DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT FOR A PROPOSED 54-INCH STORM SEWER REPLACEMENT PROJECT—THE CITY OF FORT WORTH M-210 RELIEF SANITARY SEWER SIPHON PROJECT UPSTREAM OF UNIVERSITY DRIVE, CLEAR FORK TRINITY RIVER

**Document Supplemental to:** 

Final Programmatic Environmental Assessment–Civil Works, Minor Section 408 NEPA Compliance, U.S. Army Corps of Engineers Fort Worth District, April 11, 2011

Submitted to



of Engineers®

Fort Worth District, Texas

Prepared for

**City of Fort Worth, Texas** 

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## 1.0 INTRODUCTION

The USACE Fort Worth District and associated non-federal sponsors have constructed numerous public works projects within the USACE Fort Worth District Civil Works boundaries in the State of Texas. The USACE prepared a Draft Programmatic Environmental Assessment titled *Draft Programmatic Environmental Assessment, Civil Works, Minor Section 408 NEPA Compliance, United States Army Corps of Engineers, Fort Worth District, Texas* (the DPEA)(USACE 2011a) to evaluate future National Environmental Policy Act (NEPA) compliance for minor Section 408 requests by sponsors within USACE Public Works boundaries. The DPEA addressed 16 proposed minor actions in the Fort Worth Floodway and two minor projects in the Dallas Floodway of the Trinity River flood control system, as well as provided criteria for the consideration of future minor Section 408 requests that would occur within the boundaries of a USACE Fort Worth District Civil Works project. The Final Programmatic Environmental Assessment, Civil Works, Minor Section 408 NEPA Compliance, United States Army Corps of Engineers, Fort Worth District, Texas (the FPEA)(USACE 2011b), was issued on April 11, 2011, and received a Finding of No Significant Impact (FONSI) on April 15, 2011. The FPEA is posted on the Fort Worth District Website at www.swf.usace.army.mil.

The City of Fort Worth (project sponsor) has proposed a project within the Fort Worth Floodway public works boundaries on the south bank of the Clear Fork Trinity River, east of the Rogers Road bridge, in the City of Fort Worth, Tarrant County, Texas. The proposed action consists of the replacement and design modification of an existing 54-inch storm sewer line, temporary conflict box, and outfall facility due to construction and operational alignment conflicts with the recently constructed sanitary sewer Main 210 (M-210) project that parallels the south bank of the Clear Fork Trinity River. The two facilities cross perpendicular to each other at the same elevation on City of Fort Worth property, south of the Fort Worth Floodway public works boundary. Figure 1 provides the location of the project area. The two facilities were in elevation conflict as a result of the new sanitary sewer line design requirements, and a temporary elevation separation has been implemented for the existing storm water line. The City of Fort Worth has directed the project engineers to design a permanent storm sewer replacement project to include the replacement storm sewer outfall at a lower elevation (i.e., fully submerged outfall) than the existing outfall. This Draft Supplemental Environmental Assessment (DSEA) is being submitted to U.S. Army Corps of Engineers (USACE) Fort Worth District as a Future Minor Section 408 Request that provides project information and an assessment of potential environmental impacts associated with the storm sewer line and outfall replacement project.

The Clear Fork Drainage Basin M-210 Sewer Improvements Project consists of the construction of approximately 7,200 linear feet of large diameter sanitary sewer main (24 to 42 inches) to intercept and divert M-210 basin wastewater flows around the Colonial Country Club property and through this historically significant neighborhood. This project was specifically designed to eliminate five or six recurring and chronic sanitary sewer overflows from this area. Due to the annual Colonial Country Club professional golf tournament, the construction of this project had to be broken into five construction phases or parts. Part 1, which was completed in the Spring of 2012, built the lower portion of the proposed system improvements and included a Minor Section 408 permit to cross the Clear Fork Trinity

