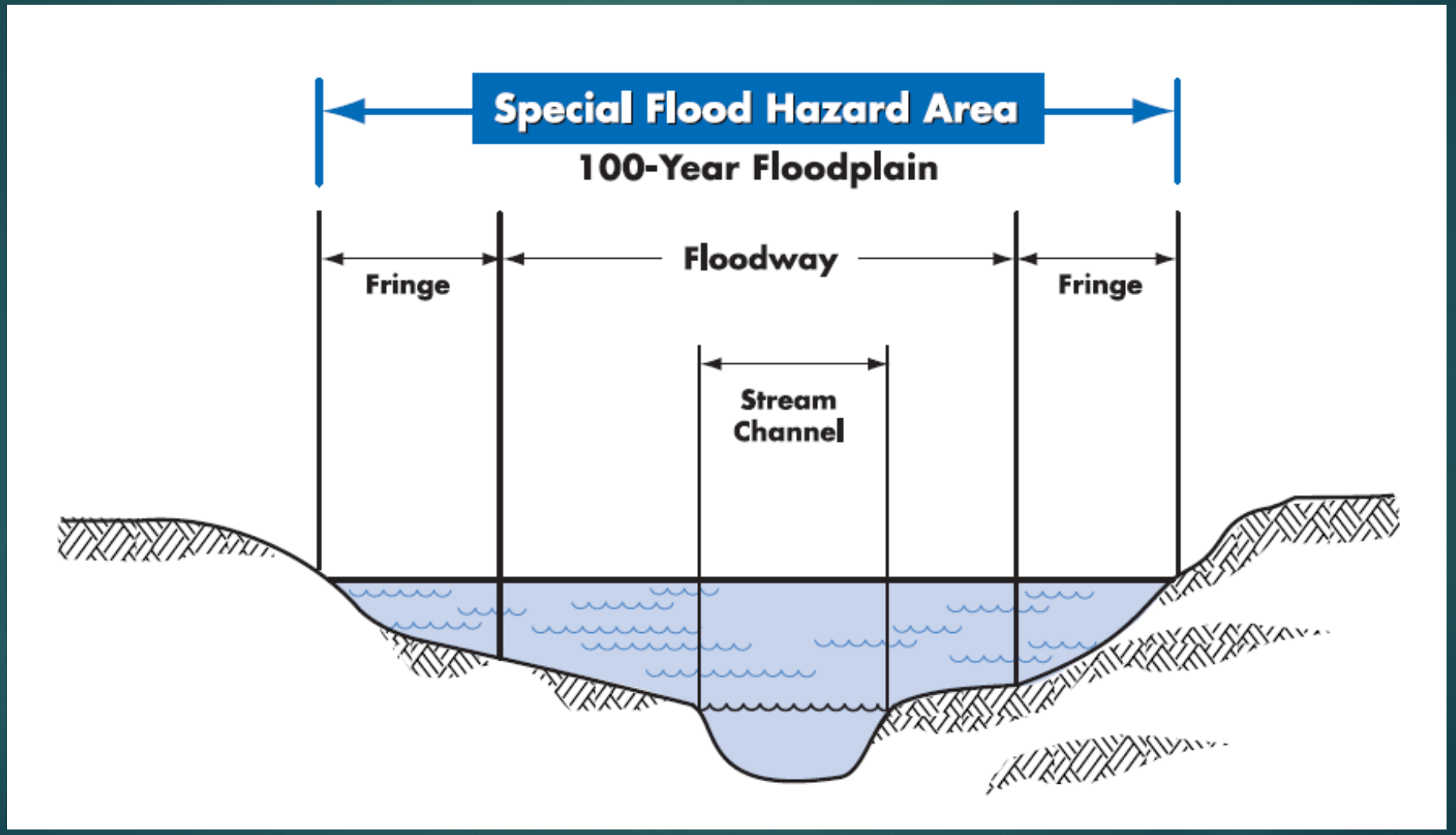
Floodplain Management has 3 key partners, each with their own responsibilities:

- Federal Emergency Management Agency (FEMA)
- State Coordinator's Office
- Local Administrators

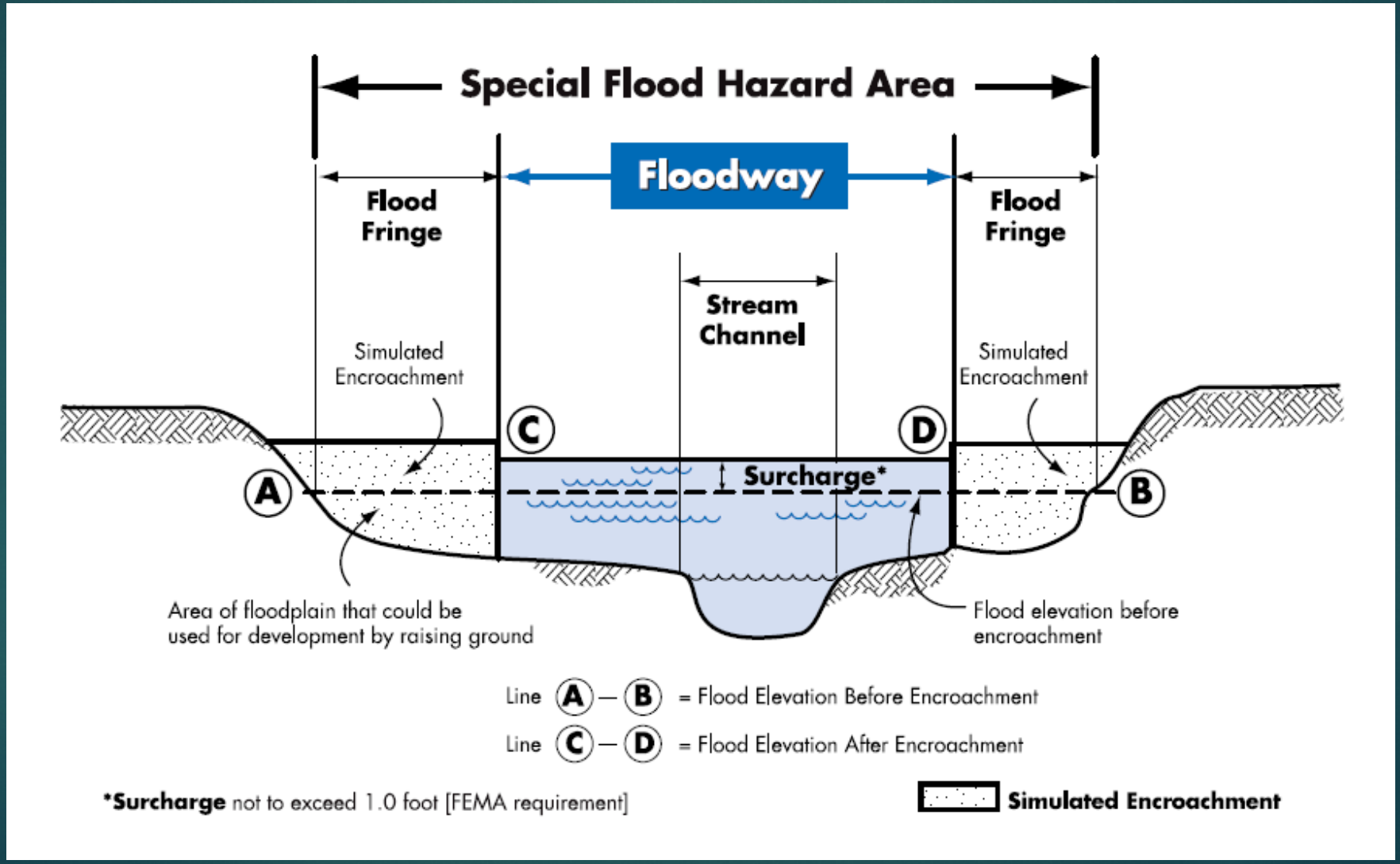
Why Do We Regulate the Floodplain?

- Protect people and property;
- Make sure that federal flood insurance and disaster assistance is available;
- To save tax dollars;
- To avoid liability and law suits;
- To reduce future flood losses.

Floodplain 101



Floodplain 101



Key Roles

- Reviewing development plans
- Reviewing channel alterations and setbacks
- Planning for long-term community-wide stormwater needs and updating stormwater regulations and ordinances
- Addressing erosion control and prioritizing projects
- Addressing existing street and other public facility flooding
- Protecting private structures from flooding
- Addressing lot-to-lot residential complaints between neighbors
- Providing determinations from flood maps

Future Floodplain Management Demographics

- More People and More Development
  - The United States has the third largest population in the world, about 323 million. We can expect as many as 460 million U.S. residents by 2050, an increase of from 120 to 150 million people over the next several decades.
  - More people will mean more buildings of all kinds, and more infrastructure such as roads, bridges, parking lots, stormwater systems, and communications. The development will be extremely dense in some places, bringing more public health issues than in the past, and more safety and damage concerns when floods occur, along with concentrated pressures on water and related resources.

Future Floodplain Management Demographics

- A Different Character
  - The income and wealth gap between the "haves" and the "have nots" is widening. The middle class is shrinking and the result is going to be more lower-income people. We can expect a larger proportion of households headed by one person instead of a couple and we are headed toward a nation in which there will be many more retirees and elderly people than today. These latter groups tend to be more vulnerable to flood and other disaster losses. Thus the overall vulnerability of the nation is bound to increase.

Future Floodplain Management Demographics

- A Pattern of Movement and Urbanization
  - The increase in population will lead to the geographic concentration of people (urbanization) over wider areas than at present. Existing metropolitan areas will become even larger and we can expect moderately sized urban areas to graduate to true megapolitan status.
  - Pressure on the availability of land and the rising cost of housing may well lead to the concentration of socially vulnerable people in high-hazard areas.

Future Floodplain Management

- Make room for rivers, oceans, and adjacent lands
- Restore and enhance the natural, beneficial functions of riverine and coastal areas
- Identify risks and resources and communicate at public and individual levels
- Insurance
- Land Use
- Watershed Management
- Development & Building Standards
- Assume personal and public responsibility

The Bottom Line…

- It's only a matter of time until flooding will occur in or near your community.
- When it does, a strong floodplain management program will lower the amount of property that will be damaged and lives that may be put at risk.

Questions?

Gabe Johnson, PE, PH, CFM
City of Celina
gjohnson@celina-tx.org

Sources:

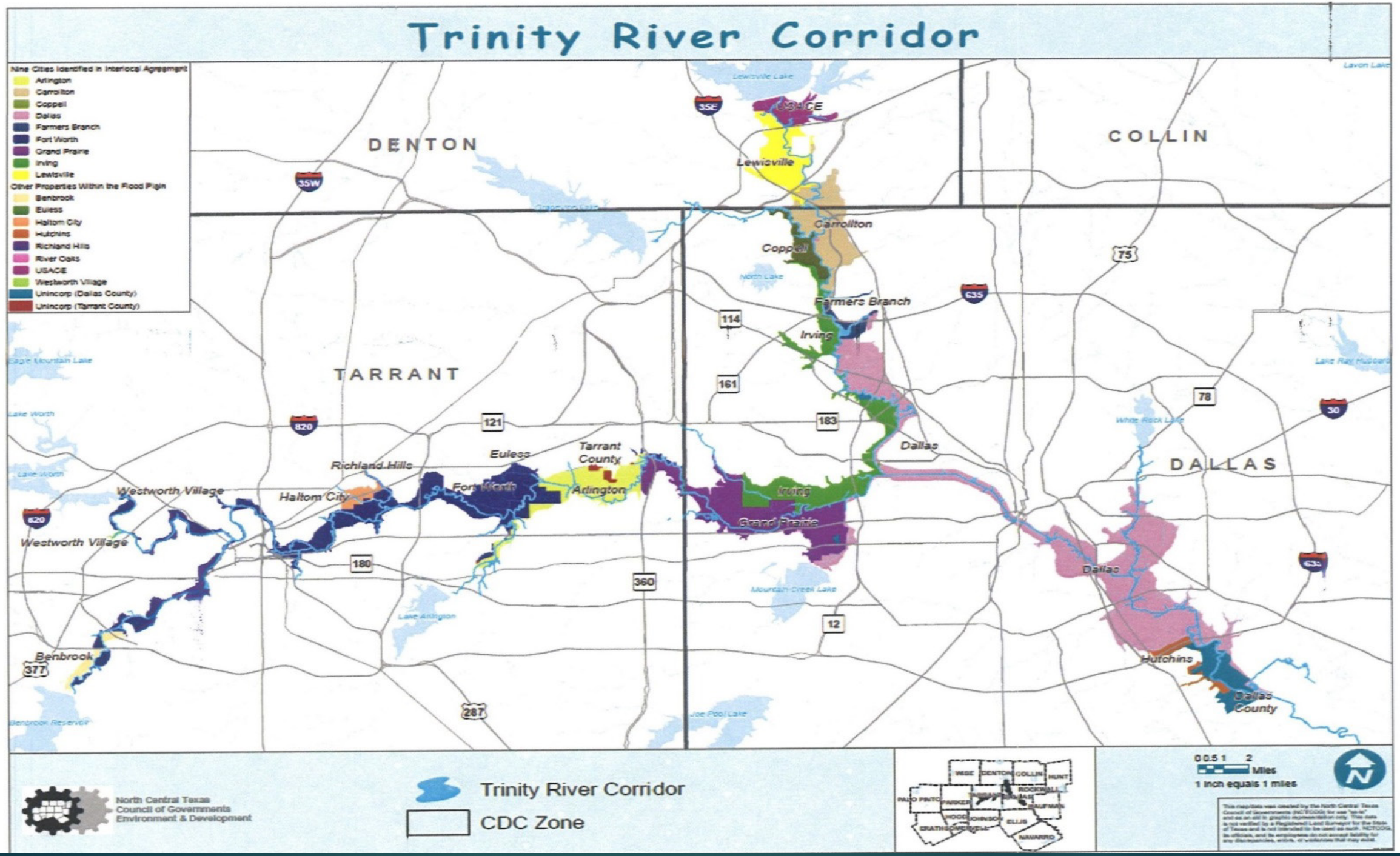
- TFMA – 2008 Quick Guide
- TCEQ – Floodplain Management 101
- ASFPM – Floodplain Management 2050

