

CORRIDOR DEVELOPMENT CERTIFICATE MANUAL

for the

TRINITY RIVER CORRIDOR

North Central Texas

JOINTLY PREPARED BY:

The Cities of

Arlington
Carrollton
Coppell

Dallas
Farmers Branch
Fort Worth

Grand Prairie
Irving
Lewisville

The Counties of

Dallas

Denton

Tarrant

Special Districts

Tarrant County Water Control and Improvement District Number One
Trinity River Authority of Texas

United States Army Corps of Engineers, Fort Worth District

Federal Emergency Management Agency

North Central Texas Council of Governments

**AS APPROVED BY THE TRINITY RIVER STEERING COMMITTEE ON:
MAY 23, 1991**

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FOREWORD

A Steering Committee of elected officials has been guiding the interjurisdictional program and has adopted a *Regional Policy Position for the Trinity River Corridor*. This Policy Position states that, "Until a major flood control program can be completed to reduce or eliminate existing flood threats, the continuing pressure for development of the floodplain must be managed in the most practical and equitable manner possible to at least stabilize current levels of flooding risk. Attention must also be placed on meeting water and other environmental quality goals and implementing desired regional public facilities."

The Corridor Development Certificate (CDC) Team of the Trinity Corridor Flood Management Task Force has drafted this Manual over a two and one-half year period. The goal of the CDC process is to avoid any adverse cumulative impacts from development in the corridor. The CDC Team has strived to address many of the complex issues involved in the development of this Manual in order to create a sound and equitable process for the development of the Trinity River Corridor. The Flood Management Task Force completed its review of this Manual on May 1, 1991. It was approved by the Trinity Corridor Steering Committee of elected officials on May 23, 1991.

However, there are significant topics that still require discussion. It is important to realize that this Manual represents a dynamic process that will continue to develop and change over time. As more detailed information develops, the requirements of this process will change. The CDC Team has crafted this Manual using the following three primary sources of material:

- U.S. Army Corps of Engineers Record of Decision; April, 1988
- Fort Worth Development Policy;
- North Central Texas Council of Governments Trinity River Steering Committee Statement of Principles; January, 1988

THIS MANUAL REFLECTS POLICY ENDORSED BY THE TRINITY RIVER STEERING COMMITTEE. EACH PARTICIPATING JURISDICTION RETAINS PERMITTING AUTHORITY BUT BASES ITS PERMIT DECISION ON THE SET OF COMMON PERMIT CRITERIA DESCRIBED HEREIN.

CDC MANUAL

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Section 1.0

DESCRIPTION OF A CORRIDOR DEVELOPMENT CERTIFICATE (CDC)

1.1 PURPOSE OF CDC PROCESS

The Trinity River Steering Committee, herein called the **Steering Committee**, composed of elected officials of participating agencies and the North Central Texas Council of Governments Executive Board have adopted a Regional Policy Position on Trinity River Corridor. It calls for a cooperative management program using common permit criteria which are derived from criteria now being applied by the U.S. Army Corps of Engineers (COE) in their permitting process. It also calls for expanded technical assistance by the COE and a regional review and comment process by other local governments for major actions within the Corridor.

In 1988, the **Statement of Principles For Common Permit Criteria** was drafted in order to address common problems and opportunities faced by cities along the Corridor. (See Appendix B) This Statement represented the best attempt at a regional consensus on permit criteria within the 90 days available for response to the COE Final Regional Environmental Impact Statement (REIS) for the Trinity River. It was developed by the Flood Management Task Force through several drafts, with input from the NCTCOG staff, COE, and other governmental agencies and private sector representatives.

A significant finding of the Final REIS indicated that different local policies for floodplain reclamation had the potential of increasing the risk of flooding and the potential for water quality and environmental degradation. The participating nine cities and three counties have expressed their support for a cooperative management program whereby each city retains development permit authority within its jurisdiction but bases its permit decision on a set of common permit criteria.

It is the express purpose of this cooperative process to satisfy the requirements of the Federal Emergency Management Agency (FEMA) and the Texas Water Commission (TWC) regarding city floodplain permit actions within the Trinity River Corridor and to effect close coordination with the U.S. Army Corps of Engineers and other State or Federal agencies that have their own permit processes. The Corridor Development Certificate (CDC) Process does not supersede other State and Federal programs.

The CDC Process represents the high level of commitment exhibited by the FEMA, the TWC and the COE. It has been understood by these agencies that the implementation of the CDC Process will necessitate some procedural changes in each of these organizations. The long-term commitment and cooperation is evident and as the CDC Process evolves, appropriate actions will be taken to improve the CDC Process. Please recognize that the major objective of the CDC Process is to uniformly evaluate development in the Trinity River Corridor based on common criteria by an equitable process. Logically, this will affect some existing design criteria and procedures used by all parties involved. It is important to remember that all permit decisions will be made by the participating local governments based on the common permit criteria contained in this manual.

1.2 GEOGRAPHIC AREA OF REGULATION

The **Trinity River Corridor** is defined in the Interlocal Agreement as the bed and banks of the river segments from the dams of Lewisville Lake, Grapevine Lake, Lake Worth, Benbrook Lake, Lake Arlington, and Mountain Creek Lake, downstream to the area near Post Oak Road and the Trinity River in southeast Dallas County, and all of the adjacent land area and all watercourses contained within the boundaries of the river floodplain as designated by the **Steering Committee** which is composed of elected officials for the Trinity River Corridor Program through NCTCOG.

The Trinity River Corridor will be delineated into two zones - the Regulatory and Review Zones. These zones are incorporated into the **Trinity River Corridor Map - CDC Regulatory and Review Zones** which are available for inspection at the local permitting authority and at NCTCOG. These zones are defined in Section 1.5 DEFINITIONS of this Manual. The Regulatory Zone includes all of the area within the 100-year floodplain as defined and the Review Zone includes the remaining area between the Regulatory Zone and the designated Standard Project Flood (SPF) boundaries of the Trinity River Corridor. The digital map has been approved by the **Steering Committee**. This digital map is maintained by NCTCOG and is available at a 1"= 1,000' scale or larger, from NCTCOG, the COE - Fort Worth District, or the participating local government.

The Regulatory Zone is the area in which any and all development activities will require a CDC permit to occur. The Review Zone is the area in which development activities will require review of Part 1 of the CDC application by the appropriate CDC/Floodplain Administrator(s). Although no permit is automatically required, the purpose of this zone will be to maintain data on activities occurring in important areas of the watershed.

In addition, the cities participating in this program may require Regulatory Zone requirements for areas in the Review Zone within the municipality's jurisdiction.

The **Trinity River Corridor Map** and the **CDC Regulatory and Review Zones Map** were endorsed on July 25, 1991 and were officially approved by the Trinity River Corridor Steering Committee on December 19, 1991.

1.3 DEVELOPMENT ACTIVITIES AFFECTED

Any public or private development within the Regulatory Zone of the Trinity River Corridor must obtain a CDC prior to start of any development activity, unless specifically exempted as discussed in Section 1.4 EXEMPTIONS AND VARIANCES. A development activity means "any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations." To assure consistency with TWC requirements, development activity also includes "any levee or other improvement".

A development activity by a city within the Trinity River Corridor will be treated like any other application for a CDC and will undergo the COE permit process, and if applicable, the regional review and comment process discussed later. To avoid conflicts between adopted policy and city ordinances, the municipal application will then be considered and acted upon by that jurisdiction's policy-making body, e.g., City Council.

NOTE: Throughout this CDC Manual the term "City" is used. However, in unincorporated areas, the respective county or special district would be applicable.

1.4 EXEMPTIONS AND VARIANCES

If a development that is partly or totally within the Trinity River Corridor can show in writing that it meets any of the conditions below, it may be exempted by the city from the CDC permit process. A development is required to request an exemption in writing, using the CDC form, and the city is required to consider such a request. [NOTE: the Applicant should still contact the COE, FEMA, and the TWC to determine if the development is subject to specific permit requirements by those agencies.] If granted, this written exemption and other pertinent information will be maintained on file by the city and will be provided to NCTCOG for the permanent records.

EXEMPTIONS TO THE CDC PERMIT PROCESS:

- A. Ordinary maintenance and repairs of any operational flood control structures.**
- B. Outfall structures and associated intake structures where the outfall has been permitted under the Federal NPDES or State TPDES program.**
- C. Discharge of material for backfill or bedding for utility lines, provided there is no significant change in pre-existing bottom contours and excess material is removed to an upland disposal area.**
- D. Bank stabilization activities.**
- E. Property that is (1) completely outside the Regulatory Zone but within the Review Zone; (2) determined by the COE that no permits are required; and (3) defined or identified by city ordinance such that the property does not require the Applicant to undergo the CDC process in the Review Zone.**
- F. Specific Prior Developments - The existing development projects in Section 1.5 DEFINITIONS of this Manual.**

VARIANCES TO COMMON PERMIT CRITERIA:

Under certain circumstances a variance from these common permit criteria may be issued by the city. A variance may be sought by any public or private development that cannot meet the established common criteria as detailed in Section 2.0 CDC - COMMON PERMIT CRITERIA of this Manual. A variance shall be any modification of the literal provisions of the CDC Manual when strict enforcement of the CDC process would cause undue hardship, owing to circumstances unique to the individual property on which variance from the process is requested. Variances may also be issued for public projects deemed to be in the overall regional public interest, as determined by the jurisdiction's policy-making body, e.g., City Council.

The petition seeking a variance must include a completed **Part 1 - Section A** of the CDC Application. The application will then undergo COE technical review and regional review and comment by signatories to the Interlocal Agreement. The proposed variance must be discussed and supported by the Applicant and the local permitting signatory in this Manual. Any variance granted to a property within the Regulatory Zone must be reviewed and approved by the city council or jurisdiction(s) in which the property is located. The final decision of the City will be provided to the Applicant and copies will be placed in record at NCTCOG.

1.5 DEFINITIONS

- Trinity River Corridor** - For the purpose of the CDC Process, the **Trinity River Corridor** is defined as the bed and banks of the river segments from the dams of Lewisville Lake, Grapevine Lake, Lake Worth, Benbrook Lake, Lake Arlington, and Mountain Creek Lake downstream to the point on the mainstem of the Trinity River near Post Oak Road in southeast Dallas County, and all of the adjacent land area and all watercourses contained within the boundaries of the river floodplain as designated by the approved **Trinity River Corridor** digital map maintained on computer by NCTCOG.
- Upper Trinity River Basin** - the Trinity River watershed upstream of the vicinity of Post Oak Road and the mainstem of the Trinity River in southeast Dallas County.
- 100-Year Flood** - Also known as the base flood. It is the flood having a one percent (1%) probability of being equalled or exceeded in any given year.
- Conveyance** - A measure of the stream carrying capacity of a channel section. It is dependent on the cross-section geometry and friction or roughness characteristics of the channel.
- Design Flood** - A particular predicted flood condition that is used as a basis for design of flood protection facilities such as channels or levees. Those facilities are generally sized to provide protection against the design flood with some freeboard provided as an additional factor of safety.
- Development Activity** - Any manmade change to improved or unimproved real estate, including but not limited to, buildings or other structures, the construction of levees, mining, dredging, filling, grading, paving, excavation, or drilling operations.
- Exemptions** - Developments that fall outside the scope and intent of the CDC process as described in Section 1.4 EXEMPTIONS AND VARIANCES.
- Freeboard** - The vertical distance from the predicted water surface of a particular flood event to the lowest adjacent top of bank of a flood protection facility, e.g., a channel or levee.
- Regulatory Zone** - The area within the 100-year floodplain of the specified reach of the Trinity River as defined by the latest approved version of the digital **Trinity River Corridor Map - CDC Regulatory and Review Zones** maintained by NCTCOG. (See Appendix A)
- Review Zone** - The area between the Regulatory Zone and the designated boundaries of the Trinity River Corridor as defined by the latest approved version of the digital **Trinity River Corridor Map -CDC Regulatory and Review Zones**. The **Steering Committee** has designated these boundaries as the SPF 1995 Baseline boundaries as defined in the **COE March 1990 Upper Trinity River Reconnaissance Report**, herein referred to as the **March 1990 Reconnaissance Report**, and as modified by the Trinity River Flood Management Task Force and delineated by the NCTCOG Regional Geographic Information System (GIS). (See Appendix A)
- Specific Prior Development** ("Grandfathered Projects") - Under the CDC process, existing projects that are included in the COE baseline modeling are identified as Specific Prior Development and may not require a certificate. These projects include those that; 1) are listed in the **March 1990 Reconnaissance Report** (See excerpt in Appendix A), and/or 2) have been approved by the appropriate participating jurisdiction as of the date of the

adoption of this manual. If any significant changes in the project occur or if the term of Permit Validity expires, the project may lose its specific prior development status and be subject to the CDC process. This provision of the process only applies to the CDC requirement; it does not apply to any other State or Federal regulatory program. Projects not specifically addressed by the above conditions may be exempted by the appropriate participating jurisdiction and agencies.

Standard Project Flood (SPF) - The Standard Project Flood is the flood that may be expected from the most severe combination of meteorologic and hydrologic conditions that are considered to be reasonably characteristic of the geographical region involved, excluding extremely rare combinations. In practical terms, a SPF usually has a 0.3 to 0.08 percent probability of being equalled or exceeded in any given year, and is usually between 40 and 60 percent of a Probable Maximum Flood (PMF). The SPF represents a "standard" against which the degree of protection selected for a project may be judged and compared with protection provided at similar projects in other localities.

Term of Permit Validity ("Sunsetting of Permit") - If no development activities occur by the end of five years from the date of issuance, the applicant may submit a written request within thirty days for up to a three-year extension or the CDC permit shall cease to be valid. The City may grant up to a three-year extension. If no request for an extension is made at the end of the thirty day period, the Applicant must reapply for a CDC permit. Summary project status reports are required to be submitted to the CDC/Floodplain Administrator annually. Any significant changes to the project by the Applicant or the City requires the re-evaluation of the permit and may result in a reapplication.

Valley Storage - The temporary storage of floodwater provided by the channel and overbank areas of the floodplain.

Variance - A variance is any modification of the common permit criteria of the CDC Manual when strict enforcement of the CDC process would cause undue hardship owing to circumstances unique to the individual property on which the variance is granted, or when the project would be in the overall regional public interest, as determined by the jurisdiction's policy-making body, i.e., City Council.

ADDITIONAL CLARIFICATIONS:

Significant changes to project by the Applicant or the City can be quantified by the expression: *Those changes that materially affect permitted valley storage, conveyance, and environmental impacts.*

The CDC permit will be considered as a portion of the property. The Applicant shall be required to officially file the CDC permit in the county records.

Project plans are intended to provide the necessary level of detail in order to properly evaluate the development request. As a practical matter, conceptual plans will probably suffice to initiate the permitting process; however, plans of sufficient detail to adequately analyze the project's impact using the CDC criteria as outlined in this manual are necessary prior to the CDC permit being issued.

1.6 PENALTIES FOR UNAUTHORIZED CONSTRUCTION

Failure to comply with the provisions of the policies and regulations found within CDC Manual will be subject to the penalties provided for under the floodplain management ordinance or regulations of the jurisdiction.

For further information, please consult the appropriate municipality for floodplain management ordinance requirements and the U.S. Army Corps of Engineers - Fort Worth District and the Texas Water Commission for applicable Federal and State requirements.

Section 2.0

CDC – COMMON PERMIT CRITERIA

The following common permit criteria describe a consistent design level of protection which should be met for all CDC applications, unless granted a variance. This detailed Manual has been developed to assist Applicants. The Applicants for a CDC would be required to provide sufficient detailed information to document criteria compliance.

The hydrologic baseline to be used in analyzing permit applications will be in accord with Table 1 in Appendix A. More detailed hydrologic studies may be performed provided the Applicant receives prior approval. Hydraulic models representing existing conditions should be based on the **March 1990 Reconnaissance Report** and its updates. Adjacent projects permitted but not reflected in the current hydraulic models should be included in the Applicant's hydraulic information. Hydrologic information from the 1990 Reconnaissance Report for the **FUTURE CONDITIONS WITH CDC SCENARIO** (See Table 1 in Appendix A) should be used for design and analysis. SPF Future Condition Discharges for the West Fork of the Trinity River in the Reconnaissance Report has been supplemented considering two additional storm centerings. For more detailed hydrology, the appropriate CDC/Floodplain Administrator may request additional information from the COE. The burden of proof of compliance with these criteria rests with the permit Applicant.