River with an inverted sewer siphon. Under Part 1, a significant storm sewer and sanitary sewer conflict was identified. A conflict storm sewer box was designed and constructed to immediately address this problem. During the permit process for the river crossing, the Fort Worth Department of Transportation and Public Works (FWTPW) was informed by the City of Fort Worth that the conflict box was viewed as a temporary measure, and FWTPW wanted to design a storm sewer system modification that would eliminate this conflict box due to long-term maintenance concerns of debris build up in this structure. Due to the limited construction window and chronic overflows in this area, the City of Fort Worth requested the USACE to consider this new storm sewer permit as a separation action from the original Minor Section 408 permit request for the sanitary sewer siphon river crossing. Therefore, the project sponsor decided to address the storm sewer permit under M-210 Part 2. RJN designed a new submerged storm sewer outfall into the Trinity River so that the City of Fort Worth can adequately separate the storm and sanitary sewer pipes without a conflict box. The design also includes construction of a first flush pollution capture device to prevent pollutants from being discharged into the river during storm events in accordance with new discharge rules that are in effect. The project sponsor is submitting the storm sewer replacement project as a Future Minor Section 408 Request for NEPA compliance coverage under the FPEA. In order for a proposed Future Minor Section 408 Request to be covered under the FPEA, the Proposed Action must adhere to the following criteria (USACE 2011b):

- A) Primary vegetative impacts must consist of grasslands with no riparian bottomland forest impacted.
- B) No impacts to federal mitigation areas and/or lands specified as ecosystem restoration.
- C) Impacts to waters of the United States would have to meet the requirements of a Nationwide or Regional General Permit.
- D) No significant impacts to threatened or endangered species will be allowed to ensure Endangered Species Act (ESA) compliance.
- E) No significant impacts to cultural resources will be allowed.

The proposed action would require the removal of approximately 0.06 acre of riparian woodland in order to replace the storm sewer and outfall facilities within the Fort Worth Floodway. Since the proposed action did not meet the five criteria due to riparian woodland impacts, this DSEA is being prepared to supplement the FPEA, address specific impacts of the proposed project to riparian vegetation, and to provide more detailed information on proposed action impacts within the Fort Worth Floodway public works boundary.

### 1.1 Purpose and Need

The proposed project consists of the replacement of an existing 54-inch storm sewer line and outfall facility due to design conflicts with recent improvements to the sanitary sewer M-210 project. The two facilities would be in elevation conflict as a result of the new sanitary sewer line design requirements and, therefore, would require an elevation separation.

The existing 54-inch storm sewer (storm water discharge facility No. 18456) was adversely impacted by the construction of the 42-inch M-210 Sanitary Sewer Interceptor during the Part 1 project, resulting in an estimated 48 percent reduction of the carrying capacity of the existing 54-inch storm sewer. A storm sewer conflict box was proposed and conditionally approved as a temporary measure for construction by the FWTPW. This box was constructed around the storm sewer pipe conflict allowing for significant hydraulic relief to the storm sewer system; however, it did not completely alleviate the problem. Additionally, this conflict box creates a long-term maintenance concern for the City of Fort Worth. As such, the project engineers were directed by the FWTPW to design a new storm water outfall so that the pipe conflict between the storm and sanitary sewers is eliminated.

The proposed storm sewer system improvements that have been submitted for USACE approval to address the FWTPW's design directives through the creation of a completely submerged outfall into the Clear Fork Trinity River. This design also includes the implementation of a first flush debris and sediment collection device (sediment trap) that would have a positive impact on the water quality of the Clear Fork Trinity River. If this Future Minor Section 408 Request is not approved, the conflict box that was constructed during the Part 1 project will generally function satisfactorily up until enough debris builds up in the conflict box, potentially causing upstream street flooding from surcharging and the continued uncontrolled release of non-treated storm water discharges.

## 1.2 Scopes of FPEA and Draft Supplemental EA

The replacement of the existing 54-inch storm sewer line and outfall facility falls under the scope of the FPEA, as a Future Minor Section 408 Request (USACE 2011b). This DSEA will provide additional project information and potential impacts analysis for site-specific project impacts not addressed in the FPEA.

## 2.0 DESCRIPTION OF ALTERNATIVES

This section describes the process that was used to develop, evaluate, and eliminate potential alternatives based on the purpose and need of the project. The identification, consideration, and analysis of alternatives are central to the NEPA process and the development of EAs and EISs. Typically, the scope of alternatives includes the proposed action alternative, the No-Action alternative, and other "reasonable" alternatives to the proposed action. In this DSEA, only two reasonable alternatives (the No-Action and proposed action alternatives) are considered because the proposed build action would require replacing an existing facility within the same footprint as the existing facility and would represent the action alternative with the least potential surface and subsurface impacts to sensitive natural and cultural resources.