Regional Perspective on the Trinity River COMMON VISION Program

JACK TIDWELL, AICP, CFM

MANAGER OF ENVIRONMENT & DEVELOPMENT

Trinity River Corridor



COMMON VISION Participants

Founding Communities and Agencies

- Arlington
- Carrollton
- Coppell
- Dallas
- Farmers Branch
- Fort Worth
- Grand Prairie
- Irving
- Lewisville
- Dallas County
- Denton County
- Tarrant County
- Tarrant Regional Water District
- Trinity River Authority of Texas
- US Army Corps of Engineers, Fort Worth District
- Federal Emergency Management Agency
- NCTCOG

Goals of the Trinity River *COMMON VISION*

- A *SAFE* Trinity
- A *CLEAN* Trinity
- An *ENJOYABLE* Trinity
- A *NATURAL* Trinity
- A *DIVERSE* Trinity

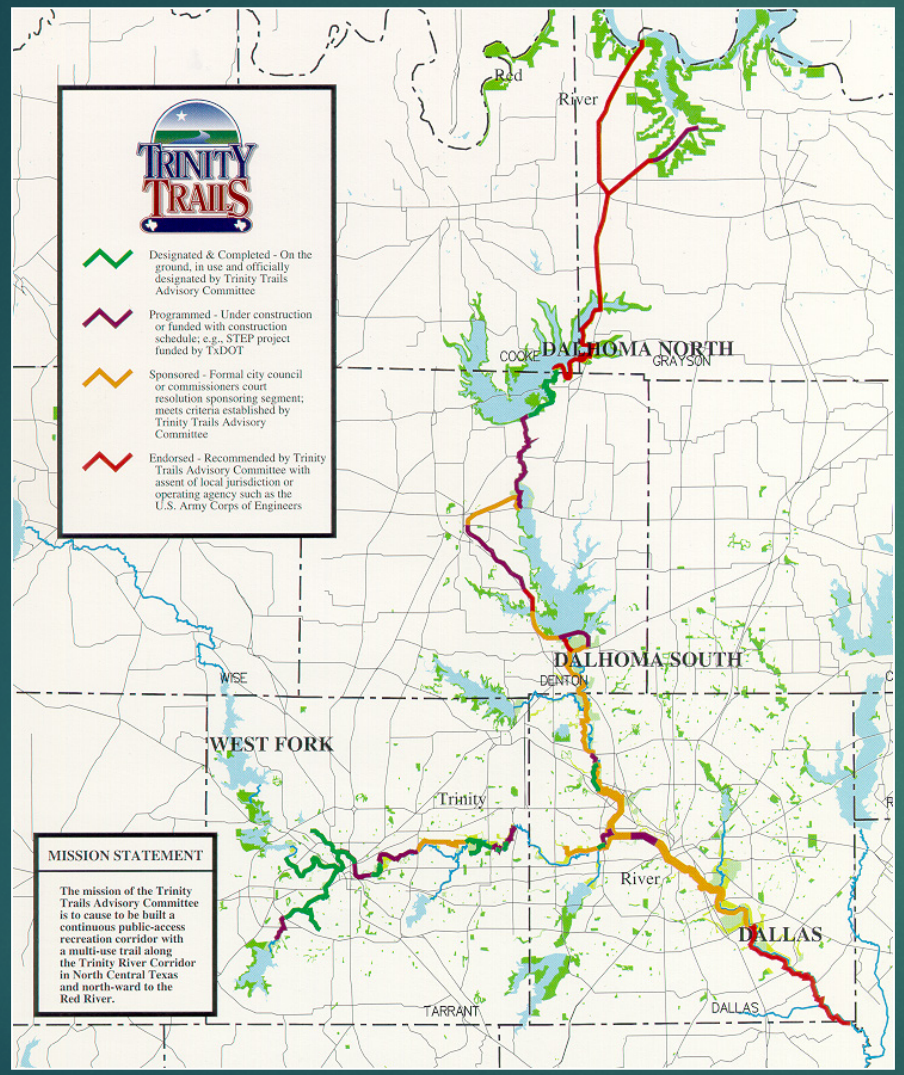
Background-
Trinity River COMMON VISION

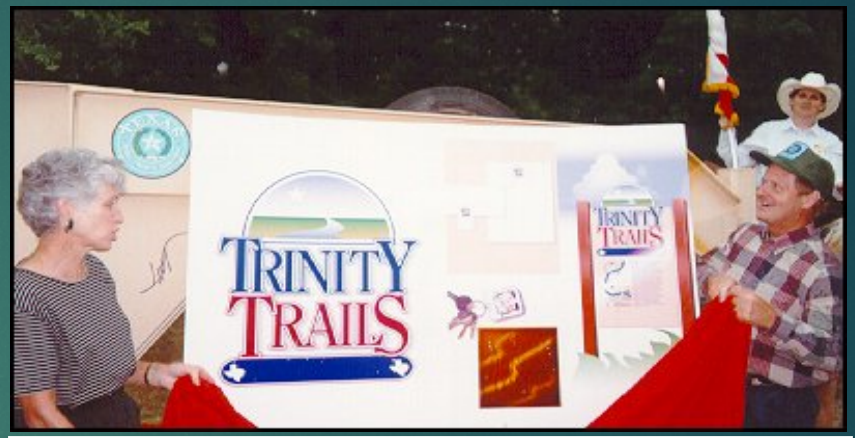
- Late 80's - USACE documented "cumulative risk" and proposed revised Record of Decision
- Trinity Locals sought out cooperative effort to demonstrate commitment to river and stabilization of flood risk
- NCTCOG Trinity River Regional Policy Position 1988 – Started the "COMMON VISION"
- Upper Trinity River Feasibility Study (and later Project Management Plans) begun in 1989
- 1989 Cooperative effort to develop Corridor Development Certificate Process begins

Ongoing Opportunities of the COMMON VISION Program

- Build on the **Upper Trinity River Feasibility Study** partnership with USACE, TWDB and FEMA with our member local governments
- Continuation of **Corridor Development Certificate Program** and corridor/basin partnerships
- Look at interest utilizing integrated storm water management-type programs into critical watersheds to provide storm water **quality and quantity benefits throughout the basin**
- Cooperative look at **recreational/economic/quality of life** aspects of the river and its watersheds

Trinity River COMMON VISION Opportunities

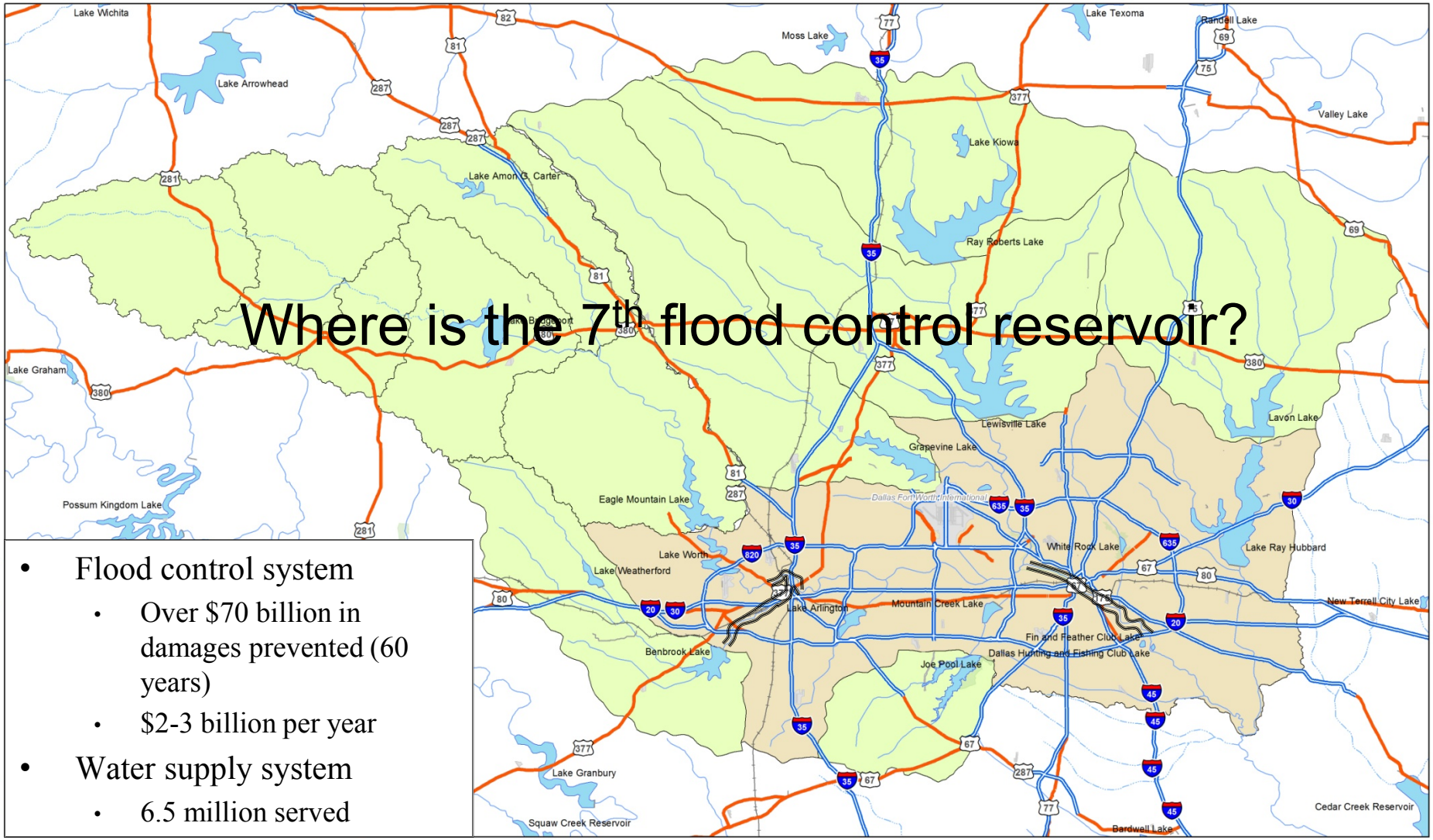




THANK YOU!

Corridor Development Certificate (CDC) Program

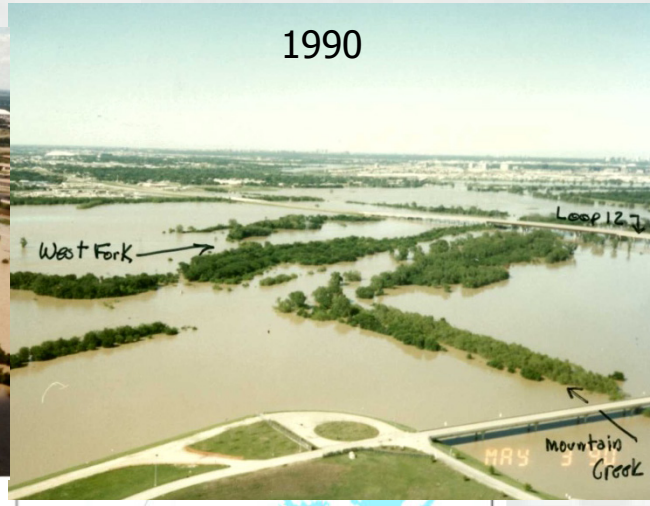
What Do You See?