- A. Hydraulic Impacts - Projects within the Regulatory Zone.** The following maximum allowable hydraulic impacts will be satisfied, using reasonable judgement based on the degree of accuracy of the evaluation, and using cross-sections and land elevations which are representative of the reaches under consideration:
1. **Water Surface Elevations** - No rise in the 100-year flood or significant rise in the SPF water surface elevations for the proposed condition will be allowed.
 2. **Storage Capacity** - The maximum allowable loss in storage capacity for 100-year flood and SPF discharges will be 0% and 5%, respectively.
 3. **Velocities** - Alterations of the floodplain may not create or increase an erosive water velocity on-site or off-site.
 4. **Conveyance** - The floodplain may be altered only to the extent permitted by equal conveyance reduction on both sides of the channel.
- B. Hydraulic Impacts - Tributary Projects.** For portions of tributary projects that are within the Regulatory Zone of the Trinity River, the maximum hydraulic impacts are the same as those for mainstem Trinity River Regulatory Zone projects.
- C. Cumulative Impacts.** The upstream, adjacent, and downstream effects of the Applicant's proposal will be considered. The proposal will be reviewed on the assumption that adjacent projects will be allowed to have an equitable chance to be built, such that the cumulative impacts of both will not exceed the common criteria. Hydraulic data should be supplied to show the impacts of adjacent developments, (e.g., HEC-2 modeling with blocked off conveyance).

- D. Design Level of Flood Protection.** The engineering analysis will include the effects of the Applicant's proposal on the 100-year flood and SPF and should demonstrate meeting COE, FEMA, Texas Water Commission, and local criteria for both flood events.
1. For levees protecting urban development, the minimum design criterion for the top of levee is the SPF plus four feet, unless a relief system can be designed that will prevent catastrophic failure of the levee system.
 2. For fills, the minimum design criterion is the 100-year flood elevation plus one foot, unless a relief system can be designed that will prevent catastrophic failure.
- E. Borrow Areas.** The excavation of borrow areas to elevations lower than the bottom elevation of the stream is generally hydrologically undesirable. The volume of such excavations, above the elevation to which the area can be kept drained, may be considered in hydrologic storage computations.
- F. Preservation of Adjacent Project Storage.** The Applicant will be required to respect the valley storage provided by adjacent projects by ensuring that their hydraulic connection to the river is maintained. If the project blocks the hydraulic connection of the adjacent project, then the Applicant will be required to provide additional valley storage to offset the loss caused by the blockage of the hydraulic connection.

NOTE: The COE will examine other criteria for the purpose of evaluating new COE permit applications. The criteria include;

- A. Wetlands and Fish & Wildlife Resources Impacts**
- B. Runoff**
- C. Habitat Mitigation**
- D. Other Regional Needs and Plans**

Jurisdictions may require that Regulatory Zone criteria be applied to projects occurring within the Review Zone.

For further information on COE review, please contact the COE Fort Worth District Permit Section at (817) 334-2681.

Section 3.0 CDC APPLICATION REQUIREMENTS

An application for a CDC will be submitted on standard forms furnished by the City or facsimiles thereof, and be signed by the owner of the property or appropriate agent. To insure that all proposed developments are afforded a complete and consistent level of analysis, the application will include, but not be limited to:

- A. Project Plans
- B. Hydrologic Data
- C. Hydraulic Data
- D. Elevation - Storage - Discharge Data
- E. COE Jurisdictional Review
- F. Resource Data
- G. Maintenance and Operation Data
- H. Erosion Control

More detailed descriptions of these requirements are presented below:

- A. **Project Plans.** Project plans would be submitted as part of the CDC application at a scale that provides adequate detail of the whole project as well as individual features of the project. The plan should show the location of the FEMA Regulatory Floodway and the layout of cross-sections used in the hydraulic model. Proposed changes to the Floodway should be clearly shown. (See Section 1.5 DEFINITIONS for additional clarification)
- B. **Hydrologic Data.** Design discharges for the 100-year and SPF storm events shall be based on urbanization consistent with the Future Conditions With CDC Scenario of the **March 1990 Reconnaissance Report** or supplemental data provided by the COE, whichever is larger. (See Table 1 in Appendix A). The Applicant should clearly identify these design discharges, including source and date.

In conjunction with the common policies described herein, the Future Conditions With CDC Scenario (as supplemented by the COE with two additional storm centerings on the West Fork of the Trinity River) are reflective of a watershed with modest stability in future discharges. However, future discharge corrections will undoubtedly be required. For consistency in permit review and evaluation of design requirements, revisions to the discharges contained in the **March 1990 Reconnaissance Report** should be scheduled and coordinated among the affected jurisdictions.

- C. **Hydraulic Data.** Water surface elevations at the upstream, middle, and downstream ends of the project (for pre-project and with-project conditions) for 100-year flood and SPF discharges consistent with the Future Conditions With CDC Scenario should be provided with the CDC application. Hydraulic calculations should be continued for a distance great enough upstream and downstream of project to verify water surface elevations are not raised by the proposed hydraulic modifications. In all cases, the best available data on water surface elevations should be utilized.

Printouts and plots from an approved hydraulic model (HEC-2) of cross-sections for pre-project and with-project conditions should be part of the CDC application. Water surface profiles for 100-year flood and SPF for pre-project and with-project conditions should also be included. The number and location of sections should be adequate to describe and support documented computations.

D. Elevation, Storage, and Discharge Data. Elevation, storage, and discharge data (i.e., using the **March 1990 Reconnaissance Report the Future Conditions With CDC Scenario** discharges with supplements in combination with the most reliable elevation data available) for pre-project and with-project conditions should be developed:

- within the project borders alone,
- considering full cross-section widths across the river or creek, and
- indicating percent of change in valley storage capacity.

Storage change is to be considered "on-site" (i.e., within upstream and downstream limits and property limits of the project). In addition, if any valley storage is lost elsewhere due to the project, storage change is to be addressed on a full cross-section width basis.

E. COE Jurisdictional Review. Applicants should provide written correspondence from the COE indicating whether the Corps jurisdiction applies to the project area. **NOTE:** a formal determination on the application itself occurs at a later step in the CDC process.

F. Resource Data. Applications should include at least the following information on environmental/cultural resources: (1) engineering and environmental resource data which tabulates the impact on land cover types and habitat units, and (2) any plans for erosion control, general landscaping, or other practices to minimize potential water quality and other environmental impacts.

Projects areas which are within COE jurisdiction will also need to provide identification of mitigation required for loss and/or alteration of high value habitats.

Developments which propose to relocate or alter a natural channel should also submit more detailed environmental data and a stream rehabilitation program.

G. Maintenance and Operation Data. An estimate of annual maintenance and operation costs for the hydrologic and hydraulic aspects of the project should be provided. Parties responsible for costs associated with maintenance and operation in perpetuity for the "as designed" condition should be clearly identified. If maintenance is to be accomplished by an agent other than the community, a legal provision for community monitoring and backup maintenance is required.

H. Erosion Control Plan. The regulating jurisdiction should be contacted to obtain specific information regarding local erosion control requirements and plan submittals.

Corridor Development Certificate

December 1991

General. This application should be completed according to the guidelines set forth in the **Corridor Development Certificate Manual**. Information provided by the Applicant herein will be used by the City/County to evaluate this Trinity River Corridor Development Certificate (CDC). This application is public information and will be used by other relevant flood plain regulatory authorities, i.e., U.S. Army Corps of Engineers (COE); Federal Emergency Management Agency (FEMA); and the Texas Water Commission (TWC). These and other regulatory agencies may require additional information. If additional space is needed to complete this application, please attach a separate sheet labeled appropriately.

Distribution. If a Notice of Intent to Process is granted, this data shall be distributed to the following agencies: COE, FEMA, TWC; the North Central Texas Council of Governments (NCTCOG); the cities of Arlington, Carrollton, Coppell, Dallas, Farmers Branch, Fort Worth, Grand Prairie, Irving, and Lewisville; the counties of Dallas, Denton and Tarrant; the Tarrant County Water Control and Improvement District Number One, and the Trinity River Authority.

Applicant's Representative. (identify person knowledgeable of and authorized to respond to questions concerning data provided by the Applicant)

Name: _____ Relationship to Applicant: _____
Address: _____ Telephone: _____

(PLEASE TYPE)

Standard CDC Form - Part 1 Section A -- CDC Application (To be filled out by Applicant)

1. **CDC Applicant:** _____ **City/County:** _____
Property Owner: _____ **Engineer:** _____
Project Name: _____ **Project Size: (total acres)=** _____
NCTCOG Map Grid: _____

2. **Location:**

a. Provide general description of location, including MAPSCO location, street address, and identified impacted water bodies:

b.i. Part or all of project is within the CDC REGULATORY ZONE. Yes No

b.ii. Part or all of project is within the CDC REVIEW ZONE. Yes No

If the answer to both of these questions is negative, NO CDC PERMIT is required.

3. **Proposed Activity:** (check appropriate categories)

dredge/channel modification swale construction fill levee other (attach explanation)

4. **Proposed Use:** (check appropriate categories)

private single dwelling(s) private multi-dwelling(s) public commercial industrial
 other (explain) _____

5. **Applicant requests a variance to common permit criteria.** Yes No

[Please attach supporting material]

Application is hereby made for a Corridor Development Certificate (CDC). I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, this information is true, complete, and accurate.

Signature of Applicant or Applicant's Representative / Typed Name / Title

Date

Section B -- Notice of Intent to Process by City / County

(To be filled out by CDC/Floodplain Administrator)

1. **CDC Number:** _____ **Local Contact Person:** _____
City/County of: _____ **Telephone No:** _____

2. **Exempt Category:** (check if applicable - additional documentation may be required)
 maintenance/repair of flood control structures bank stabilization activities
 outfall/intake structure permitted under NPDES program project is completely outside the CDC Regulatory Zone
 discharge of material for backfill or bedding for utility lines with no change to bottom contours

3. **Required State/Federal Review:**
 a. FEMA Conditional Letter of Map Revision (CLOMR) Yes No
 b. COE Permit required Yes No
 c. TWC Plan of Reclamation required Yes No

4. **COE Hydrologic/Hydraulic technical review completed.** (check one) Yes (attached) No (explain)

5. **Administrative Findings:**(comments/conditions)

6. **City Action if Variance is requested.** granted denied

7. **Notice of Intent:** (check one) issued denied not applicable (CDC not required)

By my authority under the City/County, I hereby issue and record the City/County's findings. This Notice of Intent to Process in no way implies that final project approval will be granted by the City/County.

 Signature of CDC/Floodplain Administrator / Typed Name / Title

 Date

Section C -- CDC Action/Findings

(To be filled out by CDC/Floodplain Administrator)

1. **Listing of Commentaries:** (written comments on this application were received from:) _____

2. **Summary of Other Permitting Actions:**
 COE Project No: _____ Permit Type: _____ issued issued w/conditions denied no permit required
 (comments:) _____
 FEMA Comments: _____
 TWC Comments: _____

3. **CDC Action:** (check one) granted granted w/conditions denied

4. **Operation and Maintenance Agreement:** executed (attach copy) not applicable **Date/Initials:** _____

5. **The CDC will cease to be in effect:** five years after the date of issuance if no development activities are undertaken
 DATE: _____

6. **Final Findings of Fact:** (summary of City/County's findings/comments/conditions) _____

By my authority under the City/County, I hereby issue the City/County's findings and final action.

 Signature of CDC/Floodplain Administrator / Typed Name / Title

 Date

**Standard CDC Form - Part 2
 Detailed Hydrologic/Hydraulic Information**

General. CDC Applicants are requested to provide the following detailed hydrologic and hydraulic information for all proposed projects within the CDC Regulatory Zone of the Trinity River Corridor. This form and the data provided by the Applicant herein is a required supplement to the Part 1, Corridor Development Certificate (CDC) Application. However, in certain cases the City/County may release the Applicant from completing all or portions of this form if the proposed project satisfies specific provisions. The Applicant is encouraged to schedule a pre-application meeting with the City/County if there are any questions regarding the requirements of the City/County. This application is considered public information and will be distributed to affected Federal, State, and local governmental agencies. Please be as complete and concise as possible.

(To be filled out by Applicant)

1. Site Plan.

- (a) Please attach a location map (8 1/2 x 11). Plans attached: Yes No
- (b) Please attach a general site plan (8 1/2 x 11). Plans attached: Yes No
- (c) Please attach a detailed site plan (see CDC Manual). Yes No

2. Hydrologic/Hydraulic Information. Please provide the following data to characterize the hydrologic and hydraulic impacts of the proposed project:

--- 100 YEAR FLOOD EVENT ---

Hydrologic / Hydraulic Impact (measure)		Pre-Project	Post-Project	Change
Discharges:	Upstream Boundary:	cfs.	N/A	N/A
	Downstream Boundary:	cfs.	N/A	N/A
Channel Velocities:	Upstream Boundary:	fps.	fps.	fps.
	Downstream Boundary:	fps.	fps.	fps.
Water Surface Elevation (NVD):	Upstream Boundary:	ft.	ft.	ft.
	Downstream Boundary:	ft.	ft.	ft.
Project Lands in Floodplain:		ac.	ac.	ac.
Valley Storage on Project Lands:		ac-ft.	ac-ft.	ac-ft.

--- SPF FLOOD EVENT ---

Hydrologic / Hydraulic Impact (measure)		Pre-Project	Post-Project	Change
Discharges:	Upstream Boundary:	cfs.	N/A	N/A
	Downstream Boundary:	cfs.	N/A	N/A
Channel Velocities:	Upstream Boundary:	fps.	fps.	fps.
	Downstream Boundary:	fps.	fps.	fps.
Water Surface Elevation (NVD):	Upstream Boundary:	ft.	ft.	ft.
	Downstream Boundary:	ft.	ft.	ft.
Project Lands in Floodplain:		ac.	ac.	ac.
Valley Storage on Project Lands:		ac-ft.	ac-ft.	ac-ft.

CDC PART 2 - CONTINUED

3. **Flood Storage/Hydraulic Mitigation.** Please identify all flood storage and other hydrologic/hydraulic mitigation areas on the site plan, and describe them in the space below:

4. **Habitat/Wetland Mitigation.** Please identify all habitat and/or land resource area used for environmental mitigation purposes on the site plan, and describe them in the space below:

5. **Operation and Maintenance.** The operation and maintenance of flood water conveyance systems, conveyance alterations, storm water control structures, equipment and appurtenances, and water quality control measures will become the obligation of: (check one)

City County Owner other (specify): _____

The annualized cost, including replacement costs, of operating and maintaining post-project storm water control systems, conveyance alterations, and water quality control measures is estimated to be in current year dollars: (\$/yr) _____

6. **Erosion Control Information.** Please provide the following data on site erosion control and water quality protection practices.

(1) Construction Controls: (describe construction control strategies intended for site erosion control)

(2) Post Construction Controls: (describe permanent control strategies intended for erosion control and water quality protection after project completion)

7. **Land Cover Information.** Please provide the following data, in total acres, to characterize the impacts on current land cover which will result from construction of the proposed project:

— LAND COVER INFORMATION —		
Land Use / Land Cover Classification **	Values in TOTAL ACRES	
	Pre-Project	Post-Project
100 urban/built-up		
200 agricultural/pasture		
300 rangeland/shrub & brush		
400 forest/woodlands		
500 water (identify on site plan)		
600 wetland (identify on site plan)		
700 barren land/mines & quarries		

*** Note: Listed land cover types are "Level 1" categories (100 through 700) defined in accordance with the land use and land cover classification of the U.S. Geological Survey, U.S. Department of the Interior. This data may be required by the U.S. Army Corps of Engineers and other regulatory agencies.*

To the best of my knowledge, the information in Part 2 is complete and accurate:

Signature of Applicant or Applicant's Representative / Title / Date

Corridor Development Certificate Extension Request

December 1991

General. This application should be completed according to the guidelines set forth in the **Corridor Development Certificate Manual**. Information provided by the Applicant herein will be used by the City/County to evaluate the extension of the Trinity River Corridor Development Certificate (CDC). This application is public information and will be used by other relevant flood plain regulatory authorities (e.g. COE, FEMA and TWC). If granted, the permit extension applies to the Corridor Development Certificate only.

Applicant's Representative.

(Identify person knowledgeable of and authorized to respond to questions concerning data provided by the Applicant)

(PLEASE TYPE)

Name: _____ Relationship to Applicant: _____
Address: _____ Telephone: _____

CDC Permit Number: _____

Explanation for Extension Request

Status of Other Related Permits / Projects

Signature / Typed Name / Title

Date

CDC/Floodplain Administrator Action/Findings

Extension Request Granted

Yes No

CDC/Floodplain Administrator

Signature / Typed Name / Title

Date

Section 4.0 THE CDC PROCESS

There are five basic steps in the CDC application review process as depicted in the accompanying chart and summarized follows:

NOTE: Throughout this CDC Manual the term "City" is used, however, in unincorporated areas, the respective county would be applicable.