## 2.1 <u>Alternative 1 – No-Action</u>

If the "No Action" alternative is implemented, the proposed sewer line and outfall facilities would not be built. The conflict box that was constructed during the Part 1 project will generally function satisfactorily up until enough debris builds up in the conflict box, potentially causing upstream street flooding from surcharging and the continued uncontrolled release of non-treated storm water discharges.

## 2.2 Alternative 2 – Proposed Action

The proposed project consists of the replacement of an existing 54-inch storm sewer line and outfall facility that crosses the recently constructed sanitary sewer M-210 project. The two facilities are in elevation conflict as a result of the new M-210 sanitary sewer line design requirements. Therefore, an elevation separation is required that would entail the installation of a sediment trap, a 54-inch-diameter storm sewer pipeline vertical realignment, and outfall replacement. A plan and profile of the proposed project is presented on **Figure 2**. **Figure 3** depicts the proposed action elements in relation to the Fort Worth Floodway public works boundary.

The overall length of the project is approximately 400 feet, with a trenching and construction area width of approximately 50 feet in turf areas and an approximately 20-foot-wide work area within the riparian woods along the south bank of the Clear Fork Trinity River. Within the Fort Worth Floodway public works boundary, the proposed temporary construction easement is approximately 3.08 acres. The majority of the proposed temporary construction easement (3.0 acres) is located in an area that exhibits maintained turf grasses. Approximately 0.08 acre of the temporary construction easement would be located within the riparian woodland area adjacent to the south bank of the Clear Fork Trinity River. However, the construction disturbance footprint would be minimized to the greatest extent practicable within the riparian zone, with an expected terrestrial impact of approximately 0.06 acre within the riparian area. The total length of the storm sewer pipeline and outfall structure within the Fort Worth Floodway public works boundary is approximately 260 linear feet.

#### 3.0 AFFECTED ENVIRONMENT

The FPEA collectively addressed the affected environment resources by two means: 1) individually by the USACE Public Works project (primarily flora description and layout) and 2) regionally by biological resources (primarily fauna and threatened and endangered species), air quality, climate, and cultural resources. **Figure 3** depicts the proposed project on an aerial photograph base map. This section provides any additional pertinent site-specific information regarding the affected environment not provided in the FPEA.

## 3.1 Setting

This proposed action is associated with the M-210 sanitary sewer siphon located on the Clear Fork Trinity River, Fort Worth Floodway, USACE Flood Control Project. The affected environment for the proposed storm sewer replacement project is generally discussed in the FPEA (USACE 2011b). The following sections provide site-specific information regarding the affected environment, as necessary. The resources addressed below follow those discussed in the FPEA.

## 3.2 Hydrological Resources

## 3.2.1 Surface Water

The project area is located on the south bank of the Clear Fork Trinity River immediately east of the Rogers Street bridge that crosses the river. The river is approximately 200 feet in width, with a depth of

eight to twelve feet at normal pool level. The Clear Fork Trinity River within the project area is identified as Segment 0829 of the Trinity River Basin by the Texas Commission on Environmental Quality (TCEQ 2008). The Clear Fork Trinity flows to the northeast and merges with the West Fork Trinity River, approximately three miles northeast of the proposed project area. Segment 0829 has listed uses of Aquatic Life, Contact Recreation, Fish Consumption, and General. All uses are supported except Contact Recreation, which is considered impaired due to elevated levels of bacteria. The water quality in the project area is primarily influenced by base flows from upstream Lake Benbrook releases and urban runoff from local and upstream adjacent watershed areas.

#### 3.2.2 Groundwater

The groundwater component of the affected environment has been addressed in the FPEA (USACE 2011b) and this resource will not be further discussed in this DSEA.