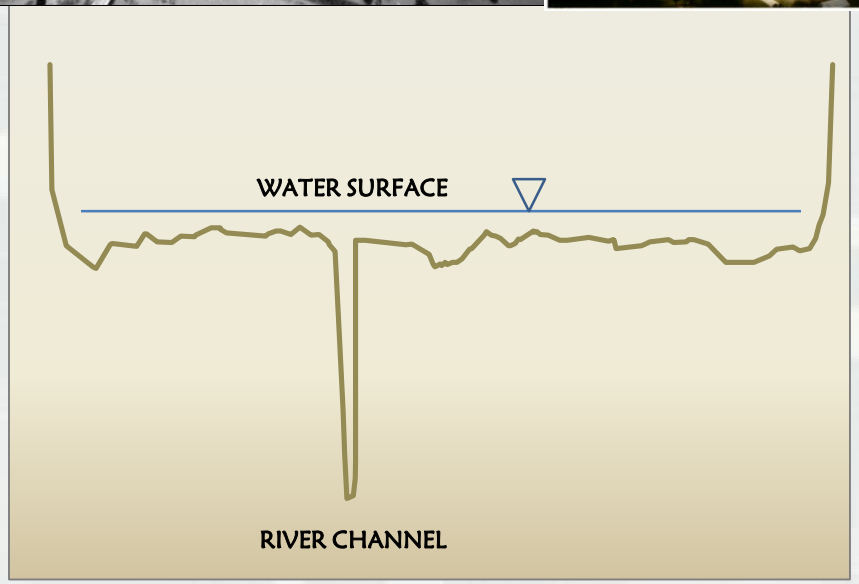


- Flood control system
  - Over $70 billion in damages prevented (60 years)
  - $2-3 billion per year
- Water supply system
  - 6.5 million served

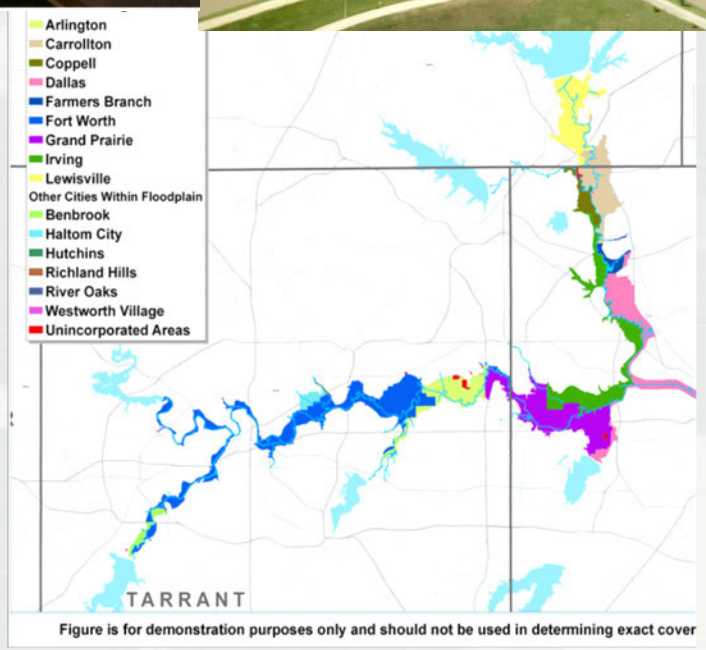
Corridor Development Certificate

Floodplain as a Reservoir





Full floodplain conveyance and storage



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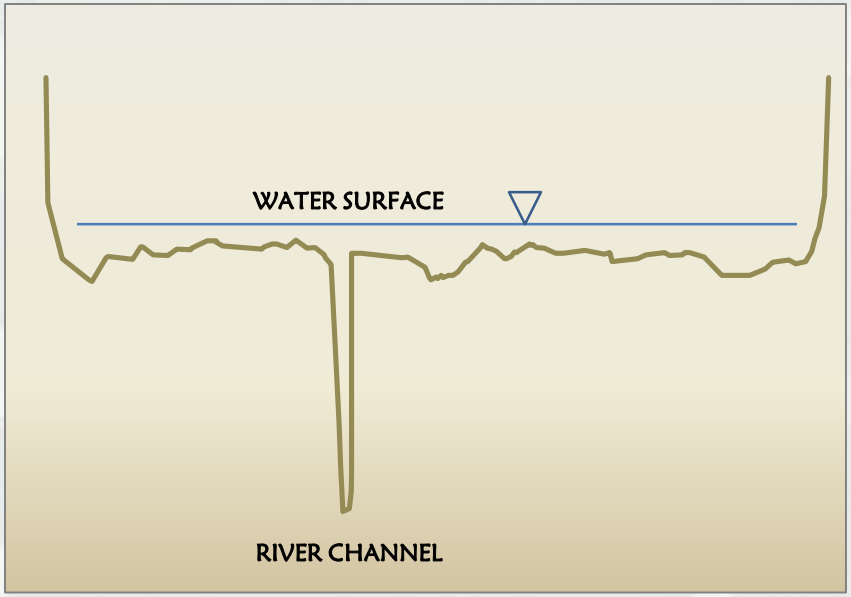
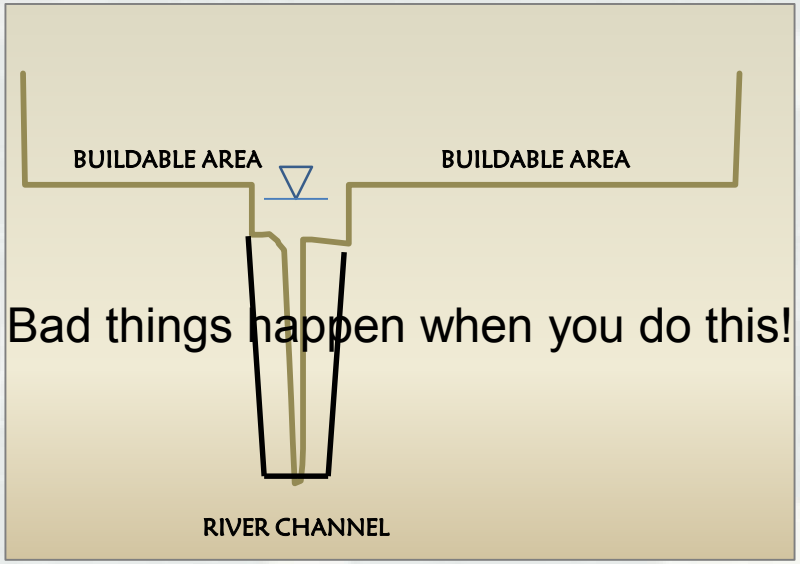
Corridor Development Certificate

Floodplain as a Reservoir



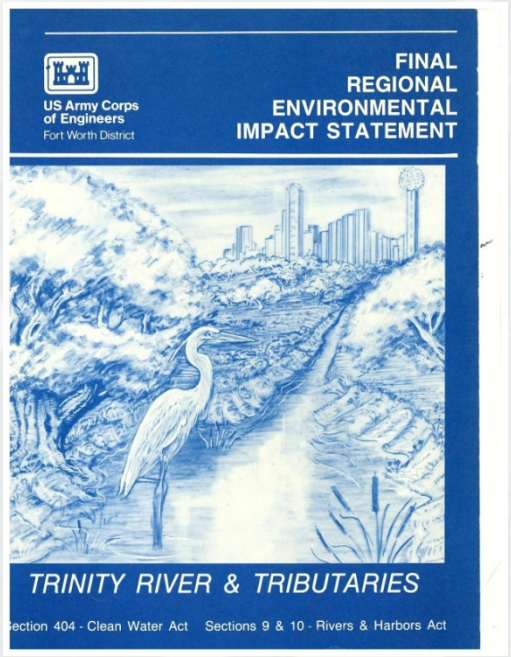
Full floodplain conveyance and storage

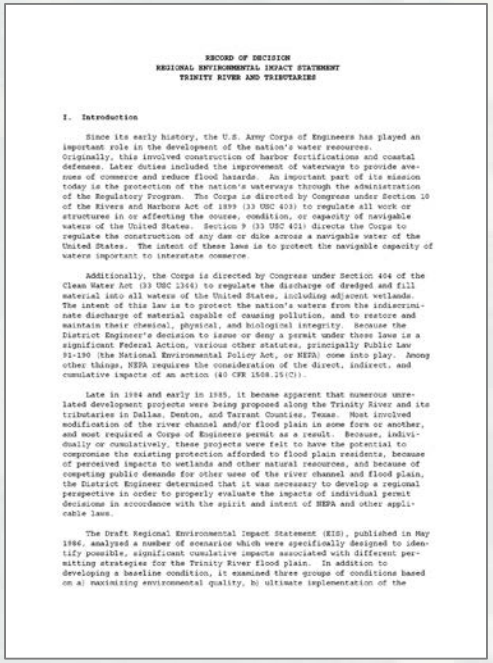
- Downstream flood risk increases
  - Higher flows
  - Higher water surface elevations



Reduced floodplain conveyance and storage

Chronology of the Regulatory Program





RECORD OF DECISION
REGIONAL ENVIRONMENTAL IMPACT STATEMENT
TRINITY RIVER AND TRIBUTARIES

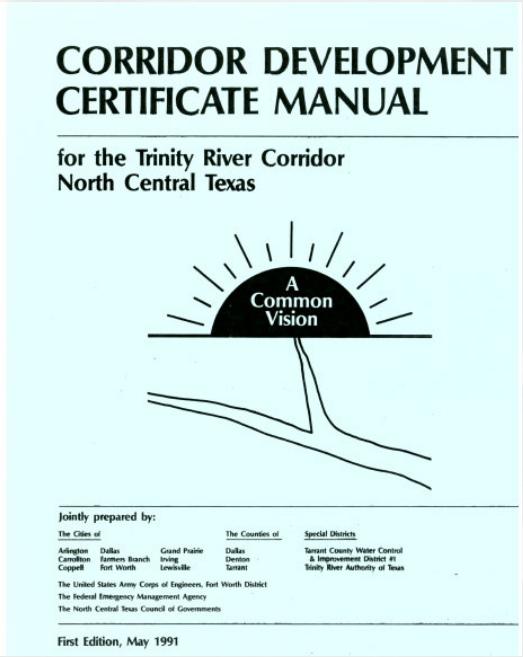
I. Introduction

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce and reduce flood hazards. An important part of its mission today is the protection of the nation's waterways through the administration of the Regulatory Program. The Corps is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition, or capacity of navigable waters of the United States. Section 9 (33 USC 401) directs the Corps to regulate the construction of any dam or dike across a navigable water of the United States. The intent of these laws is to protect the navigable capacity of waters important to interstate commerce.

Additionally, the Corps is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including adjacent wetlands. The intent of this law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution, and to restore and maintain their chemical, physical, and biological integrity. Because the District Engineer's decision to issue or deny a permit under these laws is a significant Federal Action, various other statutes, principally Public Law 91-190 (the National Environmental Policy Act, or NEPA) come into play. Among other things, NEPA requires the consideration of the direct, indirect, and cumulative impacts of an action (40 CFR 1508.25(C)).

Late in 1984 and early in 1985, it became apparent that numerous unrelated development projects were being proposed along the Trinity River and its tributaries in Dallas, Denton, and Tarrant Counties, Texas. Most involved modification of the river channel and/or flood plain in some form or another, and most required a Corps of Engineers permit as a result. Because, individually or cumulatively, these projects were felt to have the potential to compromise the existing protection afforded to flood plain residents, because of perceived impacts to wetlands and other natural resources, and because of competing public demands for other uses of the river channel and flood plain, the District Engineer determined that it was necessary to develop a regional perspective in order to properly evaluate the impacts of individual permit decisions in accordance with the spirit and intent of NEPA and other applicable laws.

