

Draft Environmental Assessment
City of La Feria, Texas
Storm Water Pump Station on AN-49
Drainage Channel
HMGP-DR1931- TX Project #1
Cameron County, Texas
September 2012



Federal Emergency Management Agency
Department of Homeland Security
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List of Acronyms

APE	Area of Potential Effect
AQCR	Air Quality Control Regions
BMP	Best Management Practices
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
ESA	Endangered Species Act
ETJ	extraterritorial jurisdiction
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GLO	General Land Office
HMGP	Hazard Mitigation Grant Program
IBWC	International Boundary and Water Commission
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
PA	Programmatic Agreement
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SHPO	State Historic Preservation Office
SWDA	Solid Waste Disposal Act
SWPPP	Storm Water Pollution Prevention Plan
SWPS	Storm Water Pump Station
TCEQ	Texas Commission on Environmental Quality
TDSHS	Texas Department of State Health Services
THC	Texas Historical Commission
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TSCA	Toxic Substance Control Act
TWDB	Texas Water Development Board
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
WIID	Water Information Integration and Dissemination

Section 1

Introduction

The City of La Feria in Cameron County is located in the Lower Rio Grande Valley region of South Texas, a relatively flat terrain area near the Gulf Coast. La Feria lies north of the Arroyo Colorado in an area where natural overland drainage to the Arroyo Colorado is restricted due to the absence of significant topographic relief and substantial land development. Tributary inflows to the Arroyo Colorado occur through an extensive network of drainage channels. In recent years, Hurricane Dolly (2008) and Hurricane Alex (2010) have caused flooding in La Feria and the surrounding areas. Both Dolly and Alex caused substantial flooding in La Feria and resulted in inundation of U.S. Highway 83, a major roadway and the designated evacuation route for this region.

The International Boundary and Water Commission (IBWC) is an international agency which interprets and applies the boundary and water treaties of the United States and Mexico. The United States section of the IBWC operates and maintains three flood control systems on the Rio Grande. The IBWC is responsible for the Lower Rio Grande Flood Control System which contains 270 miles of flood control levees along the Rio Grande, interior floodways, and the Arroyo Colorado (Appendix A-1). The Arroyo Colorado, a 53-mile natural channel that breaks off the interior floodway about six miles to the west, is confined by high terraces on each bank and by 25 miles of levees that were constructed to protect urban, suburban, and highly developed irrigated farmlands in the Rio Grande delta from floods. The IBWC levee extends along the Arroyo Colorado from the confluence with the North Floodway to upstream of the City of La Feria (Appendix A-1). AN-49 must drain through the IBWC Arroyo Colorado north levee and the current culvert located here is a single 24-inch reinforced concrete pipe (RCP). This structure is gated at the levee so it can be closed by the IBWC to prevent backwater flow when the Arroyo Colorado is in flood stage conditions.

The proposed storm water pump station (SWPS) on AN-49 drainage channel would be located southeast of the City of La Feria within its extraterritorial jurisdiction in southwest Cameron County, Texas (Figure 1). Construction of this SWPS would enable the City to pump storm water over the IBWC gate to reduce flooding in La Feria when flood conditions require the IBWC gate to be closed.

The City of La Feria has prepared and submitted an application for Federal Emergency Management Agency (FEMA) funding under the Hazard Mitigation Grant Program (HMGP). FEMA is considering funding the construction of the proposed SWPS project to mitigate the flood hazard in this area. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act which is a funding source for cost-effective measures that would reduce or eliminate the threat of future similar damage during a disaster.

This draft Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations Parts 1500-1508), and FEMA's regulations implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this draft EA is to analyze the potential environmental impacts of the proposed SWPS project. FEMA will use the findings in this draft EA to determine whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI).