Step 1. Determination of Applicability by City - Does the City have jurisdiction regarding this application? Is it within the Trinity River Corridor? Is it within the Regulatory or Review Zone? Is it exempted from the process? If the City has jurisdiction for the project, the review process proceeds. If not, the City informs the Applicant in writing.

Step 2. Jurisdictional Review by COE - The Fort Worth District staff of the COE will perform the jurisdictional review and provide preliminary hydraulic/hydrologic technical data required by the common permit criteria in coordination with the City and the Applicant. This review will occur within thirty (30) days of submittal to COE, provided ALL required data has been received.

Step 3. Notice of Intent to Process by City - The City will review the application materials and COE findings within its own time frame. If the City decides to deny the application at this point, the process ends. NCTCOG will be provided a copy of this action. If the City decides to continue the process, then it will assure that the application is complete, assign a CDC identification number, and provide the full application to the COE for a permit determination, to FEMA if a conditional map revision is required, to the Texas Water Commission if their jurisdiction applies, and to NCTCOG for incorporation into the Trinity River Information Network (TRIN) tracking system.

Step 4. Parallel COE, FEMA, TWC, and Regional Review - If the application is subject to a COE individual permit, then the public notice and review/comment process will be initiated by COE (including the other affected local governments). If the application is not subject to a COE individual permit, then the City will distribute a notice and materials directly to the other signatories to the Interlocal Agreement. The FEMA and TWC review processes will occur simultaneously.

If under COE jurisdiction, COE will decide whether to issue its permit and so notify the City and Applicant. Likewise, FEMA will notify the City regarding any requested conditional map revision and the TWC for any plan of reclamation. Signatories of the Interlocal Agreement will have thirty (30) days from receipt of the Notice of Intent to Process to provide the City with written comments. Time extensions for the written comments may be granted by the City. If no response is received from a participating entity during the comment period, it is assumed that a "no response" implies no comment for documentation purposes. Applicant appeals from the permit decision may be sought from the individual jurisdiction.

Step 5. Formal City Action - The final step in the application review process is formal approval, approval with conditions, or disapproval by the City within the CDC area. If a COE permit, a FEMA conditional map revision or a TWC plan of reclamation is denied the Applicant, the City will not issue a CDC. If approved by the City over the expressed unfavorable opinions of other signatories to the Interlocal Agreement, a written summary of the justifications for the City's action will be attached to the approval action. A copy of the Final Disposition of each CDC application will be provided to NCTCOG for the permanent Corridor records.

If no development activities occur by the end of five years from the date of issuance, the applicant may submit a written request within thirty days for up to a three-year extension or the CDC permit shall cease to be valid. The City may grant up to a three-year extension. If no request for an extension is made at the end of the thirty day period, the Applicant must reapply for a CDC permit. Summary project status reports are required to be submitted to the CDC/Floodplain Administrator annually. Any significant changes to the project by the Applicant or the City requires the re-evaluation of the permit and may result in a reapplication. Summary project status reports are required to be submitted to the CDC/Floodplain Administrator annually. Any significant changes to development plans, including changes in State and Federal regulatory programs after a permit is granted, requires the re-evaluation of the permit and may result in a reapplication.

Please note that NCTCOG should receive official copies of development activities for the corridor as defined by the Trinity River Corridor Regulatory and Review maps.

Any appeals to the CDC process should be addressed to the appropriate CDC permitting authority, (i.e., city) and that authority's permit appeals process.

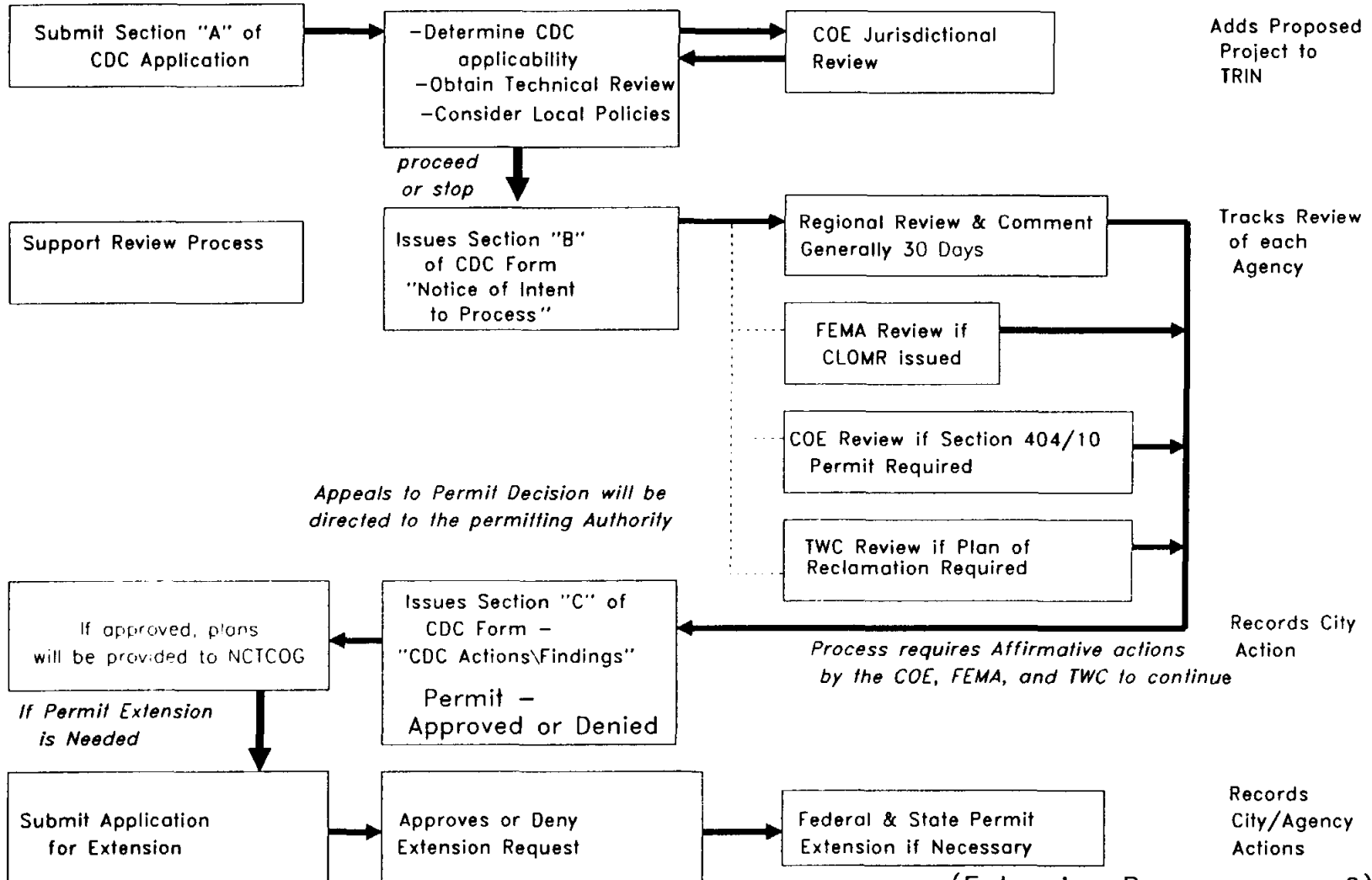
Corridor Development Certificate

Applicant

City / County

Other Agencies

NCTCOG

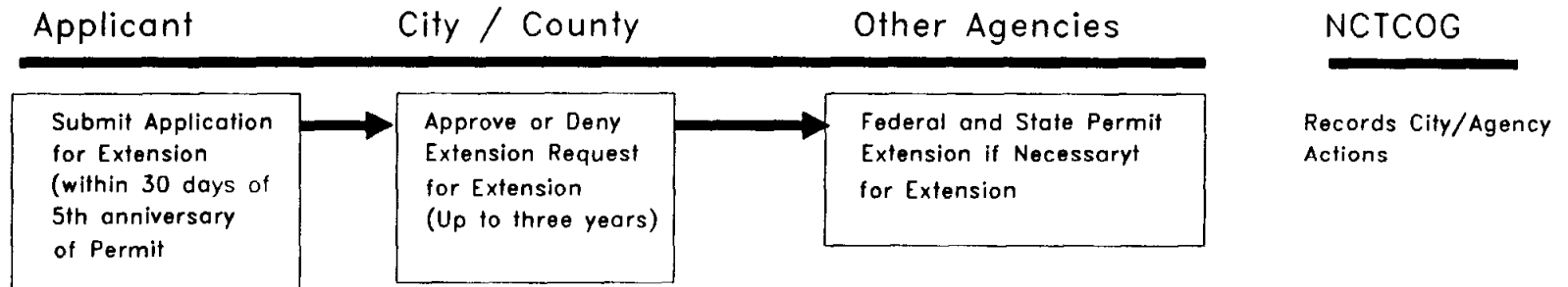


(Extension Process – pg.2)

Corridor Development Certificate

pg.2 Extension Process

Continued from pg. 1



Section 5.0

RELATED STATE / FEDERAL REGULATORY PROGRAMS

This Section is composed of the following contributions from the U.S. Army Corps of Engineers, Federal Emergency Management Agency, and the Texas Water Commission describing an overview of the respective agencies' requirements.



DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

REPLY TO
ATTENTION OF:

OVERVIEW OF THE U.S. ARMY CORPS OF ENGINEERS REGULATORY PROGRAM

In 1890, the U.S. Army Corps of Engineers began its regulatory program for protecting navigation on the nation's navigable waterways. In 1972, the Corps began regulating discharges of dredged and fill material into navigable waterways. In 1975, a lawsuit results in the Corps regulating discharges of dredged and fill material in non-navigable waters and wetlands.

The state of Texas is divided among four Corps Districts. Refer to the attached map to see which Corps District Office serves you.

HOW MIGHT THIS AFFECT YOU?

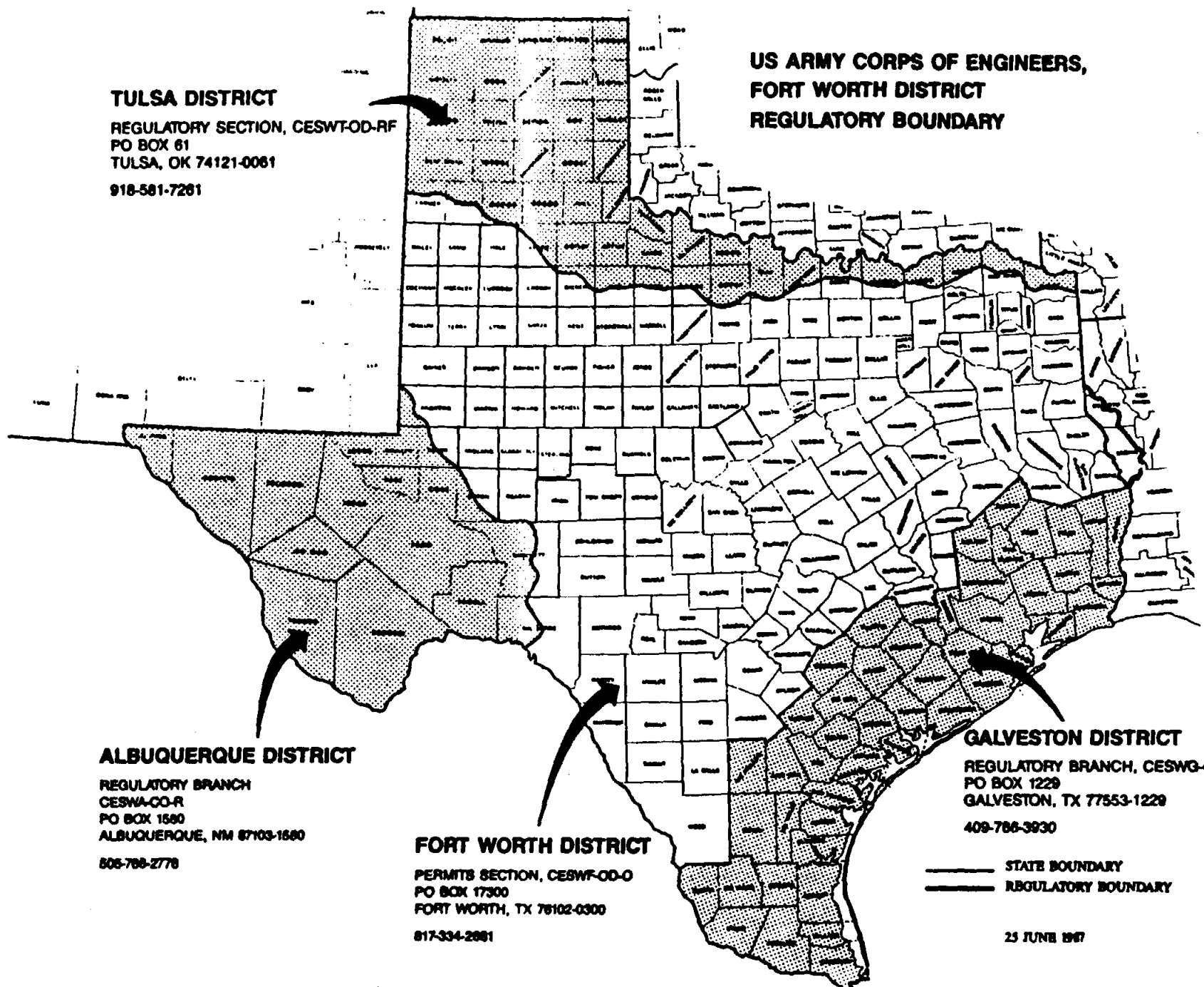
If you are planning to conduct a construction activity in or over a navigable water of the United States, a permit is required in accordance with Section 10 of the Rivers and Harbors Act of 1899 prior to beginning construction. Some examples of past activities that required permits include: dredging activities, boat houses, piers, marinas, and shoreline stabilization. Attached is a list of navigable waters within the Corps' Fort Worth District.

If you are planning to place or discharge dredged or fill material into waters of the United States including wetlands, a permit is required in accordance with Section 404 of the Clean Water Act. Some discharges of dredged or fill material are covered by the Nationwide Permit Program found in the Corps regulations at 33 CFR Part 330.5. Those discharges that are not covered require more formalized authorization. Please consult these regulations or call the appropriate Corps office if you would like information on whether your project qualifies for a nationwide permit. You are also welcome to schedule a pre-application meeting with the Corps concerning your project.

**Navigable Waters of the United States
within the Fort Worth District
of the US Army Corps of Engineers**

For purposes of Section 10 of the River and Harbor Act of 1899, the following rivers including their lakes and other impoundments are considered to be navigable waters of the United States under jurisdiction of the Fort Worth District of the US Army Corps of Engineers. For information on projects outside our area of responsibility you may contact the appropriate Corps District.

1. Sabine River
 - From US Highway 190 in Newton County upstream to confluence of Big Sandy Creek in Upshur County.
 2. Neches River
 - From Town Bluff Dam in Tyler County upstream to US Highway 69 in Tyler County.
 3. Angelina River
 - From confluence of Neches River in Jasper County upstream to US Highway 59 in Nacogdoches County.
 4. Trinity River
 - From Riverside, Texas in Walker County upstream to Riverside Drive in Fort Worth, Texas.
 5. Brazos River
 - From confluence of Navasota River in Grimes County upstream to Whitney Dam in Hill County.
 6. Rio Grande
 - From Falcon Dam in Zapata County upstream to the confluence of the Pecos River in Val Verde County.
 7. Colorado River
 - From US Highway 183 Bridge upstream to Longhorn Dam.
 8. Big Cypress Bayou
 - From the Texas-Louisiana State line upstream to Ellison Creek Reservoir.
 9. Sulphur River
 - Downstream of Wright Patman Dam.
- Navigability determinations are not yet complete. For further information concerning possible permit requirements for any project you should contact the Fort Worth District's Permits Section.