The Draft Regional Environmental Impact Statement (EIS), published in May 1986, analyzed a number of scenarios which were specifically designed to identify possible, significant cumulative impacts associated with different permitting strategies for the Trinity River flood plain. In addition to developing a baseline condition, it examined three groups of conditions based on a) maximizing environmental quality, b) ultimate implementation of the



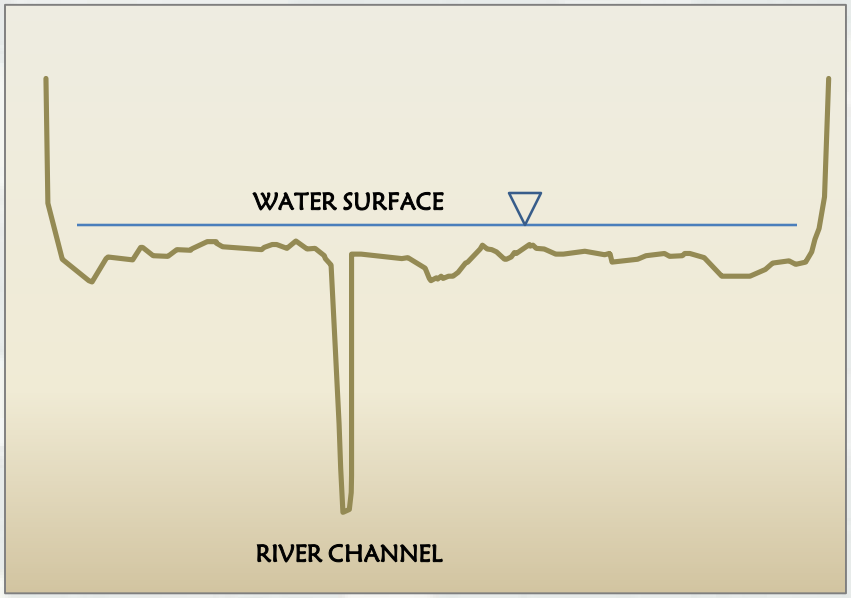
TREIS 1987 → **ROD 1988** → **CDC 1991**

Benefits of the CDC Process

- Establishment of the CDC Process provides a number of benefits and innovations, including the stabilization of flood risk.
- Common regional criteria
- State-of-the-art floodplain mapping
- Hydrologic modeling based on year 2055 Upper Trinity River watershed development
- A current hydraulic model incorporating CDC permitted floodplain development
- U.S. Army Corps of Engineers technical review
- Regional review and comment

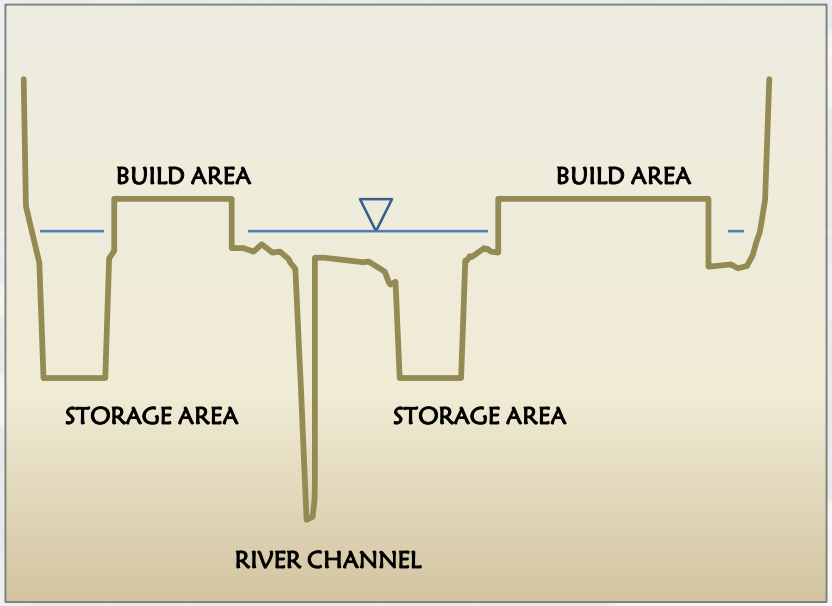
Corridor Development Certificate

Floodplain as a Reservoir



Full floodplain conveyance and storage

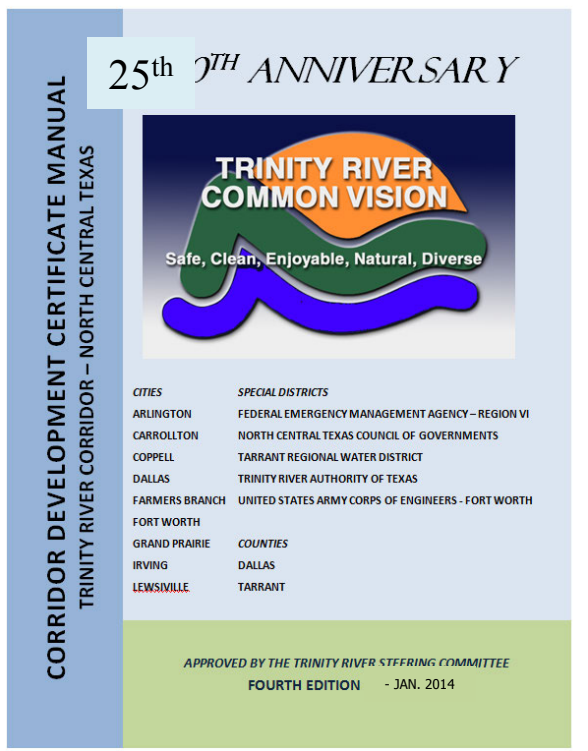
- Reduces, but does not eliminate, impacts on downstream flood potential (compromise)



Recovered conveyance and compensatory storage

Corridor Development Certificate

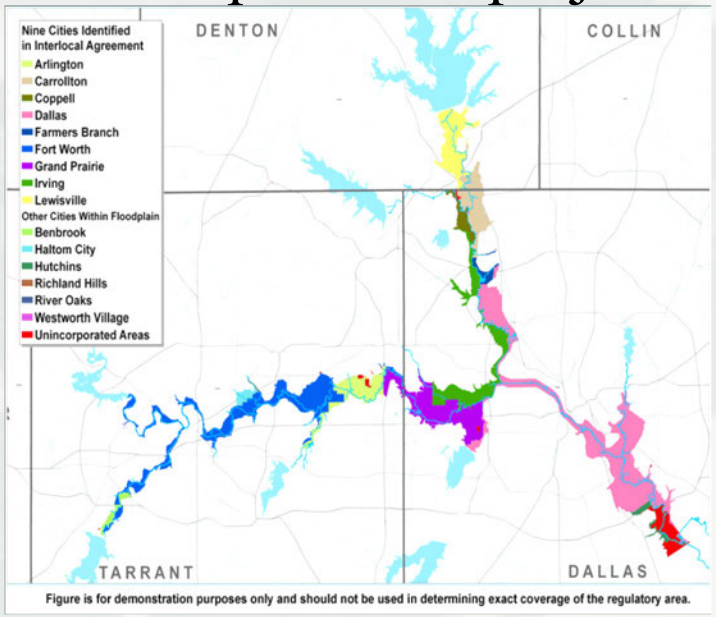
Cost Recovery Fees and Processing Times



- $5750
  - Projects with conveyance areas
- $3250
  - Projects with storage area only
- 30 days processing time
- Additional time and money for complex projects

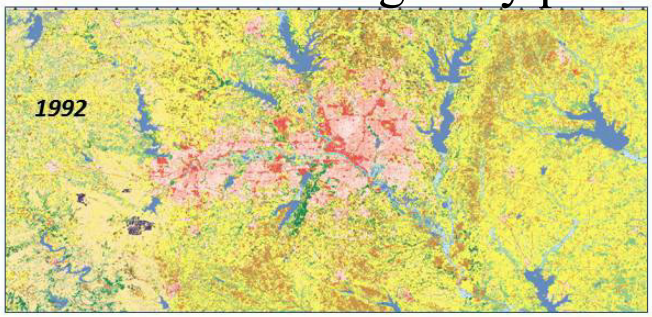
Corridor Development Certificate
2014 Update

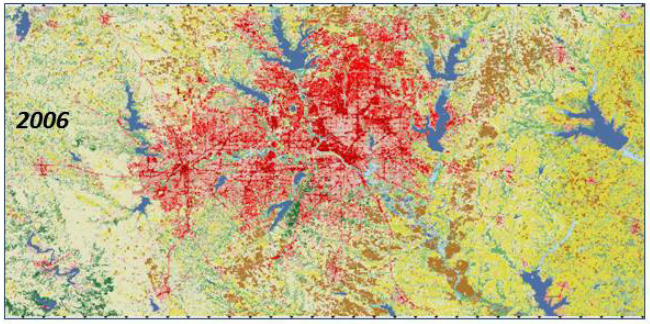
- Updated hydrology and river hydraulics with:
  - ► Updated land use
    - 2005 baseline
    - 2055 planning horizon
  - ► Incorporation of all (91) constructed and permitted projects
  - ► Updated topography
- Implementation of latest technologies



Corridor Development Certificate
Findings

- CDC program has been effective in limiting the loss of valley storage
- Flood risk within the Trinity River corridor would have increased without the program
- Population growth and watershed development have occurred more rapidly and in different areas than originally predicted





Comparison of Urbanization in DFW Metroplex 1992-2006 (Melinda Luna)

Corridor Development Certificate
Findings

- The CDC program does not limit the significant impact of loss of valley storage, as well as increased urbanization and impervious cover, in non-regulated portions of the watershed
  - ►Discharges and water surface elevations will increase as a result of development in upstream areas not regulated by the CDC program
  - ►Discharges will increase up to 30%
  - ►Water surface elevations will increase up to 3 ft

Corridor Development Certificate
Future Considerations

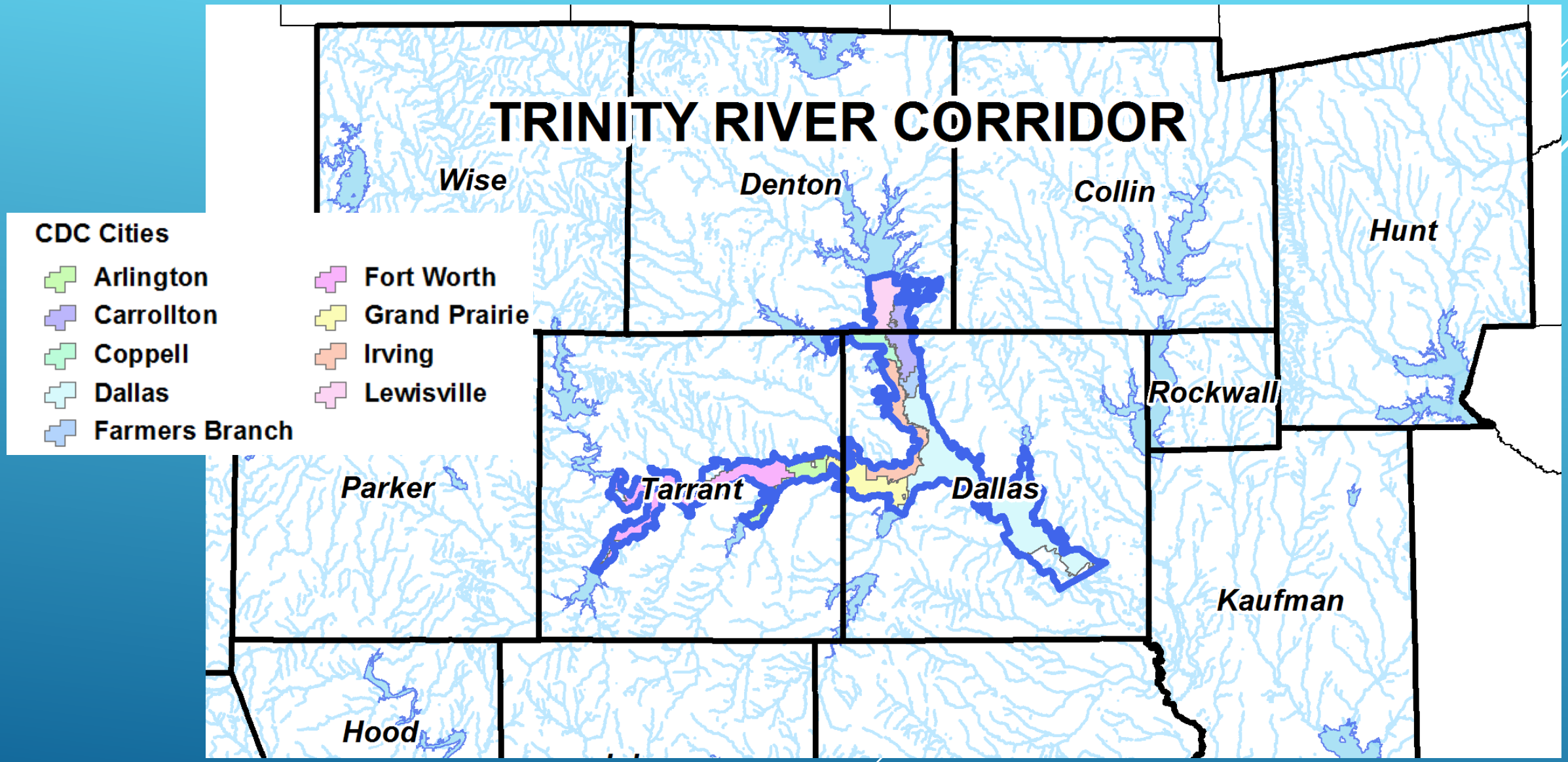
- Consistent regional storm water management goals, policies and practices could complement CDC valley storage preservation program and be an important strategy to manage increased peak discharge rates due to urbanization
- The CDC program is currently the only regional storm water management program for the metroplex