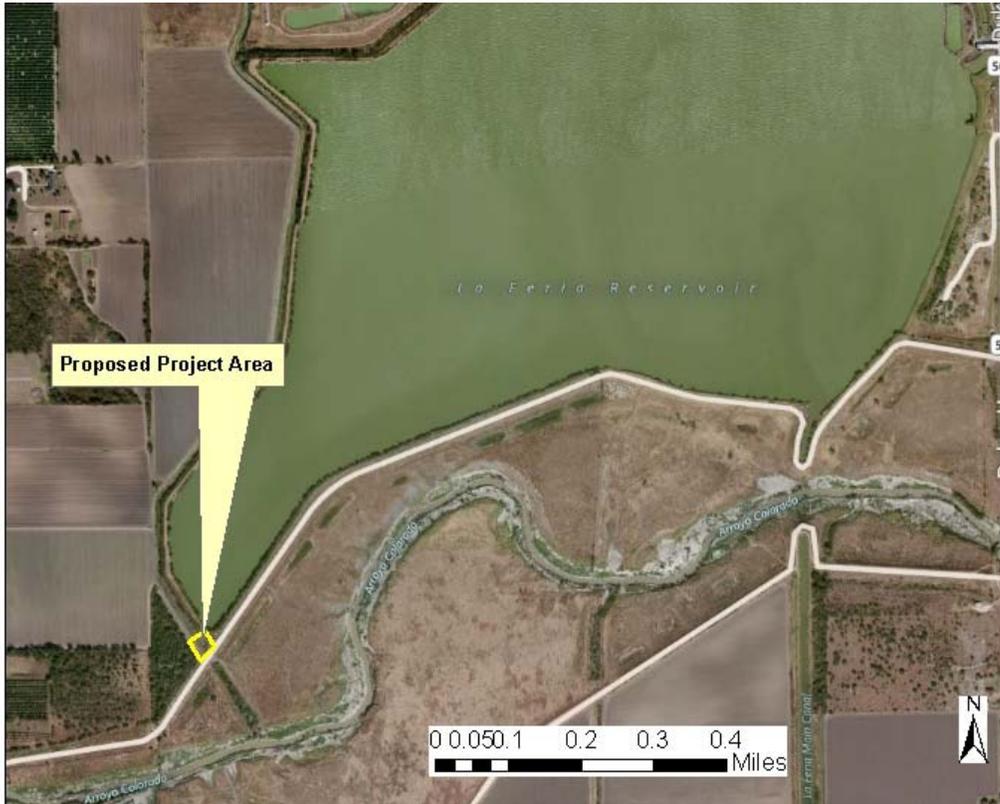


Figure 1 Proposed Project Area (Google Earth Pro, 2012)

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Section 2

Purpose and Need

The Federal Emergency Management Agency's (FEMA's) Hazard Mitigation Grant Program (HMGP) provides funds to state and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery and response from a declared disaster such as for flood mitigation assistance. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

This project is needed to reduce flooding in the City of La Feria and parts of the surrounding unincorporated areas to its southwest. La Feria is located in the Lower Rio Grande Valley region near the Gulf Coast. In recent years, Hurricane Dolly (2008) and Hurricane Alex (2010) have caused flooding in La Feria and the surrounding area. When facing large-scale storm events, the City of La Feria storm water drainage is challenged by the flat terrain and low elevations associated with the Rio Grande Valley and its proximity to the Gulf of Mexico. The relatively minor terrain slope allows storm water to pond with little chance of flowing and draining efficiently.

Tropical storms are also a significant threat to the residents of La Feria, leaving parts of or the entire city without utility service for weeks or more. During a severe storm event, the IBWC closes the gates on drainage channels to prevent the rise and backflow from the Arroyo Colorado. When the gates are closed, storm water runoff cannot drain and flood waters back up into the City, flooding local streets and homes until a drainage route is accessible (Figure 2). During severe storms, flooding occurs in sections of U.S. Highway 83, a limited access expressway in the City of La Feria. This eliminates the use of U.S. Highway 83 as a hurricane evacuation route for most residents of Cameron County, U.S.



Figure 2 La Feria, Texas, August 9, 2008 (FEMA 2008)

Highway 83 accommodates an average of 74,000 vehicles a day in La Feria area under normal circumstances, creating a dangerous situation when the roadway is not accessible for hazard evacuation. The City of La Feria is in need of resources to control flooding in the southwestern part of La Feria's extraterritorial jurisdiction and prevent future flood damages and property losses.

Section 3

Alternatives

This section describes the alternatives considered including the proposed action. A description of existing conditions is included under the no action alternative in Section 3.1.

3.1 No Action Alternative

Under the “no action” alternative, no action would be taken to mitigate flood hazards in La Feria. The no action alternative provides a baseline against which to measure the positive and negative impacts of the action alternatives. Evaluation of the no action alternative accounts for likely conditions in the future if a project is not implemented to mitigate flood hazards.

La Feria is located within the Arroyo Colorado watershed. In 1935, a system of dams, levees, and channels was completed in the Rio Grande Valley to mitigate flood hazards. The system is sometimes called the Rio Grande floodway and includes the Arroyo Colorado near La Feria. This flood control system is operated by the IBWC, and partially diverts flood waters from the Rio Grande into an artificial channel called the Main North Floodway located about ten miles west of La Feria. Flooding from the Arroyo Colorado is not mapped or considered a risk to the City of La Feria. The IBWC operates levees along the Arroyo Colorado which protect the southwestern portion of the City from inundation during high flow on the Arroyo Colorado. The IBWC is required to close the gates to outlet structures along the levee during high flow events to prevent backflow from the Arroyo Colorado. When the IBWC closes the gates, this inhibits the flow of storm water to exit the AN-49 drainage channel through the gate and levee structure. Flood waters originate from storm water runoff that is not able to exit the AN-49 drainage channel and enter the Arroyo Colorado when the flood gates are closed. This has resulted in long term flooding in many portions of the City of La Feria.