TULSA DISTRICT

REGULATORY SECTION, CESWT-OD-RF
PO BOX 61
TULSA, OK 74121-0061
918-581-7281

**US ARMY CORPS OF ENGINEERS,
FORT WORTH DISTRICT
REGULATORY BOUNDARY**

ALBUQUERQUE DISTRICT

REGULATORY BRANCH
CESWA-CO-R
PO BOX 1580
ALBUQUERQUE, NM 87103-1580
505-766-2776

FORT WORTH DISTRICT

PERMITS SECTION, CESWF-OD-O
PO BOX 17300
FORT WORTH, TX 76102-0300
817-334-2881

GALVESTON DISTRICT

REGULATORY BRANCH, CESWG-CO-R
PO BOX 1229
GALVESTON, TX 77553-1229
409-766-3930

— STATE BOUNDARY
— REGULATORY BOUNDARY

23 JUNE 1987



Federal Emergency Management Agency

Region VI, Federal Center, 800 North Loop 288
Denton, Texas 76201-3698

OVERVIEW OF THE NATIONAL FLOOD INSURANCE PROGRAM

"Between 70 and 80 percent of all natural disasters in the United States involve flooding, and from its earliest days the Federal government has been involved with the peril of flooding. Through re-channeling, or through dams and levees, restricting the flow of waters, as well as through the development of hydroelectric power and irrigation, the Federal government has attempted to ameliorate the effects of flooding. But in spite of all these actions, vast sums of money have had to be expended through the response mechanism of Federal Disaster Assistance.

In 1968 the Congress embarked upon a new course of action and focused upon ways in which flood damages could be avoided or reduced by making the public aware of its potential exposure to flooding and by providing, through the authorization of a Federal flood insurance program, and incentive to encourage communities to adopt floodplain management ordinances that would mitigate the effects of flooding upon new construction. Taking note of the fact that insurance coverage against the peril of flooding was virtually unavailable in the private sector, the Congress enacted the National Flood Insurance Act of 1968, and authorized the National Flood Insurance Program, which represented a new approach to assisting the victims of flooding an opportunity for property owners to purchase Federal government insurance protection.

Because the availability of government flood insurance without hazard mitigation would only have increased the potential for flood damage by encouraging unwise construction, FIA was directed under the 1968 Act to conduct studies throughout the United States to determine in each community the location of areas of special flood hazard and to issue Flood Hazard Boundary (FHBM) and Flood Insurance Rate Maps (FIRM) showing the location of these areas and to notify each community of such identification.

Special flood hazard areas are determined with reference to the "100-year" flood standard, which is the national standard on which NFIP regulations are based. It is also the standard adopted by virtually every federal agency and most state agencies for the administration of their floodplain management programs.

Eligibility for the purchase of flood insurance was made available only to those individuals or corporations whose insurable property is located within a community that has agreed with the Federal government to adopt ordinances that will mitigate the impact of future flooding.

Participating communities that fail to adequately enforce their floodplain management ordinances may be placed on probation or suspended from the NFIP. A new NFIP program, the "Community Rating System" (CRS) became effective October 1, 1990. Under the CRS, flood insurance premium credits are available in communities that undertake selected additional activities that reduce flood losses and/or that increase the number of flood insurance policies.

STATUTORY AUTHORITY FOR THE NATIONAL FLOOD INSURANCE PROGRAM

The National Flood Insurance Program (NFIP) became effective on January 28, 1969, (33FR 17804) and was authorized by the National Flood Insurance Act of 1968, (Title XIII of the Housing and Urban Development Act of 1968, as amended, Public Law 90-448, 82 Stat 476, 42 U.S.C. 4001-4128). The position of Federal Insurance Administrator was authorized by the Urban Property Protection and Reinsurance Act of 1968, (Title XI of the Housing and Urban Development Act of 1968, and the Federal Insurance Administration was established under the Housing and Urban Development Act of 1968 as part of the United States Department of Housing and Urban Development (HUD). The Secretary of HUD delegated to the Federal Insurance Administrator the responsibility for administering the NFIP.

Subsequently, on June 19, 1978, President Carter forwarded to the Congress Reorganization Plan No. 3 of 1978 (43FR 41493) (which has the effect of a Federal statute). This plan, in addition to creating the Federal Emergency Management Agency (FEMA), transferred the functions authorized and described in the National Flood Insurance Act of 1968 and the position of Federal Insurance Administrator FEMA. The organization of FEMA was further defined in Executive Order 12127, dated March 31, 1979 (44FR 19367) and Executive Order 12148, dated March 31, 1979 (44FR 19367) and Executive Order 12148, dated June 20, 1979. On April 1, 1979, in a notice published in 44 FR 20962, and later codified at 44 CFR 2.64, the Director of FEMA delegated responsibility for the administration of the NFIP to the Federal Insurance Administrator of the Federal Insurance Administration (FIA), which had become a Directorate within FEMA.

John Hall, Chairman
B. J. Wynne, III, Commissioner
Pam Reed, Commissioner



TEXAS WATER COMMISSION

PROTECTING TEXANS' HEALTH AND SAFETY BY PREVENTING AND REDUCING POLLUTION

OVERVIEW OF TEXAS WATER COMMISSION REQUIREMENTS

It is a matter of public policy and State law that the State provide for the conservation and development of the State's natural resources.

The Texas Water Commission (TWC) is the state agency with primary responsibility for implementing the constitution and laws of the state relating to water. Those laws are embodied in the Texas Water Code.

The Water Code contains statements of public policy, including but not limited to. The control storage, preservation, and distribution of the State's storm and floodwaters and the water of its rivers and streams for irrigation, power, and other useful purposes; and, the reclamation and drainage of the State's overflowed land and other land needing drainage.

Chapters 16, 56, 57 and 66 of the Texas Water Code directly affect the permitting, planning, and accomplishment of projects that will affect the storm and floodwaters and drainage.

Chapter 16, titled "Provisions Generally Applicable to Water Development", applies to all projects, whether proposed by individuals, corporations, or a political subdivision of the State of Texas, unless they are specifically exempted in their enabling legislation.

Political subdivision is defined in Section 16.001 as a county, city, or other body politic or corporate of the State, including any district or authority created under Article III, Section 52 or Article XVI, Section 59 of the Texas Constitution.

Hence, many different types of special purpose districts may be created, but their projects must comply with Chapter 16.

Section 16.236 establishes the prior approval of plans by TWC as the basic requirement for any project and establishes penalties for proceeding on a project without approval. In certain circumstances approval authority may be exercised by other entities with established review standards and procedures considered adequate by TWC, such as communities participating in the National Flood Insurance Program (NFIP). Section 16.236 also established an appeal procedure which allows owners of property located outside the corporate boundaries of a city, town or political subdivision that has approved a project the property owner believes is or may be harmful to his property, to ask the TWC to review the project approval.

Sections 16.311-.319 make up Subchapter I of Chapter 16 and are known as the Flood Control and Insurance Act. The Act acknowledges flooding potential in the state and the desirability of making flood insurance available to property owners. The Act designates the TWC as the State Coordinating Agency for the NFIP in Texas and authorizes all political subdivisions of the state to take all necessary and reasonable actions to comply with the requirements and criteria of the NFIP.

Together, Sections 16.236 and 16.311-.319 assure that a project is not initiated without careful review by competent authority.

After Chapter 16, Water Code Chapter 57 is one of the most important parts of the Water Code regarding projects that affect water in the State. Chapter 57, Levee Improvement Districts (LID), specifies the procedures affecting the creation, operation, and dissolution of LID's. Section 57.091 states that LID's may be created to: construct and maintain levees and other improvements (as defined in 31 TAC 301.2) on, along, and contiguous to rivers, creeks, and streams; reclaim lands from overflow and streams by straightening and otherwise improving them; and provide for the proper drainage and other improvement of the reclaimed land.

Water Code Chapter 56, Drainage Districts, specifies the procedures affecting the creation, operation, and dissolution of a Drainage District. Drainage Districts are not created by the TWC but must submit yearly audit reports to the TWC. Section 56.111 states that the Drainage District may control and supervise the construction and maintenance of canals, drains, ditches and levees, and other improvements of the District and shall keep them in repair.

Water Code Chapter 66, Stormwater Control Districts, specifies the procedures affecting the creation, operations, and dissolution of a Stormwater Control District. Section 66.012 states that a district may be created by the TWC to control stormwater and floodwater and to control and abate harmful excesses of water for the purpose of preventing area and downstream flooding in all or part of watershed. Section 66.201 lists the general powers of a Stormwater Control District.

To achieve the purposes and requirements stated in the Water Code and to provide for due process, the TWC has established procedural rules which are contained in 31 Texas Administration Code (TAC). Two chapters, 31 TAC 281 and 301 have particular relevance to projects under the Texas Water Code mentioned above. Chapter 281 specifies the rules dealing with Applications Processing and Chapter 301 specifies the rules dealing with Levee Improvement Districts, District Plans of Reclamation, and Levees and Other Improvements.

The applicable sections of the Texas Water Code, and the Texas Administration Code are too extensive for complete inclusion in this document. However, any person proposing to process an application for a CDC permit must research and comply with appropriate Texas Water Commission requirements.

APPENDICES

Appendix A

APPENDIX A

TABLE 1
Hydrologic Baseline Information

A. Discharges at Selected Points on Trinity River – Future Conditions With CDC.

LOCATION	25 YEAR	100 YEAR	SPS*
Trinity River below Confluence with Elm Fork	76,400	124,200	274,500
Trinity River at Dallas Gage	76,000	123,700	273,000
Trinity River below Confluence with White Rock Creek	76,100	120,900	268,500
Trinity River below Dallas Gage	76,100	120,800	267,800
Trinity River above Confluence with Five Mile Creek	73,500	116,400	255,200
Trinity River below Confluence with Five Mile Creek	73,500	116,400	255,400

* SPS = Standard Project Storm

Please see associated discharge profiles in attached Plates.

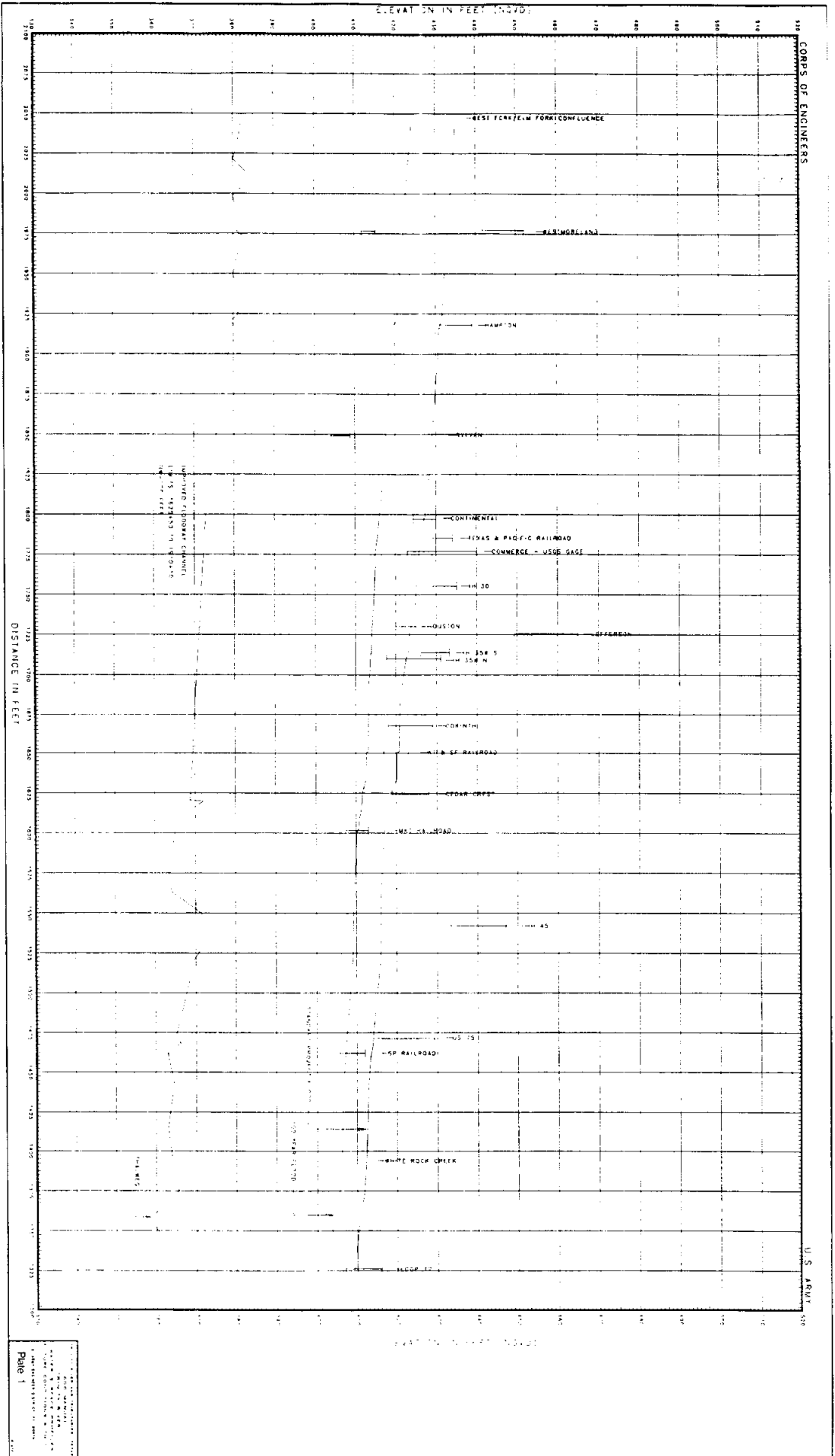
B. Discharges at Selected Points on West Fork Trinity River -- Future Conditions With CDC.

LOCATION	25 YEAR	100 YEAR	SPS
West Fork below Eagle Mountain Dam	19,000	36,400	68,000
West Fork below Lake Worth Dam	18,900	35,800	68,000
West Fork above Clear Fork Confluence	18,900	35,700	68,000
West Fork at Fort Worth Gage (below Clear Fork)	33,900	60,200	136,500
West Fork above Confluence with Marine Creek	33,000	58,600	136,700
West Fork below Confluence with Marine Creek	39,300	67,000	149,000
West Fork above Confluence with Sycamore Creek	39,200	63,900	147,700
West Fork below Confluence with Sycamore Creek	59,000	93,100	178,900
West Fork above Confluence with Big Fossil Creek	43,200	73,900	158,000
West Fork below Confluence with Big Fossil Creek	64,500	97,900	201,800
West Fork above Confluence with Village Creek	52,200	84,200	184,100
West Fork below Confluence with Village Creek	68,800	104,700	222,600
Highway 360 (R.M. 523)	50,000	85,200	199,600
West Fork above Confluence with Johnson Creek	47,400	81,000	198,500
West Fork below Confluence with Johnson Creek	47,900	82,300	199,500
West Fork at Grand Prairie Gage	47,800	79,600	198,500
West Fork below Confluence with Big Bear Creek	54,700	88,100	216,300
West Fork above Confluence with Mountain Creek	54,600	88,000	215,600
West Fork below Confluence with Mountain Creek	56,300	90,500	224,600
West Fork above Confluence with Elm Fork	56,100	90,300	224,300

C. Discharges at Selected Points on Elm Fork Trinity River -- Future Conditions With CDC.

LOCATION	25 YEAR	100 YEAR	SPS
Elm Fork D.A. between Prairie Creek and Lewisville Dam	6,300	21,000	62,000
Elm Fork below Confluence with Prairie Creek	6,900	21,000	62,000
Elm Fork above Confluence with Stewart Creek (S.H. 121)	12,400	21,000	62,000
Elm Fork below Midway Branch Confluence	9,100	21,000	62,000
Elm Fork above Confluence with Indian Creek	8,900	21,000	62,000
Elm Fork below Confluence with Indian Creek	21,100	27,400	62,000
Elm Fork above IH 35 E	18,100	24,800	62,000
Elm Fork below Timber Creek Confluence (At IH 35 E Lower Crossing)	31,600	43,000	77,400
Elm Fork below Confluence with Timber Creek	45,100	61,100	111,400
Carrollton Gage	38,800	55,000	100,000
Elm Fork below Hutton Branch Confluence	35,200	49,500	91,500
Elm Fork below Grapevine Creek	35,000	49,800	93,100
Elm Fork below Cooks Branch Confluence	35,200	50,000	93,500
Elm Fork below Cell A Sluice Outlet	35,500	50,300	93,600
Elm Fork below Farmers Branch Confluence	35,400	50,400	94,500
Elm Fork below Hackberry Creek Confluence	35,600	51,300	103,500
Elm Fork below Joes Creek Confluence	32,600	48,500	99,400
Elm Fork below Bachman Branch Confluence	33,000	49,900	104,700
Elm Fork at West Fork Confluence	32,400	49,600	102,600