WEB Sites

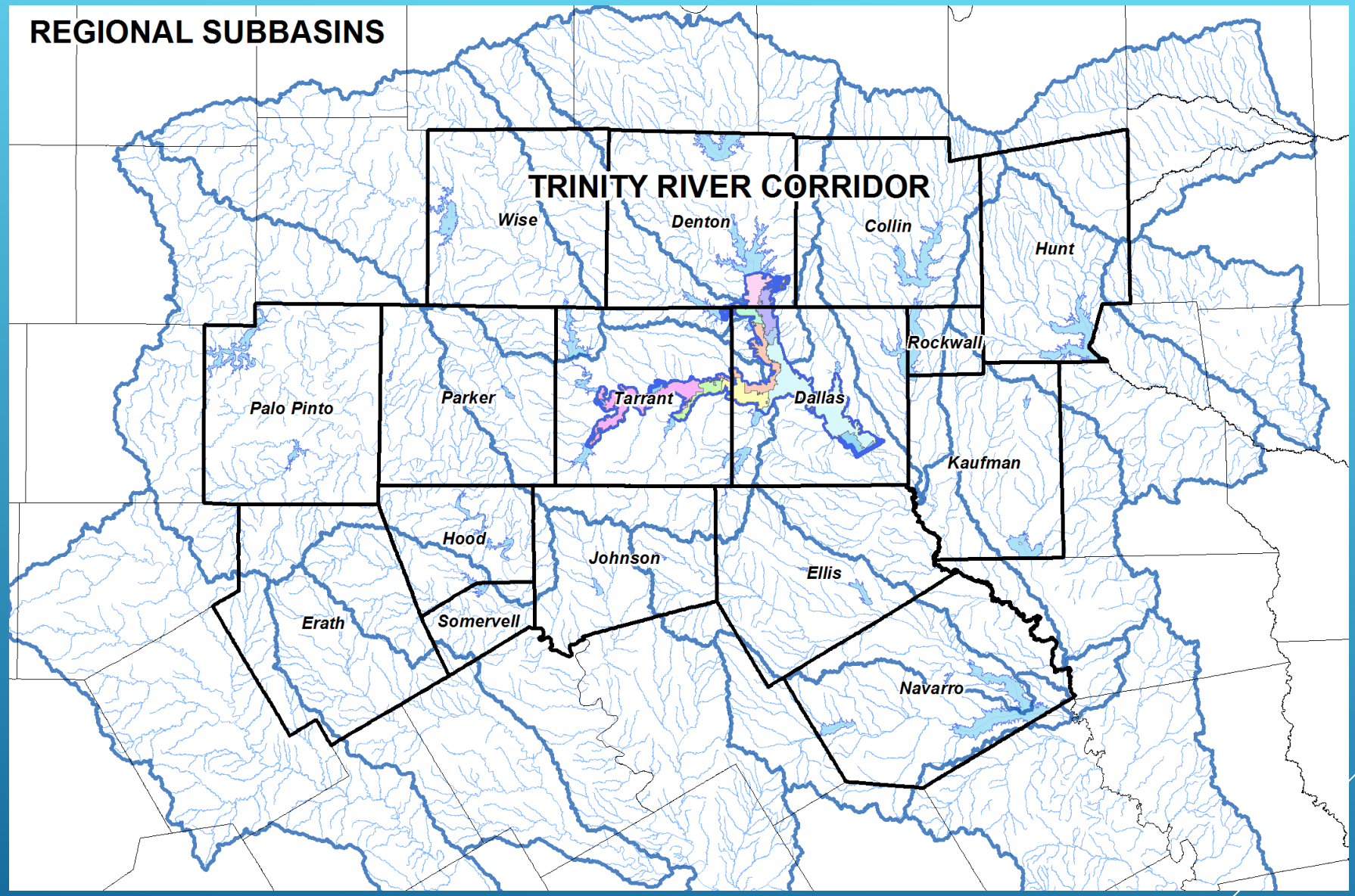
www.usace.army.mil
www.swf.usace.army.mil
www.swf-wc.usace.army.mil

Questions?

WHERE DO WE GO FROM HERE???

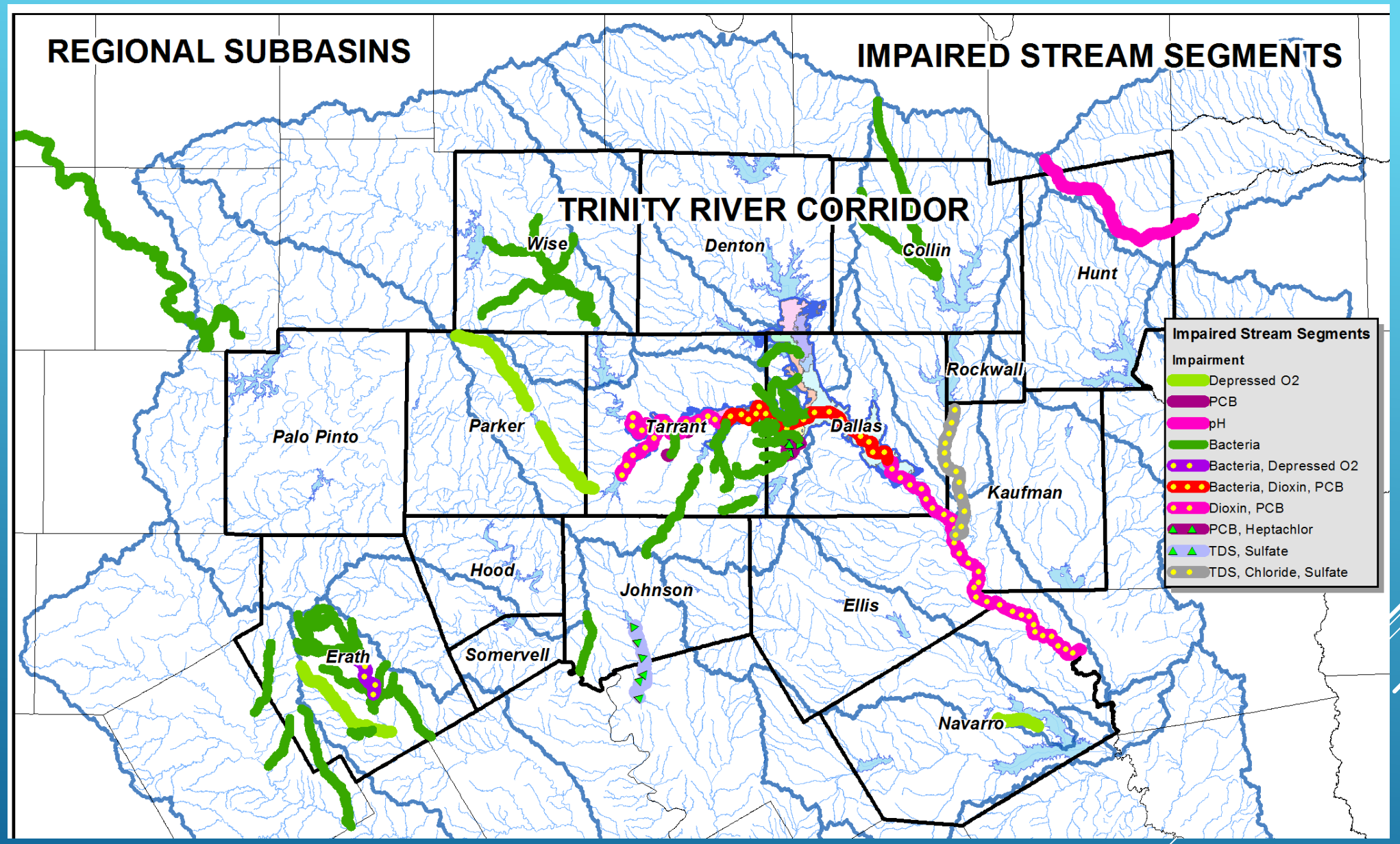


Celebrate this! – 25 Years



6.8 Mill x 2

Think forward about growth!



Don't forget about quality!

Consider options like:

- iSWM (higher stds)
- CRS
- CTP participation
- NFIP training
- TFMA membership
- Reverse Litter

Avoid urbanized flooding!

TWDB Update

NCTCOG Floodplain Management Seminar

September 26| Ben Buchanan, CFM
CTP Program Manger

NFIP Services Outline Today

- Introduction
- State NFIP Overview
- Program Areas
- Floodplain Mapping
- Cooperating Partners
- FEMA Highlights
- What Local Officials Need to Know

NFIP Program Services Overview

Flood Mitigation Planning Staff

- Michael Segner, 512-463-3509
  Director, NFIP State Coordinator

National Flood Insurance Program (NFIP)

- Shawn Snyder, 512-463-7771
  Program Specialist

- Jessica Artz, 512-463-9677
  Program Specialist

Flood Protection Grant Program

- Gilbert Ward, 512-463-6418
  Team Leader, State Flood Protection Planning Program

- Ivan Ortiz, 512-463-8184
  FEMA Flood Mitigation Assistance Program

- Kathy Hopkins, 512-463-6198
  FEMA Severe Repetitive Loss Program

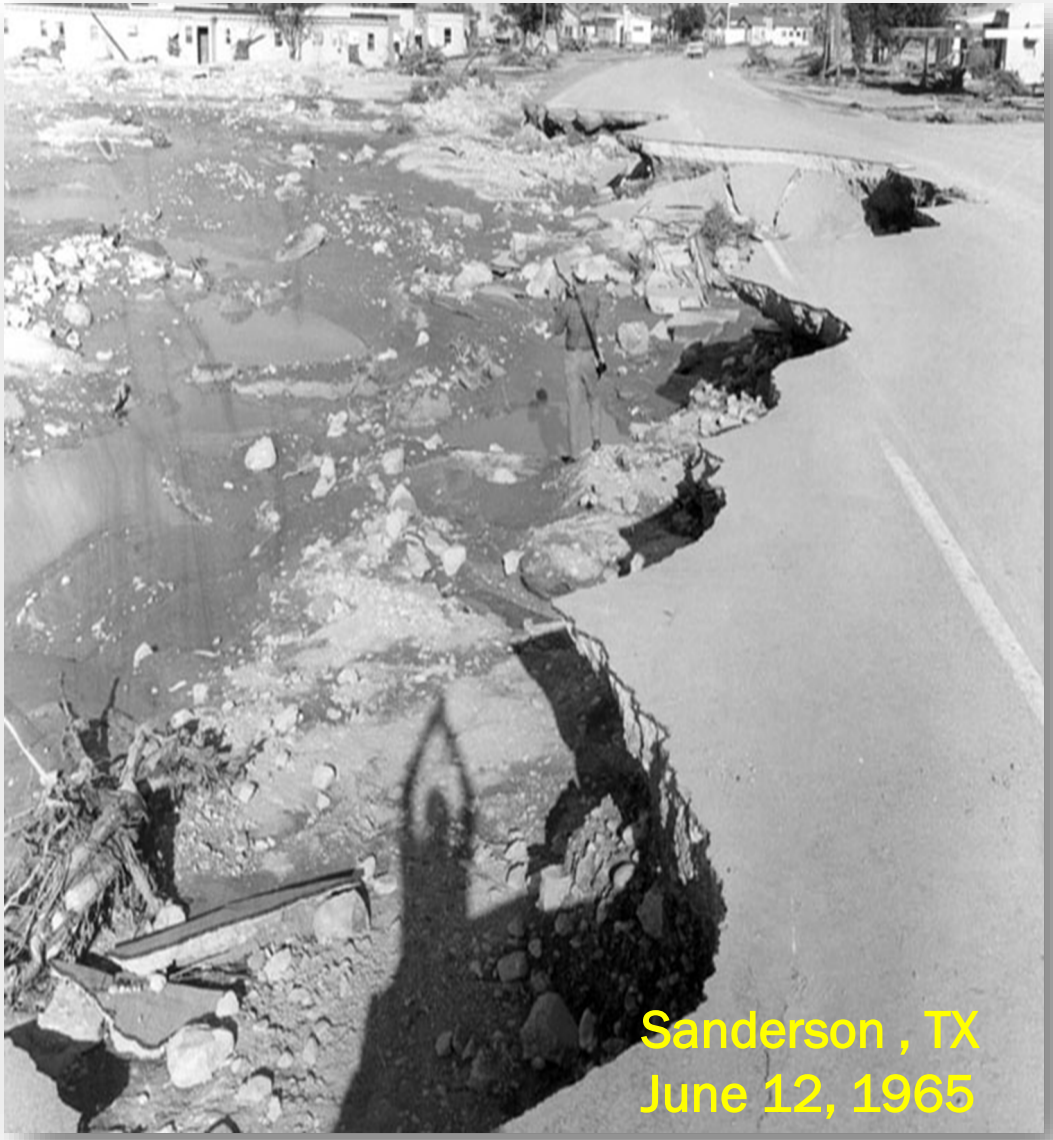
- Jeff Pollock, 512-463-3311
  Contract Specialist

NFIP Program Service Areas

- NFIP Program
- Flood Protection Grants
- Workshops and Training
- Community Resources
- CTP Mapping Services


Herald/TJ MAXWELL

NFIP Flood Mapping Services



- Build greater understanding of floodplain management needs in Texas for decision makers and the public through outreach
- Implement statewide databases for local mapping status and flood projects
- Show historical floodplain changes
- Work together to maximize funds

Federal Cooperating Partners

FEMA

U.S. Department of Housing and Urban Development

Silver Jackets

National Weather Service

NOAA

US Army Corps of Engineers.