The City of La Feria experiences intense rainfalls from thunderstorms, tropical depressions and storms, and hurricanes. These intense rain events provide a significant potential for flooding within the City and the surrounding area. Slowly permeable loamy and clay soils and flat landscapes result in poor drainage that contributes to sustained flooding.

Given the conditions in the City of La Feria that contribute to flood hazards, if no action is taken, future flooding will continue and prolonged inundation will occur. Flooding in the City of La Feria compromises public safety, damages private property and causes human health impacts. Intense rain events cause inundation of roadways, which causes unsafe driving conditions and a lack of accessibility to major roadways.

Inundation of U.S. Highway 83 is of particular concern because it is the primary designated evacuation route for the City of La Feria during tropical storms and hurricanes. U.S. Highway 83 is the main east-west corridor in the La Feria area. In 2008, the City of La Feria was severely impacted by Hurricane Dolly. As a result of the heavy rainfall associated with Dolly, portions of U.S. Highway 83 were under floodwater for more than a week, causing a severe traffic disruption. Inundation of U.S. Highway 83 impeded evacuation and the ability of first responders and social service agencies to mobilize and provide assistance to affected populations.

In addition, if no action is taken, flooding has the potential to contribute to homestead flooding and inundation of agricultural land. Flooding of agricultural land may result in loss of crops and livestock.

3.2 Proposed Action

The City of La Feria proposes to construct a storm water pump station (SWPS) near one of the IBWC drainage channel gates located at the southwest end of La Feria Reservoir to allow the City to pump storm water over the Gate 458 structure into the Arroyo Colorado (Latitude: 26.12781 N; Longitude: -97.83966 W). The proposed pump station site is southwest of the City of La Feria and adjacent to the southwestern corner of the La Feria Reservoir. Agricultural areas with homesteads lie near the pump station site. The proposed project site is situated 2.8 miles southeast from U.S. Highway 83 and Cameron County Road 506. The proposed project site is outside of City limits but within the 5-mile extraterritorial jurisdiction (ETJ) of the City of La Feria. According to the City of La Feria Planning and Community Department (2012), the project site is in the ETJ and is unclassified and no alternative land use is planned. The proposed project site is at the south end of the levee walls of drainage channel AN-49 where they join the IBWC levee just north of the Arroyo Colorado.

Construction of the SWPS would improve drainage during storm events and reduce flooding in southwestern La Feria. The proposed pump station would be located within an existing, developed City of La Feria drainage easement right-of-way north of and adjacent to the Arroyo Colorado. The proposed pump station would be a single-story structure containing two 50 cubic feet per second pumps and associated appurtenances to lift water over the gate structure and through the levee (Figure 3). The channel has the capacity to accommodate this additional flow and the IBWC would allow this quantity of flood water to be pumped into the lower channel below the levee and flow to the Arroyo Colorado. The proposed pump station site was previously disturbed when the channel was constructed and would be temporarily disturbed during construction of the pump station facility. The proposed SWPS is mapped along the western La Feria Reservoir levee and the Orange Grove (AN-49) irrigation canal that are designated as FEMA 100-year Floodplain Zones A and AH, respectively. A site plan for the proposed storm water pump station is provided in Figure 4.