### 3.2.3 Wetlands and Other Waters of the U.S.

Waters of the U.S. are protected by Section 404 of the Clean Water Act as administered by the U.S. Army Corps of Engineers (USACE). The term "waters of the U.S." has broad meaning and encompasses both deepwater habitats (lakes, rivers, streams, bays, etc.) and special aquatic sites, including wetlands. Wetlands are transitional areas between terrestrial and aquatic systems which are defined according to three criteria: (1) the presence of hydrophytic vegetation; (2) hydric soil characteristics; and (3) wetland hydrology. Jurisdictional waters of the U.S. discussed in this document were identified based on field investigations.

On March 22, 2012, Blanton & Associates, Inc. (B&A) conducted investigations to determine if any waters of the U.S., including wetlands, occur within the temporary construction easement for the proposed project. The investigations included a review of project plans and background information (including aerial, topographic, floodplain, National Wetland Inventory, and soil maps). These reviews were followed by a pedestrian survey of the project area. The investigations identified the Clear Fork Trinity River channel at the ordinary high water mark (which is equal to the normal pool level elevation), as the only water of the U.S. within the project area. The shoreline vegetation was evaluated regarding the presence of wetland plants using the Rapid Test for Hydrophytic Vegetation method. All dominant plant species are classified as either facultative (FAC) or facultative upland plant (FACU) species and no wetland hydrology indicators were present. Therefore, the steep bank at the outfall exhibited no wetland characteristics.

## 3.3 <u>Biological Resources</u>

## 3.3.1 Vegetation

Vegetation communities within the proposed project area consist of riparian woodland vegetation along the banks of the Clear Fork Trinity River and maintained parkland turf vegetation. The vegetation component of the affected environment has been addressed in the FPEA (USACE 2011b). However, a 60-foot-wide strip of riparian woodland on a steep bank (approximately 35 percent slope) of the Clear Fork Trinity River is located within the project construction footprint. This riparian vegetation is not associated

with a floodplain forest and provides little function in floodplain storage capacity due to the narrow width of the woodland and the steep slope of the river bank. However, riparian woodlands on steep banks provide some degree of other important functions such as wildlife habitat, sediment and nutrient trapping, bank stabilization, and aesthetic value.

Within the project area, the riparian woods are dominated by tree species such as green ash (Fraxinus pennsylvanica), box elder (Acer negundo), pecan (Carya illinoinensis) and American elm (Ulmus americana), with scattered American elm saplings, yaupon (Ilex vomitoria), Chinese ligustrum (Ligustrum sinense), and Eastern redbud (Cercis canadensis var. canadensis) as common shrubs in the understory. Poison ivy (Toxicodendron radicans), Carolina moon-seed (Cocculus carolinus), and raccoon grape (Ampelopsis cordata) are common woody vines in the riparian area. At the time of the field visit in March 2012, vegetative ground cover included field brome (Bromus arvensis), broad-leaf woodoats (Chasmanthium latifolium), giant ragweed (Ambrosia trifida), hairy-fruit chervil (Chaerophyllum tainturieri), Japanese honeysuckle (Lonicera japonica), and immature individuals of panic-grass (Panicum sp.) and goldenrod (Solidago sp.).

The maintained parkland turf vegetation was largely disturbed by construction activities at the time of the field visit, with intact patches of lawn dominated by field brome, black medic (*Medicago lupulina*), annual bluegrass (*Poa annua*), common dandelion (*Taraxacum officinale*), and common chickweed (*Stellaria media*).

## 3.3.2 Fish and Wildlife Species

Wildlife within the USACE Public Works project areas include a wide variety of year-around resident and migratory land and shore birds as well as mammals, reptiles, amphibians, and invertebrates adapted to urban environments throughout north-central Texas (USACE 2011b). Riparian vegetation provides important habitat for wildlife species, as well as providing important aquatic habitat enhancements, due to shade and cover for aquatic species provided by low-hanging foliage.

## 3.3.3 Threatened and Endangered Species

No habitat for threatened or endangered species is present within the proposed action area. Further information regarding threatened or endangered species habitat in the USACE Public Works project boundary is available in the FPEA (USACE 2011b).

## 3.4 Air Quality

The air quality component of the affected environment has been addressed in the FPEA (USACE 2011b). However, the trees and shrubs of the project are riparian zone can affect urban air quality including temperature reduction and other microclimate effects, as well as removal of air pollutants (D.J. Nowak 2002).