- Mitigation
- Forecasting
- Grants
- Infrastructure
- Economic Development

FEMA Flood Risk Coordination

- Mitigation Planning & Grants
- Technical Assistance
- Community Visits
- Floodplain Mapping Changes
- Regulatory Guidance
- Buyouts
- Risk MAP Program

FEMA

State Cooperating Partners

- Watershed Studies
- Technical Assistance & Visits
- Education Through Workshops
- Websites

State Cooperating Partners Continued

Beaches & Shores

Rural Community Development Block Grants

Mitigation Plans

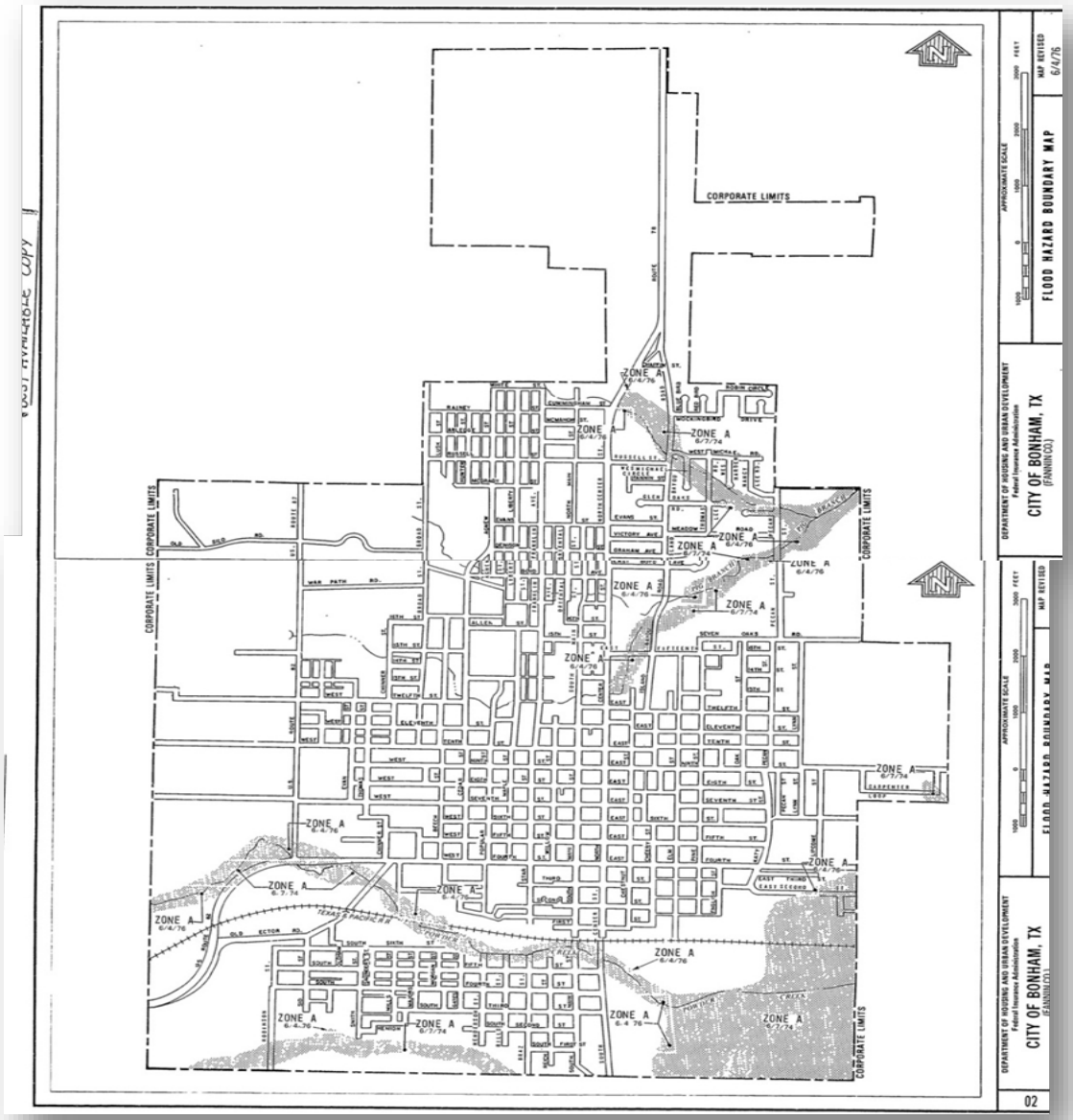
Local Cooperating Partners

Linz am Rhein, Germany, June 2014

- Emergency Operations Center
- Fire Department
- Law Enforcement
- Engineering Services
- Environmental
- Planning & Zoning
- Grants Administration

For Local Officials

- Know Your Grants!
- Unite Planning with Engineering with Emergency Management
- Mitigate, Mitigate, and Mitigate Again
- Environmental Spaces and Places
- Who do you Serve?
- Know Your Risk!



Thank You

Floodplain Mapping Services – Main Line 512-463-0167
Texas Natural Resources Information Systems,
a part of the Texas Water Development Board

Benjamin.Buchanan@twdb.texas.gov

Michael.Segner@twdb.texas.gov

TNRIS

Texas Water Development Board

Texas Floodplain Management Association

Floodplain Management Seminar for Policy Makers

North Central Texas Council of Governments

September 26, 2014

Jessica Baker – TFMA Vice President

What is TFMA?

- Organization of professionals with a wide range of experience and expertise in:
  - Floodplain Management
  - Stormwater Management
  - Flood Hazard Mitigation
  - FEMA's National Flood Insurance Program (NFIP)
  - Flood Preparedness
  - Flood Warning
  - Flood Awareness/Outreach

What is TFMA?

- Non-profit organization
- Established in 1988
- State Chapter of the Association of State Floodplain Managers (ASFPM)
- Largest association/chapter in the nation (outside of ASFPM)
- Current Membership - 2,000 members
- Just celebrated our 25th Year Anniversary

About Our Members

Employers:

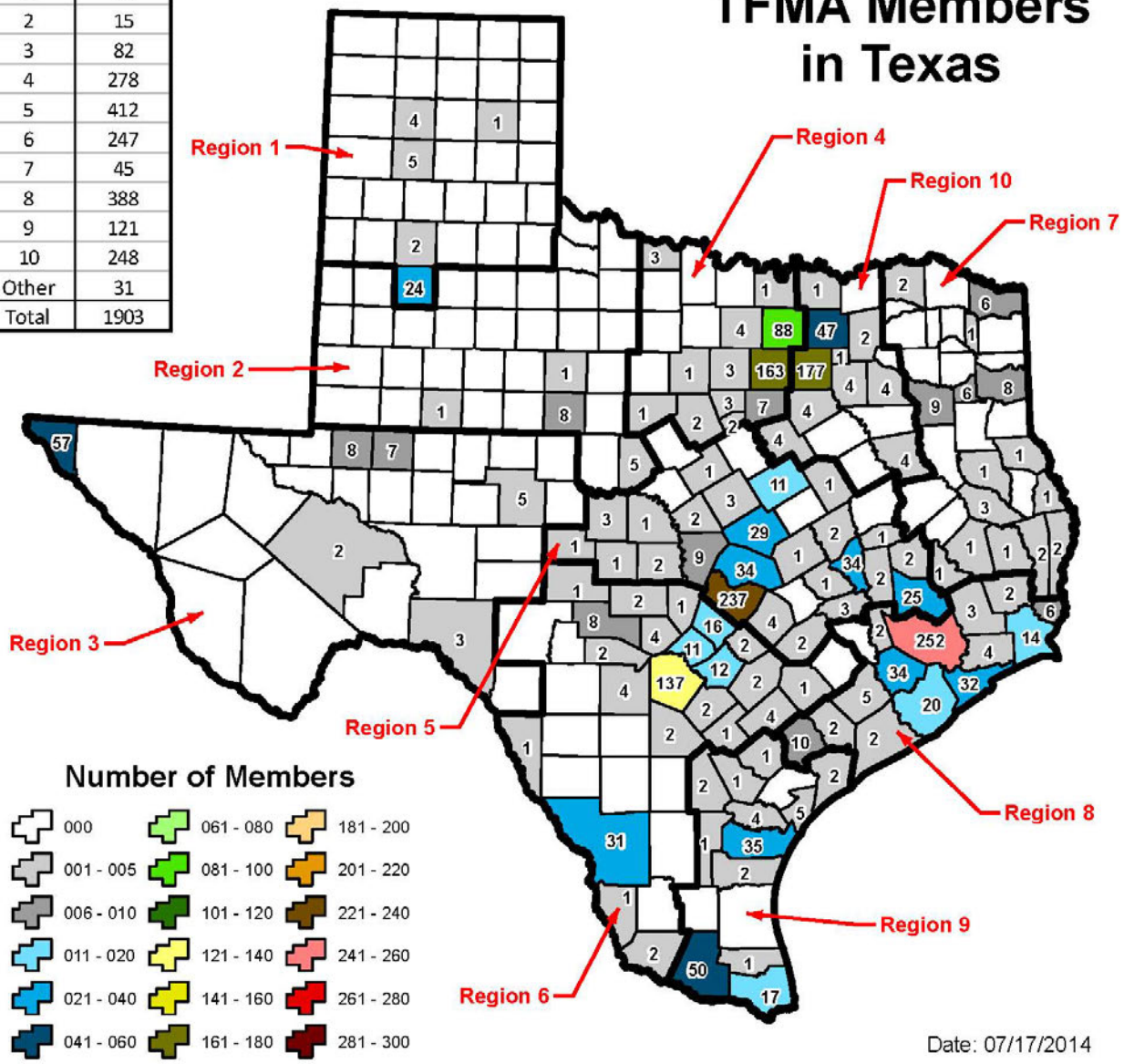
- Public Sector (50%)
  - Local
  - State
  - Federal
- Private Sector (50%)
  - Consultants
  - Mortgage
  - Insurance
  - Vendors/suppliers
- Retirees

Type of Work:

- Engineering
- Permitting
- Hydraulic Forecasting
- Water Resources
- Flood Zone Determination
- Insurance and Research
- Emergency Response
- Geographic Information Systems (GIS)
- Other

TFMA Members in Texas

Region	MEMs
1	36
2	15
3	82
4	278
5	412
6	247
7	45
8	388
9	121
10	248
Other	31
Total	1903



TFMA Purpose

- Promote public awareness of proper floodplain management
- Promote professional status of floodplain management
- Enhance cooperation and exchange information among individuals, private organizations and public agencies
- Promote floodplain management education
- Inform members of floodplain management legislation

Certified Floodplain Manager

- CFM Program is Nationally Accredited certification – Started in 1996
- Over 6,000 CFMs in US
- Over 1,750 in Texas (90% of members)
- TFMA administers program for CFMs in Texas
- Exam offered throughout the year
- 8 Continuing Education Credits (CECs) required annually to maintain certification

Training Offered in Texas

- 20+ Courses offered in Texas in 2014
- ½ Day to 4 Day Courses
- 1800+ Attendees
- Remaining 2014 Training:
  - October 1 – Floodplain Management 101 in Richardson
  - October 7 – Floodplain Management Refresher in Denton
  - December 1 to 5 – 4 Day NFIP Course + CFM Exam at NCTCOG
  - December 12th – NFIP Refresher Course in Fort Worth