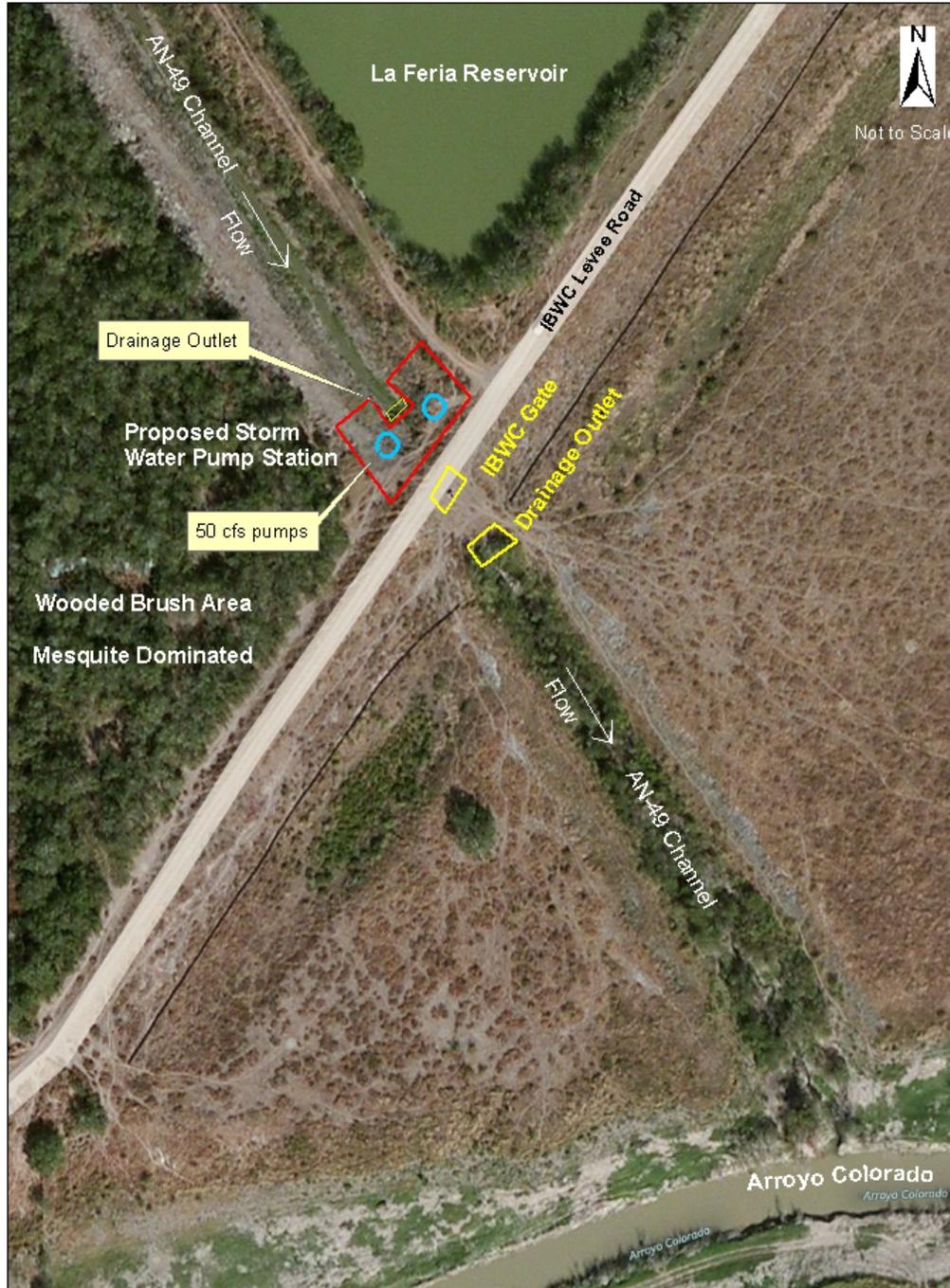
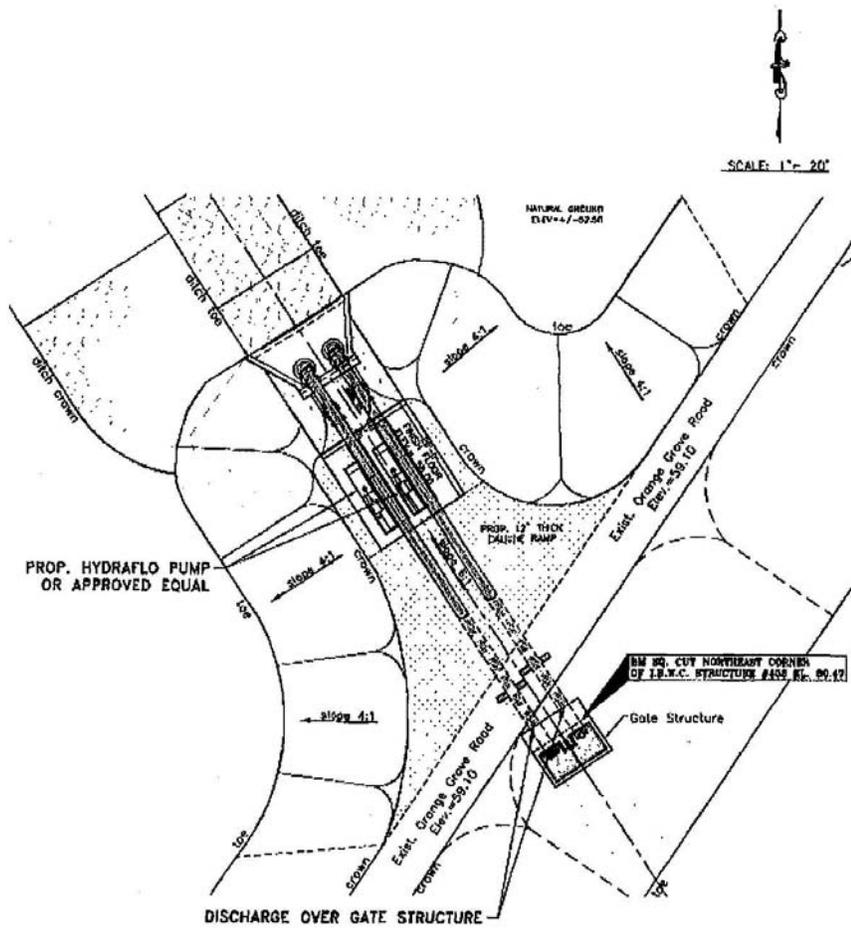