## 3.5 Climate

The climate component of the affected environment has been addressed in the FPEA (USACE 2011b). As mention above, trees and shrubs of the project are riparian zone can affect the urban climate by local temperature reduction and other microclimate effects.

## 3.6 Cultural Resources

The Proposed Action would occur within the previously disturbed existing pipeline trench; therefore the action does not have the potential to affect cultural resources. Cultural Resources will not be further discussed in this DSEA.

### 4.0 ENVIRONMENTAL CONSEQUENCES

This section describes any additional environmental consequence information regarding the proposed storm sewer line replacement project that was not specifically discussed in the FPEA (USACE 2011b).

## 4.1 Alternative 1 – No-Action

## 4.1.1 Aquatic Resources

#### **Surface Water**

Under the No-Action alternative, surface water quality of the Clear Fork Trinity River could be negatively impacted due to uncontrolled release of untreated storm water, as no sedimentation trap would be part of the storm water facility.

### Wetlands and Other Waters of the U.S.

Under the No-Action alternative, the physical conditions of the Clear Fork Trinity River, a water of the U.S., would not change from existing conditions.

## 4.1.2 Vegetation

Under the No-Action alternative, vegetation community conditions would not change from existing conditions.

#### 4.1.3 Fish and Wildlife Species

Under the No-Action alternative, the condition of fish and wildlife habitat would not change from existing conditions.

### 4.1.4 Threatened and Endangered Species

Under the No-Action alternative, conditions relating to potential habitat for threatened and endangered species would not change from existing conditions.

## 4.1.5 Air Quality

Under the No-Action alternative, conditions relating to air quality would not change from existing conditions.

#### **4.1.6** Climate

Under the No-Action alternative, conditions relating to climate would not change from existing conditions.

## 4.2 Alternative 2 – Proposed Action

## 4.2.1 Aquatic Resources

#### Surface Water

The proposed action would entail open cut construction for the outfall facility replacement within the normal pool elevation of the Clear Fork Trinity River, resulting in minimal, temporary adverse impacts to surface waters. Adverse environmental consequences to the Clear Fork Trinity River would include displacement of the current steeply-sloped mineral soil and weathered lime substrate of the river with the concrete outfall structure, using grouted large stone rip-rap armor to protect the outfall from erosion. Additionally, a temporary increase in the turbidity of the river is anticipated during construction of the outfall below the normal pool elevation. The quantity and water quality of storm sewer flows would not be negatively impacted by the pipeline, sediment trap, and outfall replacement, as the proposed storm sewer pipe would be the same diameter and would receive the same storm water flows as the pipe that is being replaced. However, the proposed action also includes the implementation of a first flush debris and sediment collection device (sediment trap) that would have a positive long term impact on the water quality of the Clear Fork Trinity River. Additional potential environmental consequences to surface water resources as a result of the Proposed Action have been addressed in the FPEA (USACE 2011b).

## Wetlands and Other Waters of the U.S.

Impacts to waters of the U.S. resulting from the proposed action would include fills below the ordinary high water mark (OHWM) of Clear Fork Trinity River, related to installation of the new storm sewer outfall. The outfall infrastructure would be entirely installed below the OHWM, with fill materials that include the concrete headwall and apron, as well as 20 cubic yards of grouted large stone rip-rap. USACE has determined that the project would be evaluated under *Nationwide Permit 12 – Utility Line Activities* (Project No. SWF-2012-00324) in compliance with Section 404 of the Clean Water Act (USACE 2012), which meets Criteria C of the FPEA (USACE 2011b).

#### 4.1.7 Vegetation

Vegetation communities within the proposed project area consist of riparian woodland vegetation along the banks of the Clear Fork Trinity River and maintained parkland turf vegetation.

Within the Fort Worth Floodway public works boundary, the proposed temporary construction easement is approximately 3.08 acres. The majority of the proposed temporary construction easement (3.0 acres) is

located in an area that exhibits maintained turf grasses. Approximately 0.08 acre of the temporary construction easement would be located within the riparian woodland area adjacent to the south bank of the Clear Fork Trinity River. However, the construction disturbance footprint has been minimized to the greatest extent practicable within the riparian zone (approximately 0.06 acre).