TFMA Conferences

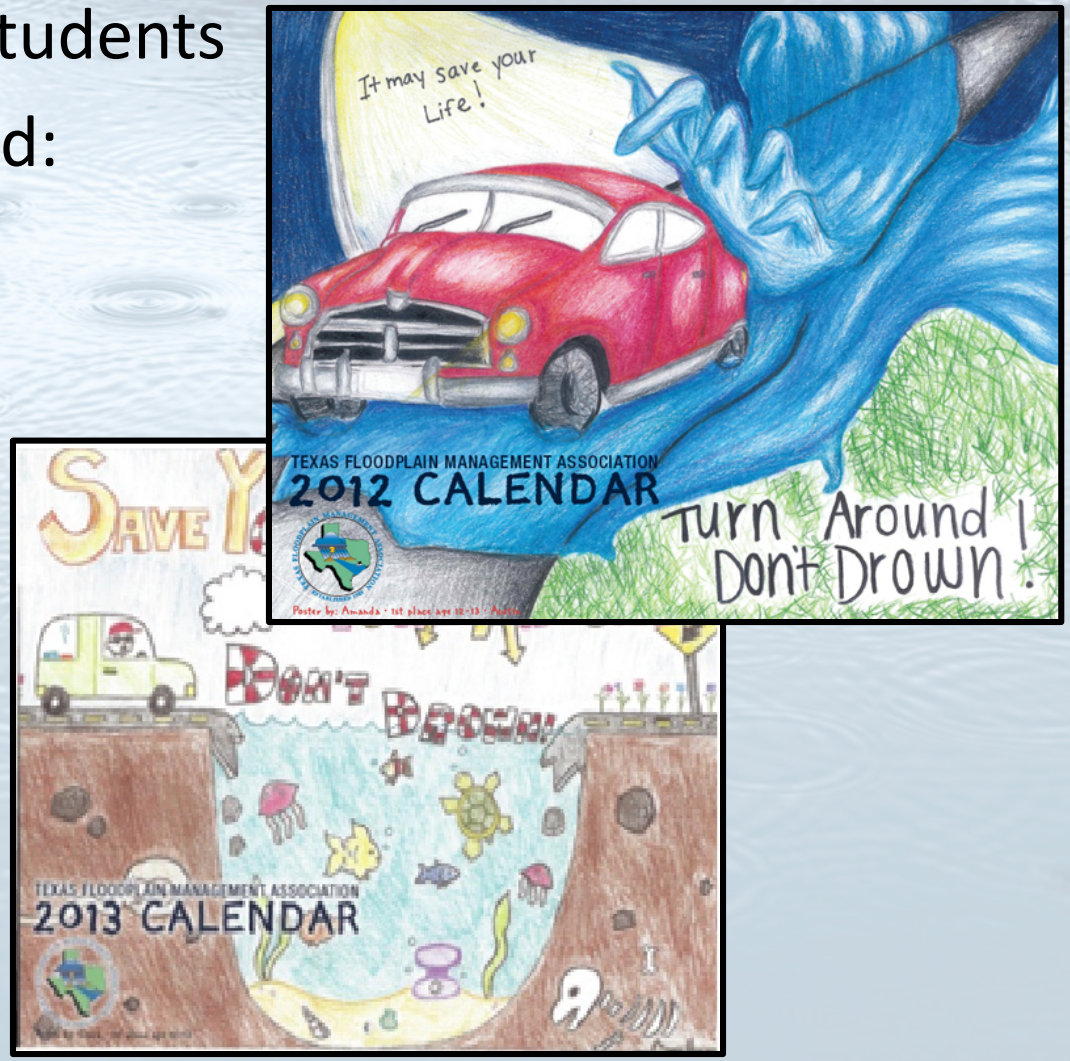
- 2014 TFMA Annual Spring Conference
  - May 27 – 30, 2014
  - Irving
- 2014 TFMA Fall Technical Seminar
  - September 2 – 5, 2014
  - San Antonio
- 2015 TFMA Annual Spring Conference
  - April 14 – 17, 2015
  - Dallas: Westin Park Central

TFMA Outreach

- 3D Flood Model
- Demonstrates Impact of Development in the Floodplain for Audiences of All Ages
- Denton County Public Works at North Texas State Fair and Rodeo in August 2014

Turn Around Don't Drown! Calendars

- Austin Elementary Students
- Calendars Distributed:
  - 5,000 (2010)
  - 7,500 (2011)
  - 10,000 (2012)
  - 10,000 (2013)
  - 15,000 (2014)
  - 15,500 (2015)



Texas Floodplain Management Association

Like us on Facebook:

TXFMA

Follow us on Twitter:

@TexasCFM

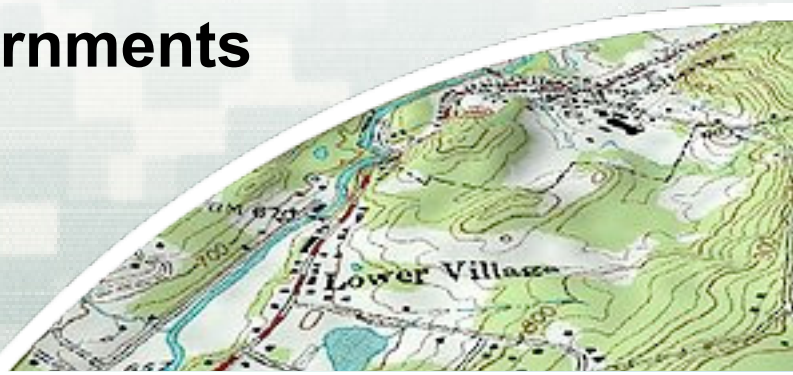
TFMA.org

Jessica Baker – TFMA Vice President

JBaker@Halff.com

USACE Regulatory Program

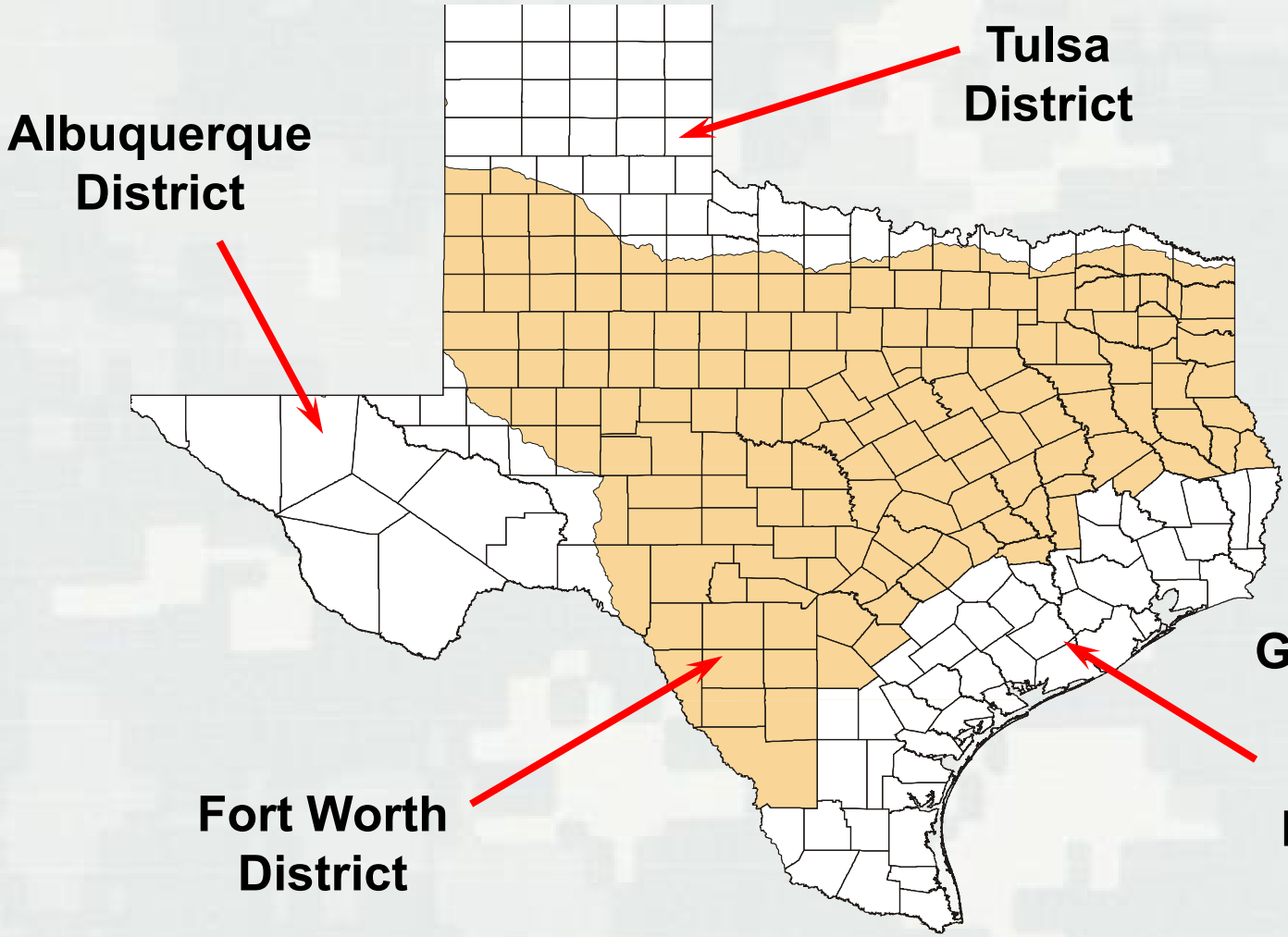
No. Central Texas Council of Governments
Floodplain Management Seminar
Arlington, TX
September 26, 2014



Chandler Peter
Technical Specialist
Regulatory Division
Fort Worth District

▪US Army Corps of Engineers
▪BUILDING STRONG®

USACE Districts in Texas - Regulatory



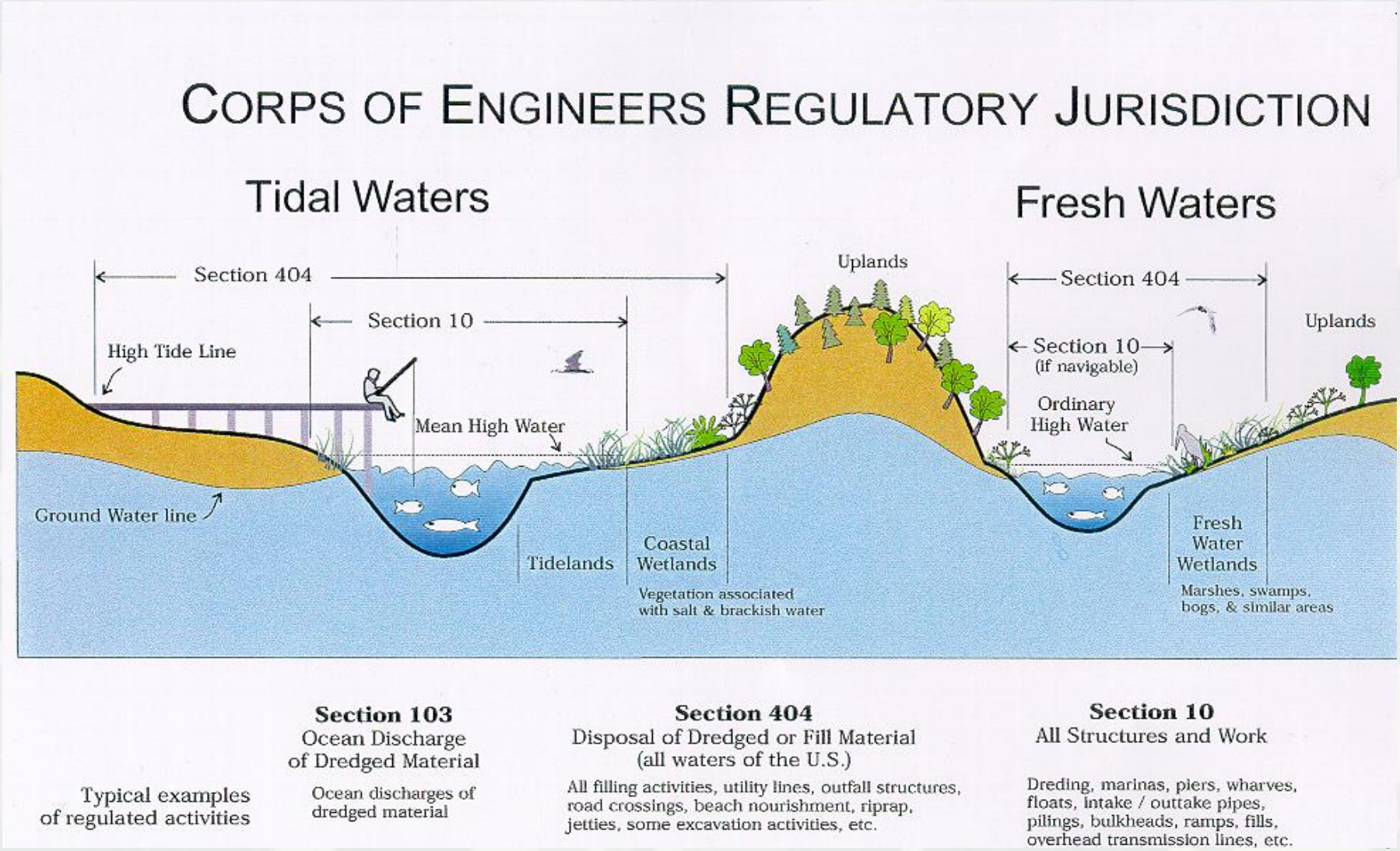
Program Authorities

- Construction and dredging
- Section 10 Rivers and Harbors Act 1899

- Discharge of dredged and fill material
- Section 404 Clean Water Act

- Transport and discharge of
- Dredged material
- Section 103 Ocean Dumping Act

Jurisdictional Limits



Types of Permits

- Review large variety of proposed activities
- Three levels of permit reviews
- USACE utilizes least burdensome level
- Fort Worth has established “templates” for efficient submittal of most common permit applications

  http://www.swf.usace.army.mil/regulatory

General Permits

- 3 categories
  - Nationwide
  - Regional
  - Programmatic
- For minimal impact activities
- Limited paperwork
- Most decisions within 45 days