Figure 3 AN-49 Conceptual Plan



PUMP STATION CONCEPTUAL PLAN

City of La Feria
 Engineering Report
 Emergency Drainage Pump at AN-49
 Sigler, Winston, Greenwood & Associates: Juan M. Gamez P.E.
 January 2012

Figure 4 Proposed Storm Water Pump Station Site Plan (Source: City of La Feria, Engineering Report 2012)

3.3 Alternatives Considered and Dismissed

During the alternatives development process, alternatives were considered but eliminated from detailed study. These alternatives and their reasons for elimination are described in this section.

During selection of the proposed site, an alternative location of the proposed SWPS was considered but eliminated. The alternative location is near the southwest corner of La Feria Reservoir, just as the proposed site, but on the east side of the drainage channel levee (Figure 5). The east side of the AN-49 drainage channel levee has more potential for adverse impacts on the levee, provides a smaller land area, and provides less convenient access for construction and maintenance. In addition, during construction, a SWPS located on the east side of the levee could compromise the structural integrity of the levee wall for the La Feria Reservoir through vibrations and land disturbance. The west bank is the preferred location because it affords more space and is more easily accessible for maintenance and construction.



Figure 5 Alternative Location Map (Google Earth Pro, 2012)

Section 4

Affected Environment and Potential Impacts

This section describes the environment that may be affected by the proposed action or any of the other alternatives considered.

4.1 Physical Resources

4.1.1 Geology and Soils

The project area is underlain by alluvium consisting mostly of muds and sediments deposited by the Rio Grande. The deposits underlying this area are of Holocene origin.

The Lower Rio Grande Valley region is characterized by its unconsolidated soil substrate. The three soil types present within the project area are clay and clay loams formed in the Delta plains: Harlingen clay (HA), Hidalgo sandy clay loam (HO), and Raymondville clay loam (RE). Table 1 lists properties of these soil types. None of the soil types present are hydric soils (associated with wetlands).

Table 1 Properties of Soil in Project Area

Parameters	Harlingen Clay (HA)	Hidalgo sandy clay loam (HO)	Raymondville clay loam (RE)
Depth	More than 80 inches	More than 80 inches	More than 80 inches
Drainage	Moderately well drained	Well drained	Moderately well drained
Permeability	Very low to moderately low (0.00 to 0.06 in/hr)	Moderately high to high (0.57 to 1.98 in/hr)	Moderately low to moderately high (0.06 to 0.20 in/hr)
Parent Material	Formed in calcareous clayey alluvium	Formed in calcareous loamy alluvium	Formed in calcareous clayey alluvium
Slope	0-1%	0-1%	0-1%
Depth to Water Table	More than 80 inches	More than 80 inches	More than 80 inches
Hydric	No	No	No

No impacts are anticipated under the no action alternative, as no land disturbance would take place. The current situation in which flooding occurs and persists has no significant impact on geology or soils other than erosion.

The proposed construction of a storm water pump station (SWPS) would have minimal or no impact on geology or soils within the project area in the short-term or the long-term. During the construction phase, soil would be disturbed which may result in erosion that is contained by best management

practices (BMPs) controls. The proposed project site is not currently used as farmland and is not subject to the Farmland Protection Policy Act because it is already committed to water storage (7 CFR 658.2(a)).

4.1.2 Air Quality

The Clean Air Act (CAA), as amended in 1977 and 1990, provides the basis for regulating air emissions in the atmosphere. The CAA, Title 42, Section 7407 of the U.S. Code states that Air Quality Control Regions (AQCR) shall be designated in interstate and major intrastate areas as deemed necessary or appropriate by federal administrator for attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The U.S. Environmental Protection Agency (USEPA) classifies air quality within an AQCR according to whether the concentrations of criteria air pollutants in the atmosphere exceed primary or secondary NAAQS.

The proposed project area is located in southwest Cameron County. The USEPA designates this region as being in attainment of all NAAQS. The USEPA air quality monitoring stations located in the region have not detected levels of pollutants exceeding air quality standards.