Appendix A (Continued)
Hydraulic Baseline Information



U.S. ARMY
 DISTRICT ENGINEER
 DISTRICT OF TEXAS
 HOUSTON, TEXAS
 1910

U.S. ARMY

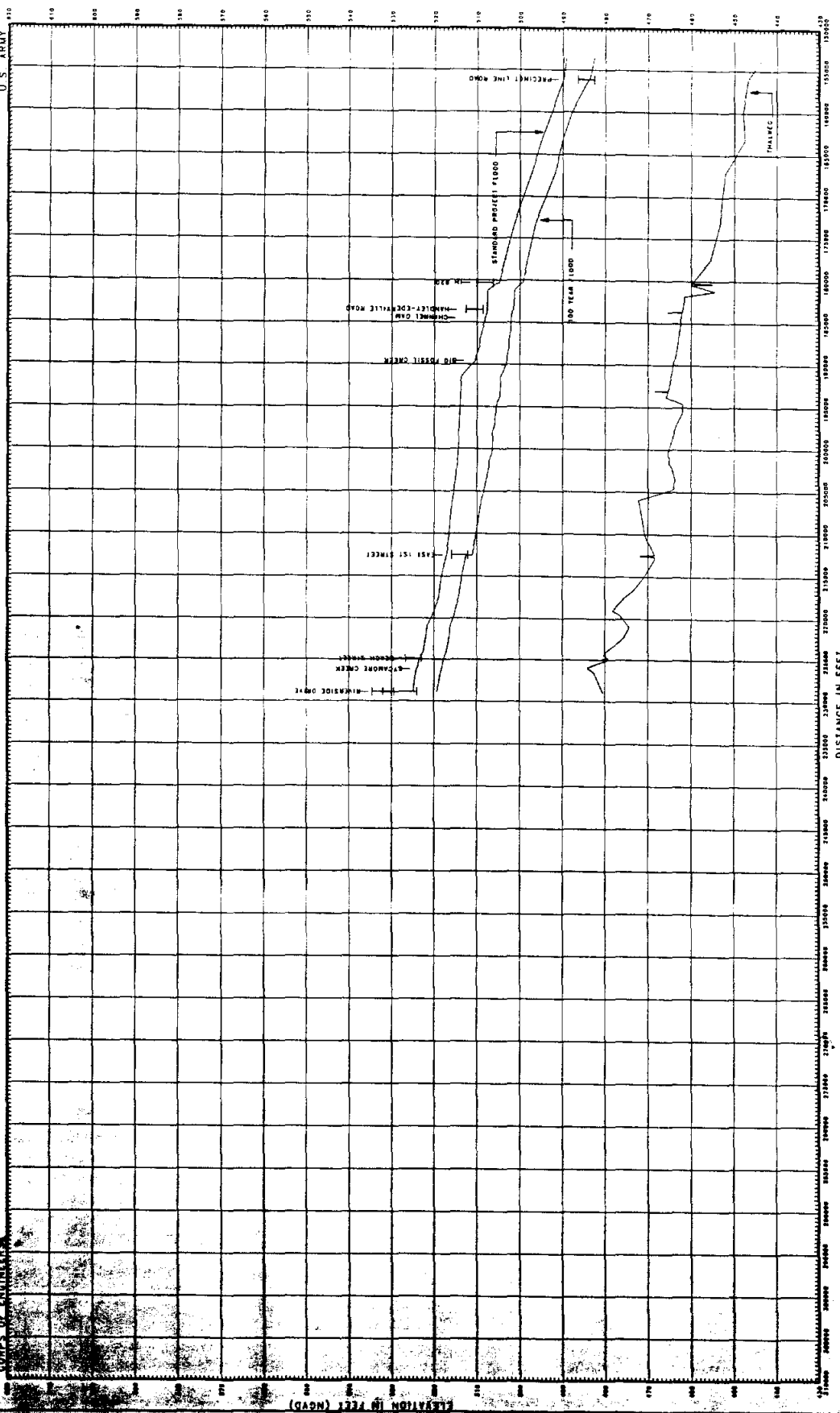
U.S. ARMY

CORPS OF ENGINEERS

ELEVATION IN FEET (NGVD)

ELEVATION IN FEET (NGVD)

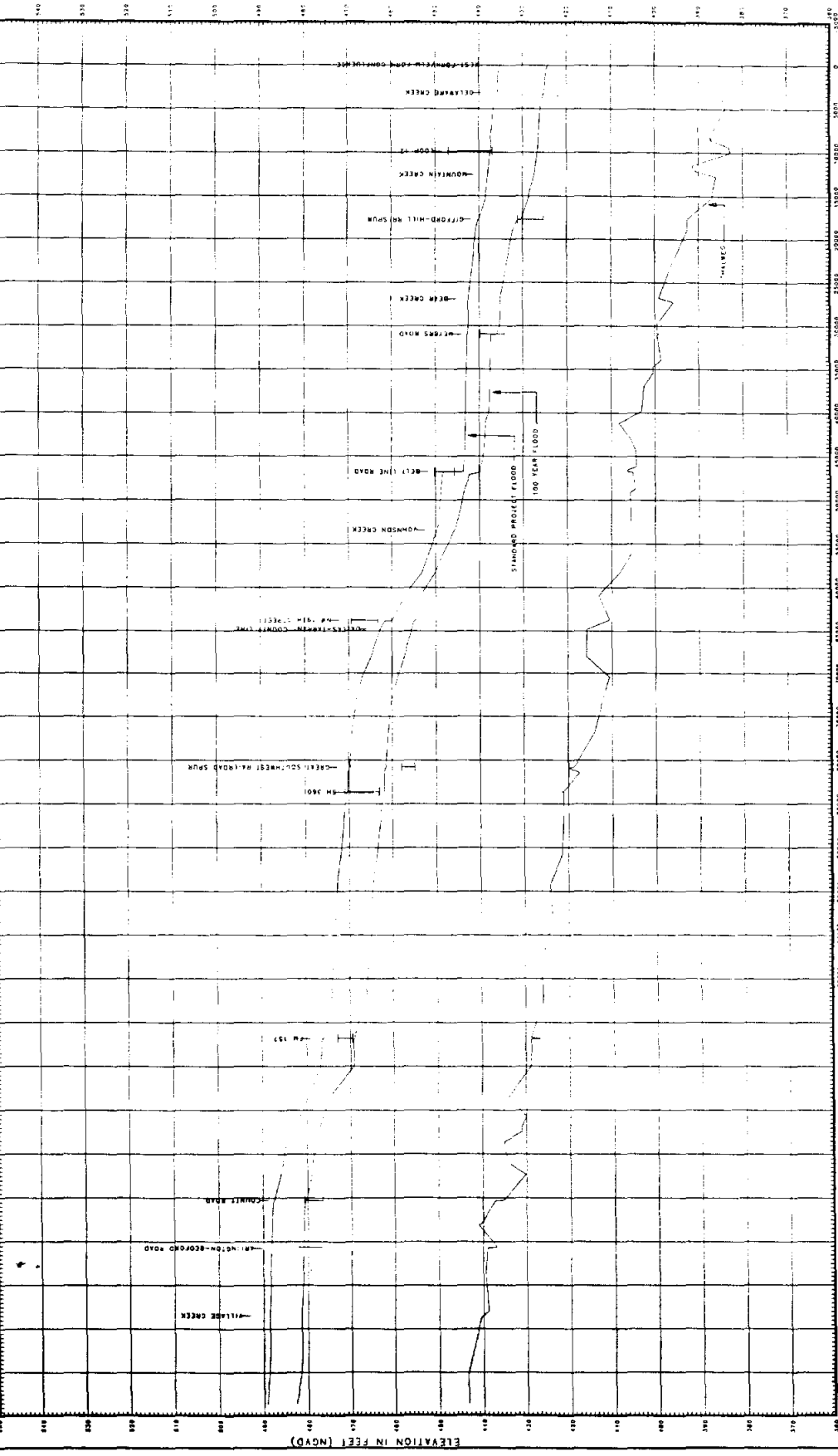
DISTANCE IN FEET



1. DATE: 12-1-54
 2. DRAWN BY: J. W. BROWN
 3. CHECKED BY: J. W. BROWN
 4. SCALE: 1" = 1000' VERT.
 5. SHEET NO.: 1
 6. TOTAL SHEETS: 1
 7. PROJECT NO.: 152000
 8. DRAWING TITLE: FLOOD PROFILES
 9. DRAWING DATE: 12-1-54
 10. DRAWING BY: J. W. BROWN
 11. DRAWING CHECKED BY: J. W. BROWN
 12. DRAWING APPROVED BY: J. W. BROWN
 13. DRAWING DATE: 12-1-54
 14. DRAWING TITLE: FLOOD PROFILES
 15. DRAWING NO.: 152000
 16. DRAWING DATE: 12-1-54
 17. DRAWING BY: J. W. BROWN
 18. DRAWING CHECKED BY: J. W. BROWN
 19. DRAWING APPROVED BY: J. W. BROWN
 20. DRAWING DATE: 12-1-54

U.S. ARMY

CORPS OF ENGINEERS

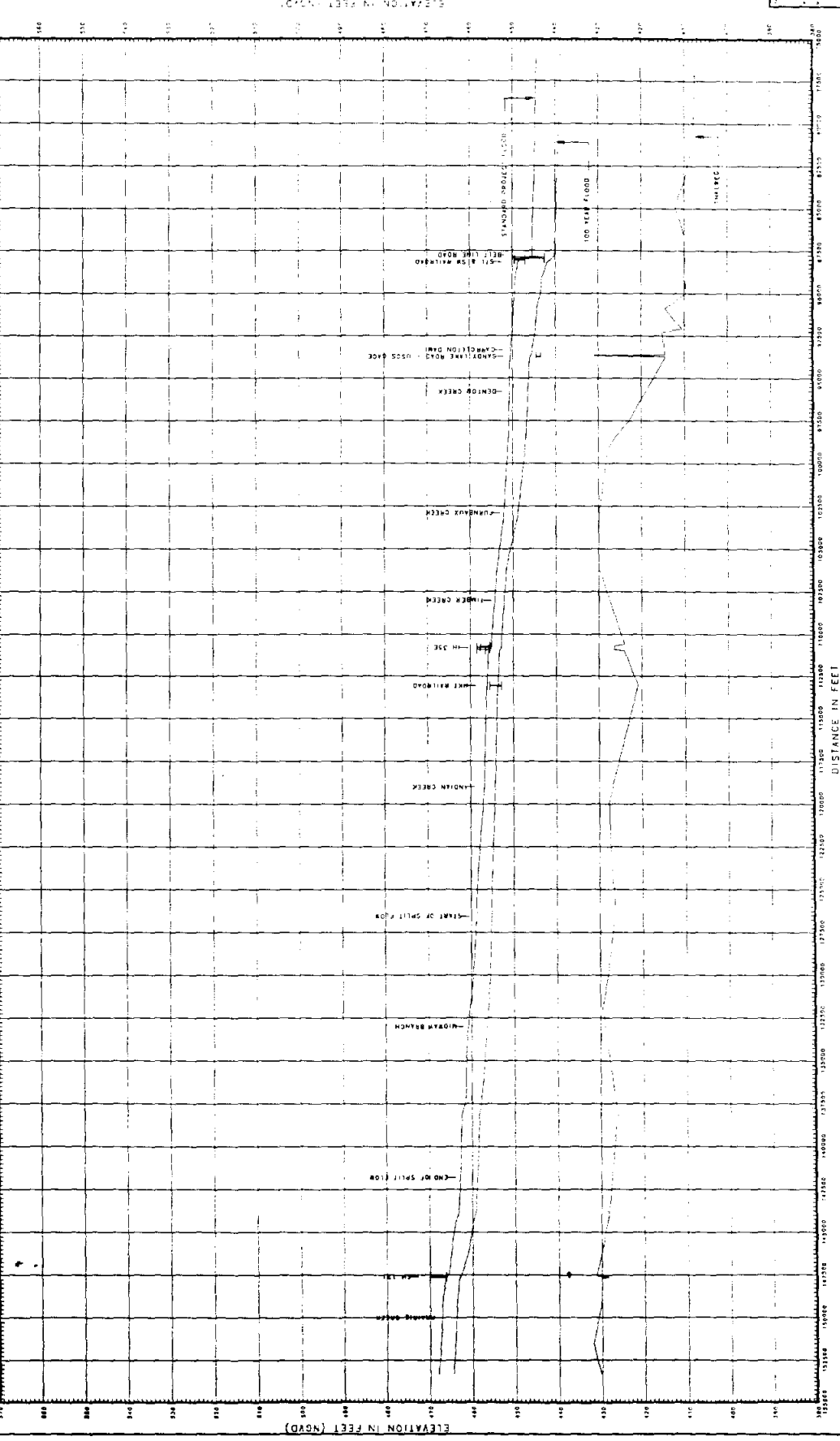


(ELEVATION IN FEET (NGVD))

DISTANCE IN FEET

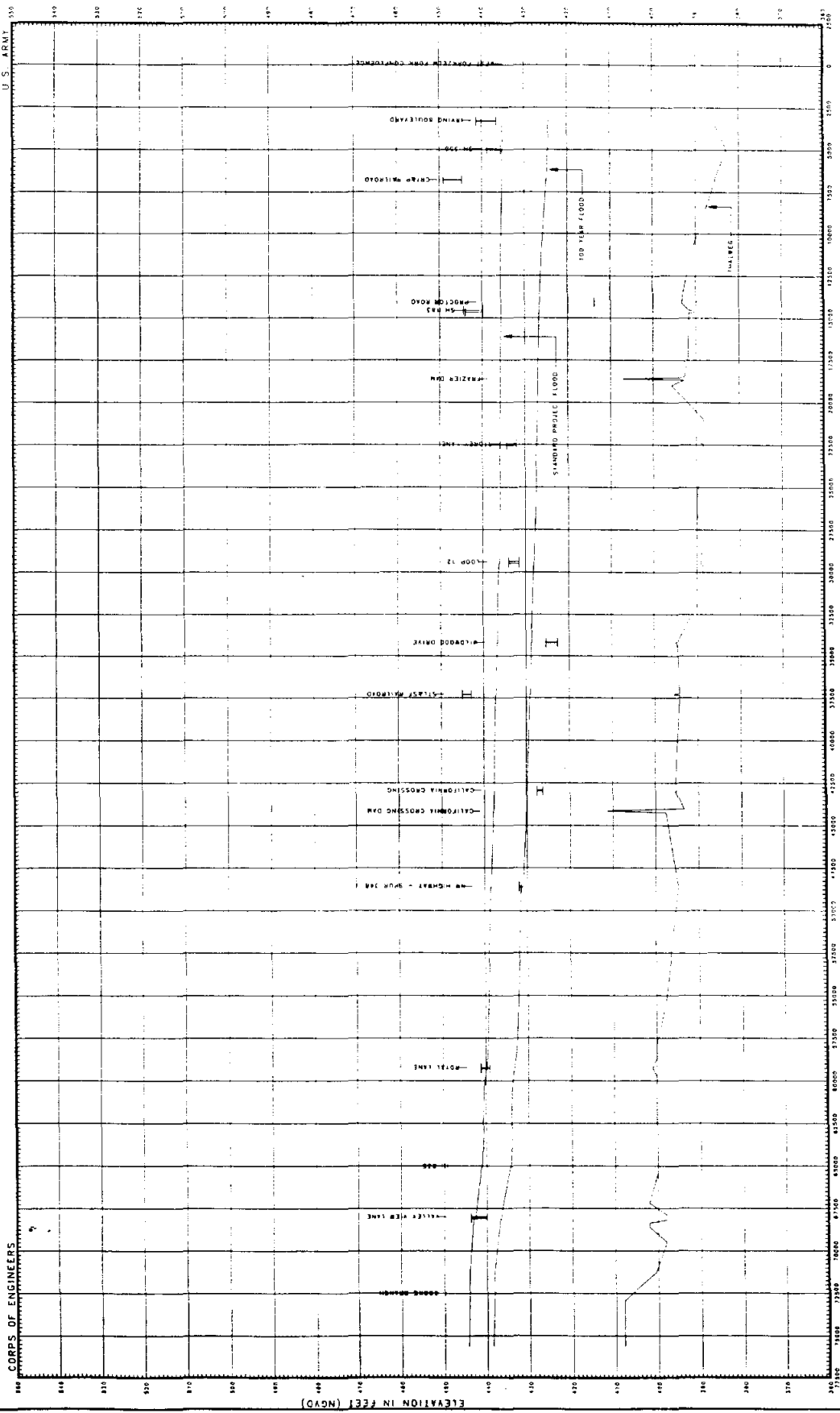
U.S. ARMY

CORPS OF ENGINEERS



ELEVATION IN FEET (NGVD)

ELEVATION IN FEET (NGVD)



STANDARD PROJECT FLOOD
100 YEAR FLOOD
ELEVATION IN FEET (NGVD)
DISTANCE IN FEET
PLATE 5

Appendix B

Regional Policy Position on Trinity River Corridor – 1989

Adopted by the Trinity River Corridor Steering Committee and the Executive Board of the North Central Texas Council of Governments



The Dallas/Fort Worth metroplex is the largest inland metropolitan region in the country, surrounding a relatively small stream named the Trinity River. To assure adequate water supply to the region's 4 million people, upstream reservoirs have been built on all major forks and tributaries. Thus, the summer flows in the West Fork and Main Stem of the river consist primarily of highly-treated wastewater effluent, while the Elm Fork conveys mostly lake releases to a Dallas water treatment plant.