Common General Permit Activities

- Maintenance
- Utility Line Installation
- Bank Stabilization
- Linear Transportation Crossings
- Residential Developments
- Temporary Construction, Access, and Dewatering
- Commercial & Institutional Developments
- Recreational Facilities
- Storm water Management Facilities

Individual Permits

- 2 categories
  - Letters of Permission
  - Standard Individual Permits
- More substantive processes
  - Public notice/agency coordination
  - Project need assessment
  - Alternatives analysis
  - More robust impact analysis
- Most decisions within 120 days

Floodplains & USACE Permitting

- Regulatory does not regulate floodplains
  - ► Jurisdictional resources USACE does regulate typically occur in floodplains
  - ► Floodplain functions/management are considerations in permit reviews & decision process
    - Normally not a primary driver in permit decisions
    - Will utilize floodplain studies/permits for local requirements to assist in permit review

Floodplains & USACE Permitting

- Three key sets of regulations to satisfy
  - National Environmental Policy Act
  - Public Interest Review
  - 404(b)(1) Guidelines
- E.O. 11988 - floodplain management
- NWPs require activities must comply w/ applicable FEMA-approved state or local floodplain management requirements
  - Coordination with local floodplain management officials occurs regularly

Corps Regulatory Program Information

- *National Regulatory Program Home Page*:
  http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx

- *Fort Worth District Regulatory Home Page*: http://www.swf.usace.army.mil/regulatory
- Fort Worth District (817) 886-1731
- Chandler Peter (817) 886-1736 chandler.j.peter@usace.army.mil

- *If this program assisted you, please help us improve our services by completing the survey on the following website:* http://per2.nwp.usace.army.mil/survey.html

Questions?

BASIC FLOODPLAIN MANAGEMENT

"Compliance"

Dale Hoff, CFM
Instructor

Basic Floodplain Management

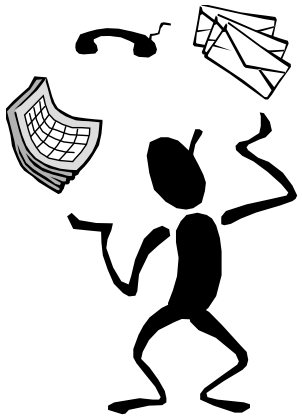
NFIP established in 1968

Established a 3 Part System

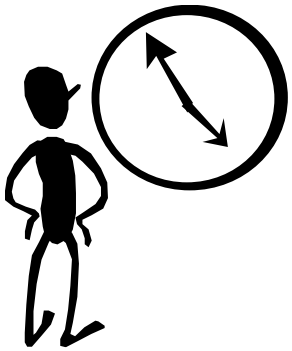
- **Floodplain Management: Local Laws**
  - **Compliance**
  - **Regulatory**
- **Risk Identification: Flood Maps**
- **Flood Insurance**

RESPONSIBILITIES:

- **Federal - FEMA**



- **State**



- **Community**

Floodplain Management
Federal (DHS/FEMA) Responsibilities

- Risk Identification (Flood Maps)
- Establish development/building standards
- Provide affordable flood insurance coverage
- Provide technical assistance & evaluate floodplain management activities

Floodplain Management

State Coordinator Responsibilities

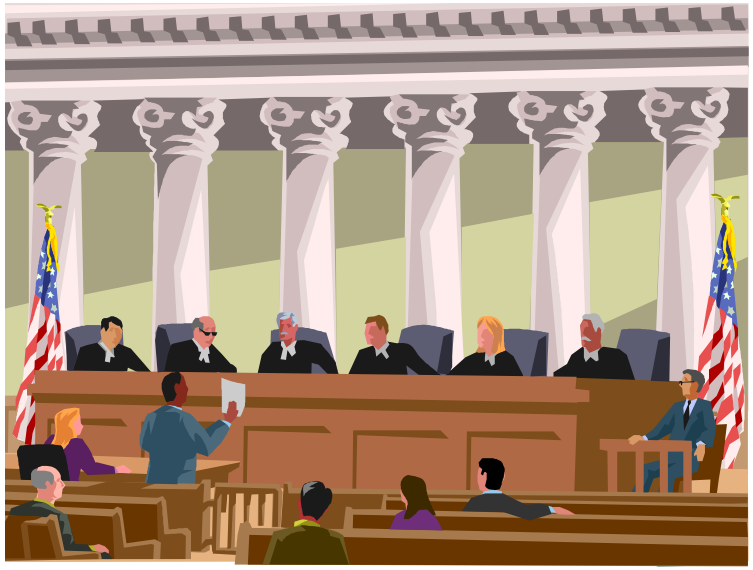
Texas Water Development Board (TWDB)

- Establish development/building standards
- Provide technical assistance to local communities/agencies
- Evaluate and document community /agency floodplain management activities

A Community Must

- **Adopt an ordinance reflecting the minimum provisions of 44 CFR 60.3**

- **Enforce its ordinance**



Floodplain Management
Community's Responsibility

- Adopt a local flood damage protection ordinance
- Enforce the provisions of the local ordinance
- Maintain records
- Coordinate development
- Permit development
- Inspect development
- Lead efforts for flood mitigation

Be Prepared –
We can not eliminate Disasters – but you can be prepared –
And you can reduce the Loss of life and property.

Don't wait for a flood to plan.

It's too late for planning, your community will be reacting.

Sanctions for Non-Participation

A community that does not join NFIP; has withdrawn, or is suspended, faces the following sanctions:

- **NFIP flood insurance not available**
- **No renewals**
- **No Federal grants**
- **Limited Federal disaster assistance**
- **No Federally backed loans**
- **FLOODPLAINS NOT REGULATED**

Remedy a Violation

FEMA Remedies (on the community):

- **Probation**
- **Suspension**
- **Subrogation**

COMMUNITY Remedies (on the owner):

- **Court**
- **Fines**
- **1316**

Flood insurance can be denied by FEMA or the community

COMMUNITY FLOODPLAIN REGUATIONS

- Legally enforceable
- Applied uniformly
- Takes precedence over any less restrictive conflicting laws, ordinances, and
- Must meet or exceed the minimum standards of 44 CFR Section 60.3

44 CFR 60.1(d)

- Any community may exceed the minimum criteria by adopting more comprehensive floodplain management regulations.
- Any floodplain management regulations adopted by State or a community which are more restrictive than the minimum standards are encouraged and take precedence.

Why do we Need the NFIP?

- Protection from the damaging effects of floods
- Methods of recovery from flooding
- Mitigate against future damages

Texas Communities Participating in the National Flood Insurance Program (NFIP)

Includes Cities and Counties, etc:

Participating:	1,239
Non-Participating:	147

Questions?

COMMUNITY RATING SYSTEM

What is it and Why Does My Community Need It?

What is It?

- Voluntary Program
- Encourages Communities to Exceed NFIP Standards
- Offers Reductions to Homeowner's Insurance Premiums
- Rewards Good Management Practices

CARROLLTON
TEXAS

Typical Activities

- Channel Maintenance
- Mapping of Facilities
- Public Outreach on Flooding Issues
- Higher Regulatory Standards – Freeboard
- Maintain / Provide Open Space

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TEXAS

Process

- Apply to CRS (NFIP Participant)
- Send Supporting Documentation
- Based on Points, Entity secures a rating between 1 and 10
- For Entities with ratings over 5, document activities at an audit every 5 years. Less than 5, every 3 years.

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TEXAS

Benefits

- Reduces Potential Flood Damage
- Citizens Save on Flood Insurance

Points	Rating	Reduction in SFHA	Reduction in non-SFHA
4,500+	1	45%	10%
4,000 – 4,499	2	40%	10%
3,500 – 3,999	3	35%	10%
3,000 – 3,499	4	30%	10%
2,500 – 2,999	5	25%	10%
2,000 – 2,499	6	20%	10%
1,500 – 1,999	7	15%	5%
1,000 – 1,499	8	10%	5%
500 – 999	9	5%	5%
0 – 499	10	0	0

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Challenges

- Managing Records can be daunting
- Multi Departmental Effort
  - Engineering
  - Building Inspection
  - Public Works
- Determining a Reasonable Rating Goal

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CRS Program Highlights

- Tools to improve Floodplain Management
- Relative Measure of Floodplain Management Efforts
- While no direct financial benefit to City –
  - Citizens receive reduced insurance rates
  - Potential for severe flood damage is reduced
  - Numerous 'side benefits'

CARROLLTON
TEXAS

Questions / Comments?

Michael G. McKay, P.E., CFM
Floodplain Administrator
City of Carrollton
Mike.mckay@cityofcarrollton.com

CARROLLTON
TEXAS

FEMA's Cooperating Technical Partners Program

What is the CTP Program?

The CTP Program was created in 1999 to help FEMA stretch limited mapping dollars and increase local involvement in the creation for the FIRMs and DFIRMs.

Program Objectives?

- Maintain consistent national standards while interjecting a tailored, local focus
- Provide training and technical assistance
- Use data from local permitting, planning and other efforts to facilitate floodplain management
- Extend limited public funds
- Utilize local experience and knowledge
- Facilitate mentoring of partners that are willing to develop ability to maintain flood hazard information

Who can be a CTP?

- Communities, State or regional agencies, universities or Tribal nations
- Must have the interest and capability to become active partners in the FEMA flood hazard mapping program

Benefits

- Customized Maps
- Increased Recognition
- Integral Part of the Process
- Training
- CRS Credit

Selection criteria

- Have existing systems in place to support data collection and flood hazard mapping
- Have demonstrated capability to perform implement or contract given activity
- Be a participating community or serve participating communities that are in good standing in the NFIP
- Be able to perform required financial management activities (if funding is provided by FEMA)
- Have in-house staff able to monitor the performance and approve completed products for contracted work

Types of CTP Agreements

- Partnership Agreement
  - Required for program participation
- Mapping Activity Statement
  - Required for undertaking activities
- Cooperative Agreement
  - Required when FEMA provides funding

Partnership Agreement

- Formalizes partnership with FEMA
- Emphasizes
  - Flood Hazard Identification
  - Flood Insurance
  - Floodplain Management
- Indicates that a partner and FEMA will collaborate on activities
- Does not obligate any party to any work or funding
- Must be completed with close coordination with the FEMA Regional CTP Coordinator

Mapping Activity Statement

- Documents all project activities
- Ensures that the project team members understand all their roles and responsibilities
- Confirms role of each project team member
- Is maintained by the entire project team as changes occur
- Is developed in close coordination with the entire project team

Cooperative Agreement

- Is the method through which Federal funding is provided
- Locally funded activities can be initiated at any time without a Cooperative Agreement

Fundable Tasks

- Program Management
- Base Map Acquisition
- Scoping (up to 10%)
- Outreach (up to 10%)
- Riverine Floodplain Analyses and Floodplain Mapping

Thank you!