No impacts are anticipated under the no action alternative, because no changes would occur to the level of air emissions. Air quality impacts from construction activities associated with the proposed project would be localized and temporary, occurring over a period of a few months near the proposed project site. During project construction activities, measures such as wetting the soil, limiting unnecessary idling of construction vehicles, maintaining vehicles in proper working condition, and shutting down construction machines that are not in use would be employed to minimize the temporary air quality impacts from construction activities. The completed SWPS would not be a significant source of air pollutants.

Post construction routine maintenance for the proposed SWPS is expected to be moderate and would not result in a significant increase in emissions of pollutants. The City of La Feria is already conducting routine maintenance on the proposed site and the level of maintenance is not expected to increase significantly if the proposed action is approved.

4.2 Water Resources

4.2.1 Water Quality

Surface Water

Sections 303(d) and 305(b) of the Clean Water Act (CWA) require all states to identify and characterize waters that do not meet, or are not expected to meet, water quality standards. The Texas Commission on Environmental Quality (TCEQ) is the regulatory agency responsible for compliance with water quality standards in Texas. The TCEQ's 2010 Integrated Report for CWA Sections 303(d) and 305(b) characterizes the quality of Texas surface waters and identifies those waters that do not meet water quality standards on the 303(d) list, an inventory of impaired waters. Streams are classified by segment within their respective basin.

The Arroyo Colorado, the proposed project's receiving water body, comprises Segments 2201 and 2202. Both segments have consistently failed to meet water quality standards. The proposed project area is within Segment 2202, the non-tidal segment of the Arroyo Colorado located upstream of the Port of Harlingen. Segment 2202 is governed by a Total Maximum Daily Load (TMDL) program for legacy pollutants and organics. Legacy pollutants are substances now banned that remain in the watershed and its environment because of their low rate of decomposition.

Water quality issues in the non-tidal Segment 2202 of the Arroyo Colorado include high concentrations of fecal bacteria and nutrients such as nitrogen and phosphorus compounds (Arroyo Colorado Watershed Partnership 2007). Water quality analyses identified several pollutants in fish tissue (e.g. DDE, mercury, and PCBs) at concentrations warranting a fish consumption advisory for the segments upstream from the Port of Harlingen (TCEQ 2003; TDSHS 2008).

Under the no action alternative, there would be no impacts to water quality. Water quality in Segments 2201 and 2202 would resemble current conditions.

The proposed project area is not located near any river segment designated as "wild and scenic". The Rio Grande is designated as a "wild and scenic" river starting at the Coahuila/Chihuahua state border in Mexico and extending 191 miles downstream to the Terrell County/Val Verde County line in Texas as shown in Appendix A-1 (Interagency Wild and Scenic Rivers Council 2011).

The proposed project could have short term, localized impacts to surface water of the Arroyo Colorado, occurring over a period of a few months. SWPS construction activities are expected to remove vegetation at the proposed project site, which could result in some soil erosion during heavy precipitation events. Best management practices (BMPs) would be used to prevent sediment or construction debris from being transported into the Arroyo Colorado, including silt fences or other erosion control devices such as temporary erosion blankets on slopes. In accordance with the required Texas Pollutant Discharge Elimination System (TPDES) storm water permit (TXR150000), specific measures would be implemented to minimize the impacts from construction activities. BMPs would be developed as part of the site-specific storm water pollution prevention plan (SWPPP) and implemented in compliance with all federal, state, and local regulations, including Sections 402 of the CWA, rules established under the Title 30 Texas Administrative Code and the Arroyo Colorado Watershed Partnership Protection Plan. The proposed project would not generate any of the TMDL water pollutants of particular concern in Segment 2202 of the Arroyo Colorado.

Groundwater

The major aquifer underlying the proposed project area is the Gulf Coast aquifer. The aquifer consists of discontinuous beds of clay, silt, sand, and gravel that are hydrologically connected to form a large, leaky artesian system. The Gulf Coast aquifer spans across 54 Texas counties along the coastline belt of the Gulf of Mexico from Louisiana to Mexico. Water quality issues associated with the Gulf Coast aquifer include land-surface subsidence, increased chloride content in the groundwater from the southwestern portion of the aquifer, and saltwater intrusion along the coast (TWDB 2006). Water quality in the aquifer is typically good to the north of the San Antonio River Basin, while to the south towards Mexico high salinity and alkalinity are common, making much of the water unsuitable for irrigation (Ashworth and Hopkins 1995).

A data search on the Texas Water Development Board (TWDB) Water Information Integration and Dissemination (WIID) System was conducted on June 14, 2012. The WIID System provides groundwater data and submitted water well driller reports. Within the area of concern, no water wells were identified and no groundwater quality data is available.