Long-standing federal plans to construct a barge canal from Fort Worth to the Gulf were abandoned in the early 1980's, leading to numerous unrelated requests for federal permits to reclaim portions of the flood plain for commercial and residential development. The Fort Worth District of the U.S. Army Corps of Engineers, which was formed after severe river flooding in the 1940's, has completed a three-year regional study of the cumulative effects of alternative development scenarios. Throughout this effort they have worked closely with elected officials and staff from the nine affected cities and three counties through the North Central Texas Council of Governments.

The Corps of Engineers indicates that two major conclusions have emerged from their Final Regional Environmental Impact Statement. The first "reemphasizes that a widespread lack of Standard Project Flood (SPF) protection currently exists" throughout the river corridor. The SPF flood plain now consists of about 69,500 acres, with 4,400 acres of residential property and 10,000 acres of commercial/industrial property. Damages to property if a Standard Project Flood were to occur today could approach several billion dollars.

The second major Corps of Engineers conclusion is that "different permitting strategies have a measurable and significant impact on the extent of increase of this lack of SPF protection." Under the most extensive development scenario, flood damages could triple the estimates for the baseline condition, not including the catastrophic effects if the Dallas Floodway levees were breached. However, the Corps of Engineers has stated that it has limited permit authority in the flood plain to affect these scenarios, and that any solutions must come from a cooperative approach among local governments.

Since mid-1986, NCTCOG has been serving as convener and facilitator of affected local governments in pursuit of a COMMON VISION for the Trinity River Corridor. The Regional EIS provides invaluable information to aid local governments in this quest. The Steering Committee of elected officials which is guiding the interjurisdictional program has recognized that even under existing developed conditions many citizens and many thousands of acres of land are under the threat of flooding in SPF conditions. Until a major flood control program can be completed to reduce or eliminate the existing flooding threats, the continuing pressure for development of the flood plain must be managed in the most practical and equitable manner possible to at least stabilize current levels of flooding risk. Attention must also be placed on meeting water and other environmental quality goals and implementing desired regional public facilities.

As a significant next step in its pursuit of a COMMON VISION, the Trinity River Corridor Steering Committee revises and adopts this **Regional Policy Position on Trinity River Corridor – 1989**.

The Trinity River Corridor is a unique regional resource.

The 100-mile Trinity River Corridor includes the Standard Project Flood (SPF) flood plain of the West Fork, Elm Fork, Main Stem and major tributaries from the reservoir dams downstream to south Dallas. The river corridor is a unique regional resource in the heart of a growing metroplex. Desires to reclaim or preserve it can and will obviously conflict — there is room in the 70,000 acres of the corridor for both. The river corridor is valuable to all 4 million residents of the region and the millions to come.

Local governments must be the stewards of the Trinity River Corridor.

Whatever is done to reclaim or preserve the river corridor will require local government action — zoning, permits, capital expenditures, maintenance. While other governmental bodies, such as levee districts, several state agencies, and three Federal agencies, have fragmented authority within the river corridor, local governments are directly responsible for the overall health, safety and welfare of their own citizens. Thus, local governments must take the lead as stewards of the river corridor.

Individual local goals can only be achieved through cooperative management.

The river corridor encompasses portions of at least nine cities and three counties. No single local government can attain its own goals alone, since actions of upstream and downstream communities will directly affect them. The participating local governments have recognized this even more clearly as they have reviewed the Final Regional EIS, and have reaffirmed their desire to pursue a COMMON VISION for the Trinity River Corridor.

The following policy statements reflect actions to be accomplished by the participating local, state and federal agencies between 1988 and 1990 to stabilize the existing risk of flooding, explore alternatives to reduce this risk, initiate a world-class Trinity Greenway strategy, and continue to improve water and other environmental quality conditions. The participating cities are providing \$200,000 to NCTCOG to continue its coordination and technical assistance role, and to facilitate local involvement in the new Corps Reconnaissance Study.

A key to successful cooperative management is common permit criteria.

A significant finding from the Final Regional EIS is that different local policies for flood plain reclamation can increase or reduce the risk of flooding or the potential for water quality degradation. Each city in the river corridor currently uses its own set of criteria for permitting a development project, which must meet minimum flood insurance requirements. To assure successful cooperative management, participating local governments are committing to use common criteria for permit decisions.

Principles for the common criteria have been developed jointly by the local governments and Corps of Engineers in response to the Regional EIS findings.

During late 1987, the local governments and the Corps of Engineers spent many hours negotiating principles for common permit criteria that would stabilize the existing threat of flooding while allowing limited flood plain development. The criteria approved in the Corps' Record of Decision are derived from the Corps' interim criteria. They are intended to be applied for the entire flood plain, not just the Corps' jurisdictional area. Cities could still have site-specific requirements as long as they would not conflict with the common criteria.

The common criteria will be applied by local governments, the Corps of Engineers, and other state/federal agencies through a new Corridor Development Certificate process.

To insure coordination among all permitting agencies in the use of the common criteria, the Steering Committee has endorsed a new Corridor Development Certificate (CDC) process. While each city retains development authority within its jurisdiction, a joint process of notification, Corps technical analysis and local government review is performed for each application. To aid permit applicants and assure consistency of interpretation, a criteria manual should be developed which clearly describes and illustrates the common permit criteria.

A computerized Trinity River Information Network is being initiated by NCTCOG to track public and private actions.

It is clear from the recent program that there is poor tracking of projects along the corridor and inadequate communication among local, state and federal agencies. TRIN will be a computer mapping and geographic information management system maintained by NCTCOG. It will serve as permanent documentation of permit decisions, and be used as input by the Corps of Engineers and others to the hydraulic/hydrologic computer models.

Expanded technical assistance within the river corridor should be provided by the Corps of Engineers.

It is extremely important that computer modeling of the river corridor be performed on a consistent basis so that the impacts of a proposed development activity can be fairly evaluated under the common criteria. The local governments have provided the Corps with the most up-to-date baseline information available, and are agreeing to use the Corps models in current studies. However, it is recognized that extensive new aerial photography, topography, cross-sections, and related data is needed to improve the reliability of the computer models for use in permitting and detailed design studies.

A regional review and comment process on major actions is being established.

To improve communication among affected local governments, and coordination with state and federal agencies, a Notice of Intent to Process a CDC application will be distributed by the appropriate city to all other local governments in the corridor, the Corps, FEMA and Texas Water Commission for comment. The city will consider these comments as it makes its decision whether or not to grant a CDC.

A Trinity Greenway of major parks linked by a regional trails system is being pursued.

Tens of thousands of acres of open space are being preserved within the river corridor with outstanding potential for active and passive recreation. Even if the most extensive development scenario were implemented, the remaining open space acreage would equal more than twenty New York Central Parks. Using TRIN, local parks and recreation professionals will prepare a realistic Trinity Greenway strategy of major parks linked by a regional trails system. Funding priorities for implementing such a greenway will be sought from the Texas Parks and Wildlife Department in their 1990 Texas Outdoor Recreation Plan.

Studies to identify the causes and solutions to periodic fish kills should be continued.

Dissolved oxygen quality in the river under normal flow conditions has improved significantly during the last decade, as major wastewater treatment plants have been upgraded. However, fish kills occurred downstream of the region in 1985 and 1986 during peak river flow events with low dissolved oxygen levels. The Texas Water Commission should continue its lead role in coordinating local, state and federal studies to document the causes of these fish kills and to identify realistic and effective solutions.

Scientifically-sound information on toxic pollutants should be obtained.

In the past, limited sampling of river bottom sediments at scattered sites has found elevated levels of selected toxic pollutants. Several monitoring studies are now underway to determine the levels of selected pesticides and heavy metals in the water and fish. The Texas Water Commission should use scientifically-sound technical data as the basis for setting any new toxic standards required by federal law.

Sites for future regional stormwater detention basins should be preserved.

As identified in the Final Regional EIS, sites for future regional wet detention ponds should be preserved, since the fish kill studies or the emerging EPA storm water permit requirements on cities may identify a need for such facilities as an alternative to costly stormwater treatment. However, the need for tertiary treatment of wastewater effluent by land application in the flood plain has not been justified at this time.

Particular attention should be given to desired regional public facilities.

There are important regional public facilities that must be protected from potential flooding damages, such as the joint system wastewater treatment plants. New public facilities such as bridge crossings, a potential parkway, and the RAILTRAN mass transit system must be planned carefully and comply with the common criteria.

The Corps is identifying alternatives to reduce flooding risks and provide environmental enhancements in its Reconnaissance Study.

During 1988, the participating local governments aided the Corps in obtaining Congressional appropriations of \$680,000 to conduct a Reconnaissance Study of the Upper Trinity basin. The purpose is to identify problems and opportunities, identify potential solutions, determine whether a federal interest is warranted, identify the local sponsor(s), and outline the next steps to be addressed in a Feasibility Study. The Reconnaissance Study began in October 1988 and is expected to be completed in early 1990. Close coordination is occurring with local governments through the Steering Committee and staff.

The full range of nonstructural and structural alternatives should be examined without restrictions by the State.

In its studies, the Corps should examine the full range of nonstructural and structural alternatives to reduce flood damages, enhance water and environmental qualities, and provide for recreation. It would be inappropriate for the State Legislature to enact restrictions on the options which could be implemented for the Elm Fork, West Fork or Main Stem.

State and Federal funding for the Feasibility Study should be earmarked for FY91 and beyond.

It is already clear that there are at least two nonstructural cooperative projects for further refinement in a Feasibility Study. One is the improvement of the Corps' computer models through an extensive data collection effort, so that they can serve as useful tools in the CDC permitting process to stabilize the flooding risk. Interest has also been registered by Dallas, the River Forecast Center and others to explore the benefits of a sophisticated computer-based Flood Warning System. The initial portion of the four-year \$5 million Feasibility Study needs to begin in FY91 with 50% federal funding and 50% state and/or local matching funds.

NCTCOG Executive Board 1988-89

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Trinity River Corridor Interjurisdictional Management Program
"In Pursuit of a Common Vision"

Designated Local Government Representatives:

<u>Jurisdiction</u>	<u>Steering Committee</u>	<u>Flood Mgmt. Task Force</u>
City of Arlington	Ken Groves Councilmember	Jerome F. Ewen , Asst. Dir. of Community Dev.
City of Carrollton	Gary Blanscet Councilmember	Pat Canuteson City Engineer
City of Coppell	Mark Wolfe Councilmember	Russell Doyle City Engineer
City of Dallas	John Evans Mayor Pro Tem	Michael H. Askew Program Manager
City of Farmers Branch	Calla Lea Davis Mayor Pro Tem	J.V. Murawski, Jr. City Engineer
City of Fort Worth	Bert C. Williams Mayor Pro Tem	Gary L. Santerre Dir. of Public Works <i>Alt: Rick Trice, Flood Plain Manager</i>
City of Grand Prairie	Ed Galligan Councilmember	Dale Powell Senior Civil Engineer
City of Irving	Jeff Singleton Councilmember	Jack Angel , Asst. Dir. of Public Works
City of Lewisville	John Peveto Councilmember	T.S. Kumar Staff Engineer
Dallas County	Chris V. Semos Commissioner	John W. Bryan Dir. of Public Works
Denton County	Lee Walker Commissioner	Tammy Lucas Assistant to Comm.
Tarrant County	Bob Hampton Commissioner	Howard Friedman Mgt. Research Services
Chairman	Gary Skaggs Past President, NCTCOG	

Adopted by the Trinity River Corridor Steering Committee and the Executive Board of the North Central Texas Council of Governments on January 26, 1989 and February 23, 1989 respectively.

What is NCTCOG?

The North Central Texas Council of Governments is a voluntary association of cities, counties, school districts, and special districts — established in January 1966, to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development.

The Council of Governments is an organization of, by, and for local governments. Its purpose is to strengthen both the individual and collective power of local governments — and to help them recognize regional opportunities, resolve regional problems, eliminate unnecessary duplication, and make joint regional decisions. NCTCOG also assists in developing the means to implement those decisions.

North Central Texas is a 16-county metropolitan region centered around Dallas and Fort Worth. Currently the Council has 204 members, including 16 counties, 149 cities, 21 independent school districts, and 18 special districts. The area of the region is approximately 12,800 square miles, which is larger than nine states, and the population of the region is over 4.0 million, which is larger than 29 states.

For more information contact:

North Central Texas Council of Governments, Department of Environmental Resources
P. O. Drawer COG/616 Six Flags Drive/Arlington, Texas 76005-5888/(817) 640-3300 (metro).

December 15, 1988

RESOLUTION FOR A JOINT
TRINITY RIVER CORRIDOR DEVELOPMENT CERTIFICATE PROCESS

WHEREAS, the 1987 Regional Environmental Impact Statement on Trinity River Corridor prepared by the U.S. Army Corps of Engineers indicates that different permitting strategies have a measurable and significant impact on the risk of flooding and potential damage; and

WHEREAS, goals toward a COMMON VISION for the Trinity River can only be achieved through intergovernmental cooperation; and

WHEREAS, the North Central Texas Council of Governments, which is serving as convener and facilitator in pursuit of a COMMON VISION, and the Steering Committee of elected officials representing the twelve affected local governments have adopted an Interim Regional Policy Position on Trinity River Corridor and prepared a Draft Statement of Principles for Common Permitting Process; and

WHEREAS, the Draft Statement of Principles was developed with the assistance of the U.S. Army Corps of Engineers and includes: (1) a definition of the affected river corridor area; and (2) a recommended Corridor Development Certificate (CDC) process for the joint processing of applications for river corridor modifications; and

WHEREAS, the affected local governments participate in the National Flood Insurance Program (NFIP), and under the Texas Water Code (V.T.C.A. Section 16.236) thereby exercise authority and responsibility for regulating and approving modifications to flood prone areas within their jurisdictional boundaries; and

WHEREAS, in accordance with the NFIP under 44 CFR 59-77 the affected local governments have a Local Flood Plain Administrator to execute and enforce local flood plain management ordinances aimed at protecting lives and reducing flood losses, and

WHEREAS, under 33 CFR 320-330 the Corps of Engineers is directed to process permit applications affecting waters of the United States concurrently with other required federal/state/local authorizations; and

WHEREAS, the Corps of Engineers is also directed to deny without prejudice any permit which fails to receive required federal/state/local authorizations,

NOW, THEREFORE, THE STEERING COMMITTEE OF THE NCTCOG TRINITY RIVER CORRIDOR INTERJURISDICTIONAL MANAGEMENT PROGRAM RESOLVES:

1. To reaffirm its support for a joint Corridor Development Certificate (CDC) process whereby each city still retains development authority within its jurisdiction; and
2. That implementation of an effective CDC process requires well defined cooperation and coordination among the responsible permitting agencies; and

3. That, in accordance with the Draft Statement of Principles, applications for Trinity River Corridor flood plain modifications (as defined in the Draft Statement of Principles) are to be processed in the following manner:
 - a. applications for Trinity River Corridor flood plain modifications will be initially filed with the Local Flood Plain Administrator;
 - b. the Local Flood Plain Administrator will document the filing of an application for flood plain modification by providing the applicant with a "Standard Notice of Intent to Process." (This joint and standard form will be cooperatively developed and designed, and is to be approved by the Steering Committee);
 - c. the "Standard Notice of Intent to Process" will document the city's intent to process an application to modify the Trinity River Corridor flood plain, and will serve as notice and verification that the Local Flood Plain Administrator has received the application and is reviewing the proposal;
 - d. the Local Flood Plain Administrator, to assure proper interagency coordination, will distribute copies of the "Standard Notice of Intent to Process" to the U.S. Army Corps of Engineers, the Federal Emergency Management Agency (FEMA), the Texas Water Commission, the twelve affected local governments and the North Central Texas Council of Governments;
 - e. the U.S. Army Corps of Engineers will refuse to accept a Trinity River Corridor permit application which does not include a copy of the Local Flood Plain Administrator's "Standard Notice of Intent to Process;"
4. That the Corps of Engineers, the Federal Emergency Management Agency, the Texas Water Commission and other permitting agencies provide a timely summary of their permit actions and/or findings to the local Flood Plain Administrator (and the NCTCOG) to assist the Administrator with properly exercising his ultimate authority and responsibility for flood plain alterations;
5. That the North Central Texas Council of Governments maintain a computerized tracking system of the "Standard Notice of Intent to Process" and all relevant local, State and Federal permit actions; and
6. That the District Engineer of the Fort Worth District Corps of Engineers, the Regional Director of FEMA Region VI, and the Executive Director of the Texas Water Commission be requested to review this resolution, and either concur with this procedure or provide the Steering Committee with recommended alternatives which will fulfill, to greatest extent possible, the intent of this resolution.
7. That this resolution be sent to the nine affected cities and three affected counties along the Trinity River Corridor for their review, concurrence and supporting city council/commissioners court adoption.