Potential environmental consequences of the proposed action to most vegetation communities within the study area have been addressed in the FPEA (USACE 2011b). However, the proposed action would require temporary construction impacts within the riparian woodland of approximately 0.06 acre within the 0.08 acre of construction easement located in the riparian zone. The construction impacts to riparian trees would include the removal of two box elder trees (one 15-inch diameter at breast height [dbh] and one 9-inch dbh), one 9-inch dbh pecan, as well as two 6-inch dbh redbud trees. Other vegetation that would be removed includes shrub, sapling, vines, and groundcover plant species that are common in the riparian zone, as noted above.

#### 4.1.8 Fish and Wildlife

No significant adverse impacts to fish and wildlife would occur as a result of the proposed action. Riparian vegetation provides important habitat for wildlife species, as well as providing important aquatic habitat enhancements, due to shade and cover for aquatic species provided by low-hanging foliage. The construction of the proposed action would remove this cover within an approximately 30 foot-long section of the Clear Fork Trinity River stream bank, however, planting of suitable native trees and ground cover are proposed to foster re-establishment (see Section 5.3 of this document).. Additional potential environmental consequences to fish and wildlife species as a result of the proposed action have been addressed in the FPEA (USACE 2011b).

#### 4.1.9 Threatened and Endangered Species

No significant adverse impacts to threatened or endangered species would occur as a result of the proposed action. Additional potential environmental consequences to threatened or endangered species as a result of the proposed action have been addressed in the FPEA (USACE 2011b).

## 4.1.10 Air Quality

No significant adverse impacts to air quality would occur as a result of the proposed action. Construction of the proposed action would have a temporary minimal effect on local air quality due to construction equipment exhaust emissions. Additionally, the functions (temperature reduction, microclimate effects, and removal of air pollutants) of the trees and shrubs removed from the project area riparian zone could have temporary minor affects to urban air quality. Additional potential environmental consequences to air quality as a result of the proposed action have been addressed in the FPEA (USACE 2011b).

#### 4.1.5 Climate

Under the proposed action alternative, conditions relating to climate would not significantly change from existing conditions.

## 5.0 MITIGATION

This section addresses various mitigative project design and construction practices that would minimize adverse impacts to natural resources. No compensatory mitigation would be required under Section 404 of the CWA.

## 5.1 Section 404 and Surface Water Quality

Within the project area, waters of the U.S. are limited to the OHWM of the Clear Fork Trinity River. No wetlands, including bottomland hardwood forest wetlands, occur within the project area. Construction below the ordinary high water mark of the Clear Fork Trinity River would be evaluated under *Nationwide Permit 12 – Utility Line Activities* (Project No. SWF-2012-00324) in compliance with Section 404 of the Clean Water Act. The project would be constructed in accordance with the specific USACE guidance under Nationwide Permit 12, as well as the general and regional conditions for Nationwide Permits.

## 5.2 Water Quality

Adverse impacts to waters of the U.S. would be minimized to the extent practicable, and preconstruction contours of the bed and bank of the Clear Fork Trinity River would be restored. **Figure 4** depicts the Best Management Practices (BMPs) that would be used to comply with the Texas Pollution Discharge Elimination System (TPDES) requirements for this project.

The storm sewer outfall facilities would be of a similar areal extent as the existing outfall although installed at a lower elevation. A temporary coffer dam (a portable one using fabrics and frames) will be installed in the river, and the area behind it will be dewatered for the removal of the existing headwall and storm outfall structure and facilitate the construction of the new outfall structure. Various combinations of barrier and filtering types of BMPs will be installed around the construction and excavation zones to prevent runoff from those areas reaching the river and to prevent runoff from entering the construction zones. These BMPs will include silt fences, filter socks (double layered), rock berms, and sandbag berms. A detailed storm water pollution prevention plan document and layout sheets were produced for the construction of the M-210 Part 2 sanitary and storm sewer improvements, which identify the temporary BMPs and other pollution control measures proposed to be used during construction (document available in project files).

Permanent BMPs proposed include the installation of grouted rock rip rap at the base of the outfall headwall structure to prevent any scouring velocities of the storm water discharge from adversely impacting the Clear Fork Trinity River. Other permanent BMPs include the re-establishment of the river bank slope to existing conditions. The river bank will be re-vegetated with current prevalent and appropriate native grasses and planting of new riparian trees along this riparian zone to restore this area to a similar value and function prevalent prior to the construction of this storm water project.