Under the no action alternative, there would be no impacts to groundwater quality as no construction would take place.

Short term minor impacts to groundwater of the Gulf Coast Aquifer may occur as a result of activities associated with the proposed construction work. SWPS construction activities are expected to remove vegetation as needed at the proposed project site, which could result in minor soil erosion during heavy precipitation events. BMPs, as needed, would be used to prevent sediment or construction debris from being transported to the Arroyo Colorado including the use of silt fences or other erosion control devices such as temporary erosion blankets.

4.2.2 Waters of the U.S., Including Wetlands

The National Environmental Policy Act's (NEPA) basic policy is to assure that all branches of the federal government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment. NEPA requires federal agencies to integrate environmental values into the decision making process by considering the environmental impact of proposed actions and reasonable alternatives to those actions. To meet NEPA requirements, federal agencies prepare an EA that provides evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

NEPA, in combination with the Clean Water Act (CWA), establishes that where the quality of a water resource supports a diverse, productive, and ecologically sound habitat, it is a national policy that those waters will be maintained and protected unless there is compelling evidence that to do so will cause significant national economic and negative social impacts. This national policy is founded on the CWA primary principles to restore and maintain the chemical, physical, and biological integrity of the nation's surface and ground waters. The purpose of this policy is to protect existing and future water uses including assimilative capacity, aquatic life protection, human health protection, drinking water supply, recreation, industrial use, and hydropower among others.

The basis of the CWA was originally enacted in 1948 as the Federal Water Pollution Control Act, and has been amended numerous times. The 1972 amendments established a national goal that waters of the U.S. should be "fishable and swimmable"; this goal was to be achieved by eliminating all pollutant discharges into surface waters of the U.S. "Waters of the US" are defined in the CWA; however, recent

U.S. Supreme Court decisions have led to a change in the definition. The US Environmental Protection Agency (USEPA) and the US Army Corps of Engineers (USACE) released proposed guidance to clarify protection of waters under the CWA. Part of this guidance is focused on protection of smaller watersheds that feed into larger basins, to keep downstream water safe from upstream pollution. The focus is also on the protection of jurisdictional wetlands that filter pollutants and store water and provide flood protection. The guidance will not extend federal protection to any waters not historically protected under the Sections 10 and 404 of the CWA and will be fully consistent with the law, including recent Supreme Court decisions.

Section 404 of the CWA established a program to regulate the discharge of dredged or fill material into “waters of the US” and is jointly administered by the USEPA and USACE. USACE administers day-to-day program operations, including individual permit decisions and jurisdictional determinations; develops policy and guidance; and enforces Section 404 provisions. USEPA develops and interprets environmental criteria used in evaluating permit applications, identifies activities that are required or are exempt from permitting, reviews and comments on individual permit applications, enforces Section 404 provisions, and has authority to veto USACE permit decisions.

No “waters of the US” are present at the project site; therefore, no coordination would be necessary between the City of La Feria and the USACE regarding the proposed project. USACE Galveston District does not take jurisdiction of the AN-49 drainage channel. The IBWC has jurisdiction over the flood gate (Structure 458) located on the north levee of the Arroyo Colorado and coordination with the IBWC is necessary to pump stormwater over the flood gate. On March 27, 2012, the IBWC issued a revocable license to the City of La Feria to construct, operate, and maintain a drainage structure on the north levee of the Arroyo Colorado Floodway.

The U.S. Fish and Wildlife Service’s (USFWS) National Wetlands Inventory map for the project area, in Appendix A-3, indicates there are no wetlands on the land directly affected by the proposed action. Four wetlands are located within ½ to 1 mile of the proposed project site but would not be impacted by the proposed SWPS facility. In addition, based on the Natural Resources Conservation Service’s online Web Soil Survey for Cameron County, none of the proposed project area contains hydric soils.

Under the no action alternative, no SWPS construction would occur and there would be no impact to the nearby wetlands.

Under the proposed action construction would occur without any impact on nearby wetlands. In addition, the long-term impacts associated with facility’s operation and maintenance would have no effect on nearby wetlands. The City of La Feria will ensure that BMPs are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990.

4.2.3 Floodplains

The FEMA flood insurance rate map (FIRM) for the project area, a portion of Community-Panel Number 4801010225B, dated September 15, 1983, is included in Appendix A-4. A portion of the proposed project area is in the 100-year floodplain of the Arroyo Colorado in flood zone AH. Zone AH is an area within the 100-year floodplain that is subject to shallow flooding where average depths are between one and three feet.

Executive Order 11988 requires federal agencies “to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplain and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” FEMA’s implementing regulations at 24 CFR Part 9 include an eight step decision making process for compliance with Executive Order 11988.