ADOPTED ON DECEMBER 15, 1988 BY THE STEERING COMMITTEE OF THE TRINITY RIVER CORRIDOR INTERJURISDICTIONAL MANAGEMENT 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

Federal Emergency Management Agency's (FEMA) minimum criteria for the flood insurance program, and c) maximizing economic development.

The results of the Draft Regional EIS indicated strongly that there are potential cumulative impacts associated with individual flood plain development projects which are both measurable and significant. Additionally, the Draft Regional EIS indicated that the permitting approach adopted by the Corps of Engineers had the potential to have significantly different impacts on a number of regional parameters, especially flood hazards. Even though the analyses were not complete, and the public comment on the Draft Regional EIS indicated that there was much work to follow, the implications to the ongoing Regulatory Program could not be overlooked. In response to this, the Corps formulated a set of interim criteria to be in effect until the Record of Decision was rendered.

Many of the comments received on the Draft Regional EIS indicated that the slate of alternatives analyzed did not represent a realistic approach to regulatory strategies. In many cases, the predicted results were publicly unacceptable. Two important examples include the overtopping of the Dallas Floodway levees under two of the scenarios, and a substantial downstream shift in the Dissolved Oxygen "sag" resulting in noncompliance with State Water Quality Standards in the reach below the Trinidad gage. After careful analysis of the public and agency input, several new scenarios were formulated for analysis in the Final Regional EIS.

In addition to updating the baseline, three scenarios, representing the same three broad categories that had been previously addressed, were developed. Many people suggested that the Maximum Development scenarios analyzed in the Draft Regional EIS were too extreme, either because they conflicted with an ongoing project, or because levees were physically impractical in some portions of the flood plain. In response to this criticism, we agreed to replace them with a "Composite Future" scenario. Each city was tasked to provide the North Central Texas Council of Governments (NCTCOG) a delineation of the "most likely" limits of maximum encroachment within their jurisdiction. NCTCOG compiled each city's individual prediction and presented the resultant set of maps to local staffs and local elected officials before providing them to the Corps for analysis.

The Modified Floodway scenario of the Final Regional EIS replaced the floodway-based scenarios of the Draft Regional EIS as a representative compromise between maximum (realistic) development and maximum (realistic) environmental quality. In this scenario, the Corps defined the geographic limits of a drainageway incorporating the FEMA concept with significant technical variations. For the third scenario, the Corps revised and represented a Maximum Environmental Quality scenario, hydraulically identical to the revised baseline because it incorporated no additional flood plain projects except water quality, recreation, and wildlife enhancements. Of the scenarios, or alternatives, examined in the Final Regional EIS, this is the environmentally preferred alternative.

The extensive coordination and public involvement characteristic of the Regional EIS process continued during the comment period on the Final Regional EIS, which extended from its release on October 22, 1987, through January 31, 1988. During this period, I held a public meeting at Lamar High School at

which eleven people submitted statements. My staff attended in excess of twenty meetings with local government staffs, public agencies, and citizen groups. In addition, sixty-six written comments on the Final Regional EIS were received.

II. Discussion of Issues and Factors

Most of the formal public comment and discussion with local governments centered on three general issues: the appropriate level of flood protection (100-year vs. SPF), the level of accuracy of the hydraulic and hydrologic analyses displayed in the Regional EIS, and the issue of equity as it pertains to governmental regulation. "Benefits" and "costs" of an action, whether it be a proposed project or a proposed regulation, do not always occur to the same group of people, let alone in the same order of magnitude. The definition of the "public interest" which is at the heart of the Regional EIS calls for an assessment of the tradeoffs inherent between public demands for enhanced environmental quality in the river corridor and for its use for needed public facilities, and economic development and the rights of private landowners.

A major consensus achieved through the review of the Final Regional EIS is that additional regional increases in flood hazards for either the 100-year or Standard Project Flood are undesirable, and that the thrust of flood plain management, in the short term, should be to stabilize the flood hazard at existing levels through regulation. Future efforts on the part of both the Corps and local organizations may be required to reduce flood hazard over the long term.

The Regional EIS is probably the most comprehensive such study done in the United States. It has highlighted the need for planning for the region and cooperation among the governmental entities along the Trinity River corridor to achieve quality development. The document was developed for the sole purpose of establishing a permitting strategy for the Trinity River and its tributaries. It does not contain a technical baseline that will remain current over time and is not to be used as a design document. Design decisions requiring water surface predictions based on critical storm centerings, and which are sensitive to valley storage computations, must be based on detailed site-specific engineering analyses. Other site-specific public or private flood control management decisions should likewise be based on current technical analyses. Further, flood insurance data must be obtained from the FEMA and not from the Regional EIS.

Neither the Regional EIS nor this Record of Decision encroaches upon the responsibility of design engineers or the authority of local governments. The Regional EIS, its public review, and this Record of Decision serve only to establish and document the "best overall public interest" as it applies to the Trinity River and its tributaries. It remains the responsibility of design engineers to perform competent work in accordance with professional design practices. Permit applicants which proposed flood plain modifications and/or site-specific flood control structures will need to satisfy review agencies as to the reasonableness of design assumptions.

Throughout the development of this Record of Decision, the Corps has worked closely with the NCTCOG to insure consistency with their COMMON VISION program. The criteria listed below for the West Fork, Elm Fork, and Main Stem are consistent with the Statement of Principles for Common Permit Criteria sub-

mitted by the Steering Committee of local government officials. Because of the massiveness of this undertaking and the importance of its impact on future growth, the comments from the cities and other governmental entities have been carefully considered.

III. Decision

Based on my consideration of the data developed and presented in both the Draft and Final Regional EIS's and my careful consideration of all public input, I have determined that, for the purposes of the Regional EIS study area, my Regulatory Program will be henceforth based on the following criteria. The baseline to be used in analyzing permit applications will be the most current hydraulic and hydrologic model of the specific site in question. The burden of proof of compliance with these criteria rests with the permit applicant. Variance from the criteria would be made only if public interest factors not accounted for in the Regional EIS overwhelmingly indicate that the "best overall public interest" is served by allowing such variance.

A. Hydraulic Impacts--Projects within the SPF Flood Plain of the Elm Fork, West Fork, and Main Stem. The following maximum allowable hydraulic impacts will be satisfied, using reasonable judgment based on the degree of accuracy of the evaluation, and using cross sections and land elevations which are representative of the reaches under consideration:

1. No rise in the 100-year or SPF elevation for the proposed condition will be allowed.

2. The maximum allowable loss in storage capacity for 100-year and SPF discharges will be 0% and 5% respectively.

3. Alterations of the flood plain may not create or increase an erosive water velocity on-or off-site.

4. The flood plain may be altered only to the extent permitted by equal conveyance reduction on both sides of the channel.

B. Hydraulic Impacts--Tributary Projects. For tributaries with drainage areas less than 10 square miles, valley storage reductions of up to 15% and 20% for the 100-year and Standard Project Floods, respectively, will be allowed. For tributaries with intermediately-sized drainage areas (10 square miles to 100 square miles), the maximum valley storage reduction allowed will fall between 0% and 15% for the 100-year flood and 5% and 20% for the Standard Project Flood. Increases in water surface elevations for the 100-year flood will be limited to approximately zero feet. Increases in water surface elevations for the Standard Project Flood will be limited to those which do not cause significant additional flooding or damage to others. Projects involving tributary streams with drainage areas in excess of 100 square miles will be required to meet the same criteria as main stem projects (see "A" above).

C. Cumulative Impacts. The upstream, adjacent, and downstream effects of the applicant's proposal will be considered. The proposal will be reviewed on the assumption that adjacent projects will be allowed to have an equitable chance to be built, such that the cumulative impacts of both will not exceed the common criteria.

D. Design Level of Flood Protection. The engineering analysis will include the effects of the applicant's proposal on the 100-year and Standard

Project Floods and should demonstrate meeting FEMA, Texas Water Commission, and local criteria, as well as Corps, for both flood events.

1. For levees protecting urban development, the minimum design criterion for the top of levee is the SPF plus 4.0, unless a relief system can be designed which will prevent catastrophic failure of the levee system.

2. For fills, the minimum design criterion is the 100-year elevation, see above, plus one foot.

E. Borrow Areas. The excavation of "borrow" areas to elevations lower than the bottom elevation of the stream is generally hydrologically undesirable. The volume of such excavations, above the elevation to which the area can be kept drained, can be considered in hydrologic storage computations.

F. Preservation of Adjacent Project Storage. The applicant will be required to respect the valley storage provided by adjacent projects by ensuring that their hydraulic connection to the river is maintained. If the project blocks the hydraulic connection of the adjacent project, then the applicant will be required to provide additional valley storage to offset the loss caused by the blockage of the hydraulic connection.

G. Special Aquatic Sites. Value-for-value replacement of special aquatic sites (i.e. wetlands, pool and riffle complexes, mud flats, etc.) impacted by non-water dependent proposals will be required.

These criteria will be used by the Corps for the express purpose of evaluating new permit applications received subsequent to the effective date. They will not be used to reevaluate any flood plain project already constructed or permitted. They apply to permit applications from public agencies as well as private sector applications. In addition to the criteria discussed above, the following guidelines will be used by my staff in evaluating permit applications:

A. Runoff. Site drainage systems should minimize potential erosion and sedimentation problems both on site and in receiving water bodies.

B. Habitat Mitigation. A standardized, habitat-based evaluation method should be used to evaluate the impacts of the applicant's proposal to fish and wildlife resources. Guidelines for the quality and quantity of mitigation are as follows:

1. Category 2 resources--habitat of high value which is scarce, or is becoming scarce in the ecoregion--no net loss of habitat value. Category 2 resources in the study area include vegetated shallows, riffle and pool complexes, and riparian forests, as well as wetlands (see above for mitigation of wetlands). A buffer strip of natural vegetation 100' feet wide on each side of the channel for main stem projects, and 50' feet for tributaries, should be maintained.

2. Category 3 resources--habitat of medium-to-high value that is relatively abundant in the ecoregion--no net loss of habitat value while minimizing the loss of the habitat type. (This means to reduce the loss of the habitat and compensate the remainder of loss of habitat value by creation or improvement of other Category 2 or 3 resources.) Category 3 resources in the study area include deep water, native rangeland, upland forests, and upland

shrubland.

3. Category 4 resources--habitat of low-to-medium value--mitigation should be to minimize the loss of habitat value, which can be accomplished by avoidance or improving other habitat types. Category 4 resources in the study area include cropland and improved pasture.

C. Cultural Resources. Cultural resources, including prehistoric and historic sites, will be identified and evaluated according to National Register of Historic Places Criteria. Identification procedures may involve literature review, pedestrian survey, and excavation to identify buried cultural materials. Sites which are eligible for inclusion in the National Register of Historic Places will be treated by measures which range from avoidance, to preservation in place, to mitigation through excavation.

D. Other Regional Needs and Plans. Consideration will be given when evaluating permit applications of the proposal's impact on regional facilities which have been identified as important through the Regional EIS process. These include, but are not limited to, a linear hike/bike system linking large flood plain parks throughout the Metroplex, the Trinity Tollway, and sites for regional stormwater detention basins. (Specific locations and plans for these facilities will continue to evolve through coordination with NCTCOG and local governments.) Applicants will be urged to design projects which do not preclude future implementation of these regional assets.

It is my conclusion that the criteria and guidelines set forth above represent the best available definition of the "overall public interest," taking into account the rights of individual landowners and the direct, indirect, and cumulative impacts of individual actions under my purview. Further, I conclude that these policies represent all the practical means known to me to avoid or minimize environmental harm within that framework. This document will therefore provide the specific framework within which we will operate the Fort Worth District's Regulatory Program within the Regional EIS study area.

JOHN E. SCHAUFELBERGER
Colonel, Corps of Engineers
District Engineer

Date:

**DRAFT STATEMENT OF PRINCIPLES
FOR COMMON PERMIT CRITERIA**

TRINITY RIVER CORRIDOR

Reviewed by Steering Committee on January 28, 1988

1. WHAT IS THE PURPOSE OF THIS STATEMENT OF PRINCIPLES ?

The Steering Committee of elected officials for the Trinity River Corridor Program, and the NCTCOG Executive Board, have adopted an "Interim Regional Policy Position on Trinity River Corridor." It calls for a cooperative management program using common permit criteria which are derived from interim criteria now being applied by the U.S. Army Corps of Engineers, Fort Worth District in their permitting process. It also calls for expanded technical assistance by the COE and a regional review and comment process for major actions.

This Statement of Principles represents the best attempt at a regional consensus on permit criteria within the 90 days available for response to the COE Final Regional Environmental Impact Statement for the Trinity River. It was developed by the Staff Task Force through seven drafts, with input from the NCTCOG staff, COE, other governmental agencies and private sector representatives.

A significant finding of the Final Regional EIS is that different local policies for flood plain reclamation can increase the risk of flooding or the potential for water quality and environmental degradation. The nine participating cities have expressed their support for a cooperative management program whereby each city still retains development permit authority within its jurisdiction, but bases its permit decision on a set of common permit criteria.

It is the express purpose of this cooperative process to satisfy the requirements of the Federal Emergency Management Agency and the Texas Water Commission regarding city flood plain permit actions within the Trinity River Corridor, and to effect close coordination with the U.S. Army Corps of Engineers and other state or federal agencies which have their own permit processes.

For purposes of this document, the Trinity River Corridor includes all of the area within the Standard Project Flood plain of the Trinity River West Fork, Elm Fork and Main Stem as defined in the Revised Baseline Future Discharges scenario of the Final Regional EIS, approximately 70,000 acres. The upstream and/or downstream boundaries of this corridor need to be expanded, since the City of Fort Worth has requested that it begin at the upstream dams rather than Riverside Drive, and the City of Dallas has previously suggested that it extend further downstream.

2. WHAT IS A CORRIDOR DEVELOPMENT CERTIFICATE (CDC) ?

To distinguish it from other requirements, the development permit within the Trinity River Corridor to be issued by a city will be referred to as a Corridor Development Certificate (CDC). It is a written authorization by a city which allows property to be "developed" within the city's jurisdiction in the Trinity River Corridor, in compliance with the common permit criteria presented later. The CDC will include, as a part thereof, the application and all documents supplied in support thereof and the approval by the authorized agent of the city together with any conditions thereto.

Any public or private development within the Trinity River Corridor must obtain a CDC prior to start of construction, unless specifically exempted as discussed below. [NOTE: The definition of "start of construction" has not yet been determined as noted in the last section of this document.]

Consistent with the requirements of the Federal Emergency Management Agency under 44CFR59, a development means "any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations." To assure consistency with Texas Water Commission requirements under 31 Texas Administrative Code, development also includes "any levee or other improvement" as defined by Section 301.2 of the Code.

A development by a city itself within the Trinity River Corridor will be treated like any other application for a CDC, and will undergo the COE permit process if applicable or the regional review and comment process presented later. The application will then be acted upon by the City Council (rather than a staff person who perhaps prepared the application).

If a development can show in writing that it meets any of the conditions below, it may be exempted by the city from the local permit process. [NOTE: the applicant should still check with the Corps of Engineers, FEMA and the Texas Water Commission to determine if the development is subject to specific permit requirements by those agencies.] This written exemption will be maintained on file by the city and be provided to NCTCOG for the permanent records.