## 5.3 Vegetation Mitigation

Measures to mitigate impacts to grasslands as a result of the proposed action have been addressed in the FPEA (USACE 2011b). However, mitigation for the temporary impacts to the estimated 0.06-acre of riparian woodland along the river was not addressed in the FPEA.

Upon completion of the pipeline and outfall construction, the area would be returned to the original grade and planted with a suitable ground cover to stabilize the soils and prevent potential erosion and siltation of the Clear Fork Trinity River. Although not required by USACE, the project sponsor has elected to plant suitable native riparian trees and ground cover vegetation in the disturbed riparian river bank area to foster the re-establishment of a riparian woodland of similar value and function.

#### 6.0 CUMULATIVE IMPACTS

### Past, Present, and Reasonably Foreseeable Projects

Cumulative impacts as a result of the proposed action have been addressed in the FPEA (USACE 2011b).

### 7.0 FINDINGS AND CONCLUSIONS

The action proposed in this DSEA represents a Future Minor Section 408 Request sponsored by the City of Fort Worth. Since the proposed action did not meet the five criteria set forth in the FPEA due to riparian woodland impacts, this DSEA is being prepared to address specific impacts of the proposed project to riparian vegetation and to provide more detailed information on proposed action impacts within the Fort Worth Floodway public works boundary. The proposed alternatives for the Minor 408 Requests have been evaluated in the FPEA. However, the No-Action and proposed action alternatives were evaluated to include impacts to riparian vegetation, not addressed in the FPEA.

No significant impacts to the human environment are identified from the implementation of the proposed action. There are no anticipated impacts to habitat for threatened or endangered species, and all impacts to wetlands and waters of the U.S. would be minimal and fall within the limits of *Nationwide Permit 12 – Utility Line Activities* (Project No. SWF-2012-00324) in compliance with Section 404 of the Clean Water Act. Impacts to the riparian woodland present along the Clear Fork Trinity River bank would be minimal (0.06 acre) and temporary, as the area would be re-planted with soil-stabilizing ground cover and with the appropriate native riparian tree species.

Taking into account the findings of this section, an EIS would not be necessary. Accordingly, a Draft Finding of No Significant Impact (FONSI) was prepared for the selected action.

#### 8.0 PUBLIC INVOLVEMENT

## 8.1 Agency Coordination

This section discusses consultation and coordination that will occur during preparation of this document. This includes contacts made during development of the proposed action, other alternatives considered,

and writing of the DSEA. Copies of agency coordination letters are presented in Appendix B. Formal and informal coordination would be conducted with the following agencies:

- U.S. Army Corps of Engineers (USACE, Fort Worth District),
- State Historic Preservation Office (SHPO),
- U.S. Fish and Wildlife Service (USFWS),
- Environmental Protection Agency (EPA), Region 6 Office
- Texas Parks and Wildlife Department (TPWD), and
- Texas Commission on Environmental Quality (TCEQ)

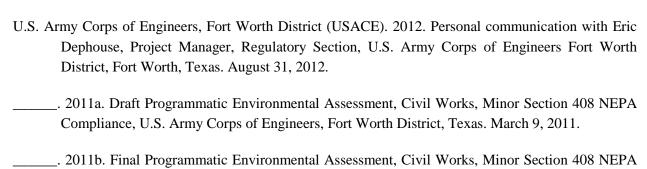
## 8.2 **Public Information and Review**

In accordance with NEPA, a 30-day review period of the DSEA will be provided via a Notice of Availability, posting of the document on the Fort Worth District Website <a href="https://www.swf.usace.army.mil">www.swf.usace.army.mil</a>, and a local mailing (Appendix C).

#### 9.0 REFERENCES CITED

Nowak, David J. 2002. The Effects of Urban Trees on Air Quality. USDA, Forest Service, Syracuse, NY.

Trinity River Authority (TRA). 2010. Clean Rivers Program – 2010 Basin Summary Report.



Compliance, U.S. Army Corps of Engineers, Fort Worth District, Texas. April 11, 2011.