EXEMPTIONS:

- a. ordinary maintenance of any flood control structures.
- b. outfall structures and associated intake structures where the outfall has been permitted under the NPDES program.
- c. discharge of material for backfill or bedding for utility lines provided there is no change in bottom contours and excess material is removed to an upland disposal area.
- d. bank stabilization activities meeting Corps of Engineers Section 404 Nationwide Permit criteria under 33CFR330.5(13).
- e. property which is (1) completely outside the 100-year flood plain as defined by the Revised Baseline Future Discharges scenario of the Final Regional EIS, and (2) has no COE jurisdictional areas as determined by the Corps of Engineers in writing.

3. WHAT INFORMATION SHOULD BE SUBMITTED IN A CDC APPLICATION ?

An application for a CDC will be made on standard forms furnished by the city or facsimiles thereof, and be signed by the owner of the property or appropriate agent. To insure that all proposed developments are afforded a complete and consistent level of analysis, the application will include, but not be limited to:

- a. Project Plans
- b. Hydrologic Data
- c. Hydraulic Data
- d. Elevation - Storage - Discharge Data
- e. COE Jurisdictional Review
- f. Resource Data
- g. Maintenance and Operation Data

More detailed descriptions of these requirements are presented below:

- a. Project Plans. Project plans would be submitted as part of the CDC application, at a scale which provides adequate detail of the whole project as well as individual features of the project. The plan should show the location of the Regulatory Floodway (FEMA) and the layout of cross-section's used in the hydraulic model. Proposed changes to the Floodway should be clearly shown.
- b. Hydrologic Data. Design discharges for the 100-year and SPF storm should be based on urbanization consistent with the Revised Baseline Future Discharges scenario of the 1987 U.S. Army Corps of Engineers' Final Regional Environmental Impact Statement; Trinity River and Tributaries (EIS) or supplemental EIS data provided by the COE, whichever is higher. The applicant should clearly identify these design discharges, including source and date.

[NOTE: It is imperative that property owners, developers and policy makers understand that the "SPF" discharges in the Final Regional EIS are applicable only for the Elm Fork and the Main Stem of the Trinity River. Critical storm centerings were not applied to the West Fork. Therefore an equivalent level of analysis (i.e. true SPF discharges) is lacking for the West Fork segments of the Trinity River.

Representatives of the U.S. Army Corps of Engineers have indicated they may develop a supplement to the Final Regional EIS which would revise the SPF discharge figures for the West Fork. In the interim, this lack of an equivalent level of analysis for segments along the West Fork warrants a conservative respect for the SPF values contained in the Final Regional EIS. Actual SPF discharges along the West Fork will predictably be greater in magnitude.]

In conjunction with the common policies described herein, the Existing Condition Future Discharges of the Final Regional EIS (as supplemented by the COE) are reflective of a watershed with modest stability in future discharges. However, future discharge corrections will undoubtedly be required. For consistency in permit review and evaluation of design requirements, revisions to the discharges contained in the Final Regional EIS should be scheduled and coordinated among the affected jurisdictions.

- c. Hydraulic Data. Water surface elevations at upstream, middle and downstream ends of project (existing and with project) for 100-year and SPF discharges consistent with the Revised Baseline Future Discharges should be provided with the CDC application. Hydraulic calculations should be continued for a distance great enough upstream and downstream of project to verify flow elevations are not raised by the proposed hydraulic modifications. In all cases, the best available data on water surface elevations should be utilized.

Printouts and plots from an approved hydraulic model (e.g. HEC-2) of cross-sections for existing and with-project conditions should be part of the CDC application. Water surface profiles for 100-year and SPF floods for existing and with-project conditions should also be included. The number and location of sections should be adequate to describe and support documented computations.

- d. Elevation - Storage - Discharge Data. Elevation, storage, and discharge data (i.e., using the Final Regional EIS Revised Baseline Future Discharges w/supplements in combination with the most reliable elevation data available) for design and with-project conditions should be developed:

- o within the project borders alone;
- o considering full cross-section widths across the river or creek; and
- o show percent of change in valley storage capacity.

Storage change is to be considered "on site" (i.e., within upstream and downstream limits of the project). Computations of the change in storage capacity should apply to the SPF flood plain as identified in the Final Regional EIS, irrespective of revised flow elevations possibly derived from an additional backwater analysis of supplemental SPF discharge information.

- e. COE Jurisdictional Review. Applicants should provide written correspondence from the Corps of Engineers indicating whether Corps jurisdiction applies to the project area [NOTE: a formal determination on the application itself occurs at later step in the CDC process.]
- f. Resource Data. Applications should include at least the following information on environmental/cultural resources: (1) engineering and environmental resource data which tabulates the impact on land cover types and habitat units; and (2) any plans for erosion control, general landscaping, or other practices to minimize potential water quality and other environmental impacts.

Projects areas which are within COE jurisdiction will also need to provide identification of mitigation required for loss and/or alteration of high value habitats.

Development which proposes to relocate or alter a natural channel should also submit more detailed environmental data and a stream rehabilitation program as outlined in the detailed design criteria manual (to be developed).

- g. Maintenance and Operation Data. An estimate of annual maintenance and operation costs for the hydrologic/hydraulic aspects of the project should be provided. Parties responsible for costs associated with maintenance and operation in perpetuity for the "as designed" condition should be clearly identified. If maintenance is to be accomplished by an agent other than the community, a legal provision for community monitoring and backup maintenance is required.

4. WHAT COMMON PERMIT CRITERIA SHOULD BE MET ?

The following common permit criteria describe a consistent design level of protection which should be met for all CDC applications, unless granted a variance. A detailed design criteria manual will be developed to assist applicants. The applicants for a CDC would be required to provide sufficient detailed information to document criteria compliance.

- a. Hydraulic Impacts. The following maximum allowable hydraulic impacts should be satisfied using cross-sections and land elevations which are representative of the reaches under consideration:
 - o Flow Elevations. No rise in the 100 year or the SPF flood elevation for the proposed condition should be allowed.
 - o Storage Capacity. The maximum allowable loss in storage capacity for 100-year and SPF discharges should be 0% and 5% respectively. The storage loss calculations should be based on the flood plain elevations of the Revised Baseline Future Discharges scenario of the Regional EIS
 - o Velocities. Alterations of the flood plain may not create or increase an erosive water velocity on or off-site.
 - o Conveyance. The flood plain may be altered only to the extent permitted by equal conveyance reduction on both sides of the channel.
- b. Cumulative Impacts. The upstream, adjacent and downstream effects of the proposed project should be considered. The proposed project should be reviewed on the assumption that adjacent projects can have an equitable chance to be built - such that the cumulative impacts of both will not exceed the common criteria. Hydraulic data (e.g. HEC-2 modeling with blocked off conveyance) should be supplied to show the impacts of adjacent developments.
- c. Resource Guidelines. Guidelines for measuring and evaluating environmental and cultural impacts will be specified in the detailed design criteria manual (to be developed).
- d. Design Level of Flood Protection. For all developments, the engineering analysis should include the effects of the proposed project on the 100-year and SPF floods (based on the with-project design discharges using urbanization consistent with the Revised Baseline Future Discharges of the Trinity River Final Regional EIS) and should demonstrate meeting FEMA, COE, TWC, and local criteria for both. Minimum design criteria should include:
 - o For levees, a minimum design criterion for top of levee should be the SPF elevation plus 4.0 feet of freeboard.
 - o For fills, a minimum design criterion should be 100-year discharge elevations plus one foot or more of fill freeboard. To provide more protection, a higher fill elevation may be required by local ordinances.
 - o For structures on fill, local ordinances should require minimum floor elevations to be set to at least two feet above the 100-year discharge elevations.

- e. Excavation of "Borrow" Areas. The excavation of "borrow" areas to elevations lower than the bottom elevation of the stream is generally considered hydrologically undesirable. The volume of such excavations above the elevation to which the area can be kept drained can be considered in hydrologic storage computations. Excavation or fill shall not be allowed closer than 100 feet to the channel banks.
- f. Preservation of Adjacent Project Storage. The developer shall respect the valley storage provided by adjacent development projects by insuring that their hydraulic connection to the river is maintained. If the project blocks the hydraulic connection of the adjacent project, then the developer shall be required to provide additional valley storage to offset the loss caused by the blockage of the hydraulic connection.

5. WHAT ARE THE STEPS IN THE CDC APPLICATION PROCESS ?

There are five basic steps in the CDC application review process as depicted in the accompanying chart and summarized follows:

1. Determination of Applicability by City - Does the city have jurisdiction regarding this application? Is it within the Trinity River Corridor? Is it exempted from the process? If the city has jurisdiction for the development, the review process proceeds. If not, the applicant is advised accordingly by the city's designated contact person in writing.

2. Hydraulic/Hydrologic Technical Analysis Review by COE - The Fort Worth District staff of the Corps of Engineers will perform the hydraulic/hydrologic technical analysis review required by the common permit criteria in coordination with the city and the applicant.

3. Notice of Intent to Process by City - The city will review the application materials and the COE findings within its own time frame. If the city decides to deny the application at this point, the process ends. If the city decides to continue the process, then it will assure that the application is complete, assign a CDC identification number, and provide the full application to the COE for jurisdictional determination, to FEMA if a conditional map revision is required, to the Texas Water Commission if their jurisdiction applies, and to NCTCOG for incorporation into the tracking system.

4. Parallel COE, FEMA, TWC and Regional Review - If the application is subject to COE permit jurisdiction, then the public notice and review/comment process will be initiated by the COE (including the other affected local governments). If the application is not subject to COE permit jurisdiction, then the city will distribute a notice and materials directly to the other cities/counties in the corridor. The FEMA and TWC processes will occur simultaneously

If under COE jurisdiction, the COE will decide whether to issue its permit and so notify the city (and applicant). Likewise, FEMA will notify the city regarding any requested conditional map revision, and the TWC for any plan of reclamation. Written comments from other cities/counties will be provided to the city.

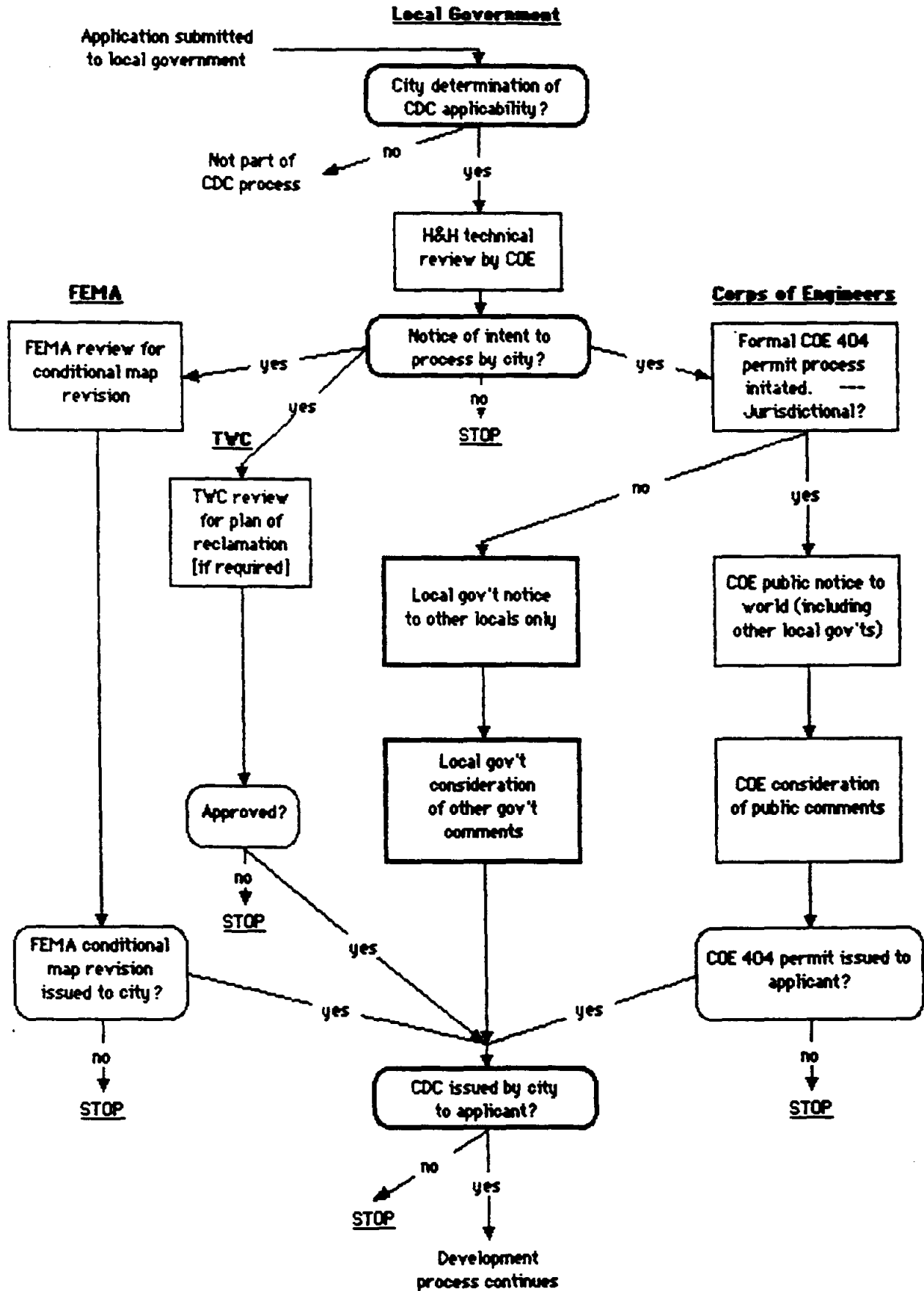
5. Formal City Action - The final step in the application review process is formal approval, approval with conditions, or disapproval by the city of the CDC. If a COE permit, a FEMA conditional map revision or a TWC plan of reclamation is denied the applicant, the city will not issue a CDC. If approved by the city over the expressed unfavorable opinions of other local government(s), a written summary of the justifications for the city's action will be attached to the approval action. A copy of the Final Disposition of each CDC application will be provided to NCTCOG for the permanent records.

IMPORTANT TOPICS NOT YET ADDRESSED

This extensive document was prepared by the Staff Task Force in less than a 90 day period, because of the deadline for submission of comments to the COE regarding the Final Regional EIS. It underwent seven drafts before emerging in this form. While it represents the best attempt at a regional consensus on a permit process, there are several important topics that have not yet been addressed. These are:

- a. Grandfathering of projects with existing permits.
- b. Sunsetting of permits for developments not started within a certain period.
- c. Exempting private development of a certain size (i.e., tract not exceeding a given size in a developed area.)
- d. Establishing a variance procedure for waiving compliance with one or more common permit criteria, recognizing that a project may be in the overall public interest (i.e., landfills, wastewater treatment plants, etc.)
- e. Setting common penalties for noncompliance.
- f. Banking of offsite valley storage within a particular routing reach with appropriate legal mechanisms to insure the preservation of those areas (i.e., park or open space dedication.)
- f. Setting time frames for processing CDC applications and the associated regional review and comment by local governments.

COMMON PERMIT PROCESS



Appendix C

APPENDIX C

**MAILING ADDRESSES
AND PHONE NUMBERS**

U.S. Army Corps of Engineers - Fort Worth District

(817) 334-2185
P.O. Box 17300
Fort Worth, Texas
765102-0300

FAX (817) 885-7539

Federal Emergency Management Agency - Region VI

(817) 898-5104
Federal Center
800 North Loop 288
Denton, Texas 76201-3698

FAX (817) 898-5163

Texas Water Commission

(512) 371-6304
P.O. Box 13087
Capital Station, Austin
Texas 78711

FAX (512) 463-8317

**North Central Texas Council of Governments
Department of Environmental Resources**

(817) 640-3300
P.O. Drawer COG
Arlington, Texas
76005-5888

FAX (817) 640-7806

APPENDIX C

LIST OF ACRONYMS

Acronym

Description

CDC	Corridor Development Certificate
COE (USACE)	U.S. Army Corps of Engineers
CLOMR	Conditional Letter of Map Revision
FEMA	Federal Emergency Management Agency
GIS	Geographic Information Systems; a geographic relational database
HEC	Hydrologic Engineering Center, Davis, Georgia
HEC-1	Flood Hydrograph Computer Package
HEC-2	Water Surfaces Profiles Computer Package
NPDES	National Pollution Discharge Elimination System
NCTCOG	North Central Texas Council of Governments
PMF	Probable Maximum Flood
REIS (TREIS)	(Trinity) River Environmental Impact Statement
SPF	Standard Project Flood
TPDES	Texas Pollution Discharge Elimination System
TRIN	Trinity River Information Network
TWC	Texas Water Commission
USCS	U.S. Department of Agriculture, Soil Conservation Service