This eight step process has been completed for the proposed SWPS, as summarized below.

The current conditions would be retained under the “no action” alternative, maintaining the current level of flood protection. The current level of flood protection may be insufficient to protect the community and may pose risks to personal safety and property during major storms.

Step 1 Determine if the proposed action is located in the 100-year Floodplain

The proposed SWPS would be located within the 100-year floodplain per FIRM panel 4801010225B, dated September 15, 1983.

Step 2 Early public notice (preliminary notice)

A public notice concerning the proposed SWPS will be published in the La Feria News together with the notice of availability of the draft Environmental Assessment (EA) document. The La Feria News is the local general circulation newspaper for the La Feria area, including the proposed SWPS site.

Step 3 Identify and evaluate alternatives to locating in the 100-year floodplain

The proposed SWPS is sited in the 100-year floodplain because flood hazards are located within the floodplain. Storm water backs up and pools in the project area, causing flood hazards. The SWPS needs to be located within the floodplain in order to receive flood water by gravity and pump it over the levee into the Arroyo Colorado. Relocating the SWPS outside of the floodplain is not a practicable alternative. The no action alternative would retain existing conditions in which flooding during storm events causes flood hazards. The no action alternative is not practicable because it does not address the purpose and need for the project.

Step 4 Identify impacts of proposed action associated with occupancy or modification of the floodplain

The proposed SWPS would not affect the function of the 100-year floodplain. The proposed SWPS would place a small structure in the 100-year floodplain; however, this structure would not impede flows. The proposed SWPS would not facilitate development within the 100-year floodplain. Any new development within floodplains would be required to comply with applicable ordinances and building codes.

The proposed SWPS is located in the mapped 100-year floodplain, and is designed to be submerged and to function during flood conditions.

Step 5 Design or modify the proposed action to minimize threats to life and property and preserve natural and beneficial floodplain values

At this time, preliminary planning has been completed for the proposed SWPS and a flood study has been prepared. The proposed SWPS would be designed to mitigate flood hazards, and would consist of two pumps designed for the 25 year storm and capable of pumping 22,000 gallons per minute. The lowest floor of the SWPS would be designed at or above the level of the base flood. The City of La Feria must coordinate with the local floodplain administrator and obtain required permits prior to initiating work. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files

Step 6 Re-evaluate the proposed action

The proposed project will not expose any segment of the population to flood hazards because it does not include a housing component, and will not facilitate development in the floodplain. The project will not aggravate the current flood hazard because the proposed SWPS would not impede or redirect flood flows in the floodplain. The proposed project will not disrupt floodplain characteristics because it will not perceptibly change water levels in the floodplain, and will not appreciably reduce habitat areas in the floodplain. The analysis completed in Steps 4 and 5 provide no basis for modifying the preliminary conclusion reached in Step 3.

Alternatives consisting of locating the project outside of the floodplain or taking “no action” are not viable.

Step 7 Findings and public explanation (final notification)

After evaluating alternatives, impacts and mitigation opportunities, it was concluded that the proposed action is the most viable alternative and that there is no practicable alternative to locating a portion of the project in the 100-year floodplain of the Arroyo Colorado because

- A portion of the community is in the 100-year floodplain, including major roads and evacuation routes.
- The proposed pump station must be located within the 100-year floodplain because there is no practicable alternative that would mitigate flood hazards.
- A “no action” plan would not resolve or improve the existing flood hazards in the City of La Feria

The City of La Feria must prepare and provide Public Notice issued for 30 days of public availability to review to project’s draft environmental assessment (EA). A separate Public Notice must be published 15 days prior to the start of construction any final decision where proposed floodplain or wetland project is the only practicable alternative.

Step 8 Implement the action

Implementation of the proposed SWPS project would not result in an increase in flood levels; rather implementing this project would alleviate flood hazards in the floodplain. Moreover, the proposed project will be implemented to ensure compliance with mitigation requirements in 44 CFR 9.11

4.3 Coastal Resources

The Coastal Zone Management Act (CZMA) enables coastal states to designate state coastal zone boundaries and develop coastal management programs to improve protection of sensitive shoreline resources and guide sustainable use of coastal areas. The Texas Coastal Management Program is administered by Texas General Land Office (GLO). The Texas GLO designated coastal zone boundary runs through the eastern half of Cameron County.

The proposed project site is located 40 miles inland and west of the nearest designated coastal resource, Padre Island National Seashore. The proposed site lies 12 miles west and inland from the Texas Coastal Management Zone boundary that runs just east of Harlingen as designated by the GLO. Thus, there would not be any potential impact to coastal resources from the proposed project. In addition, the no action alternative will not result in any impacts to Texas coastal resources. The Texas Coastal Zone map is presented in Figure 6.

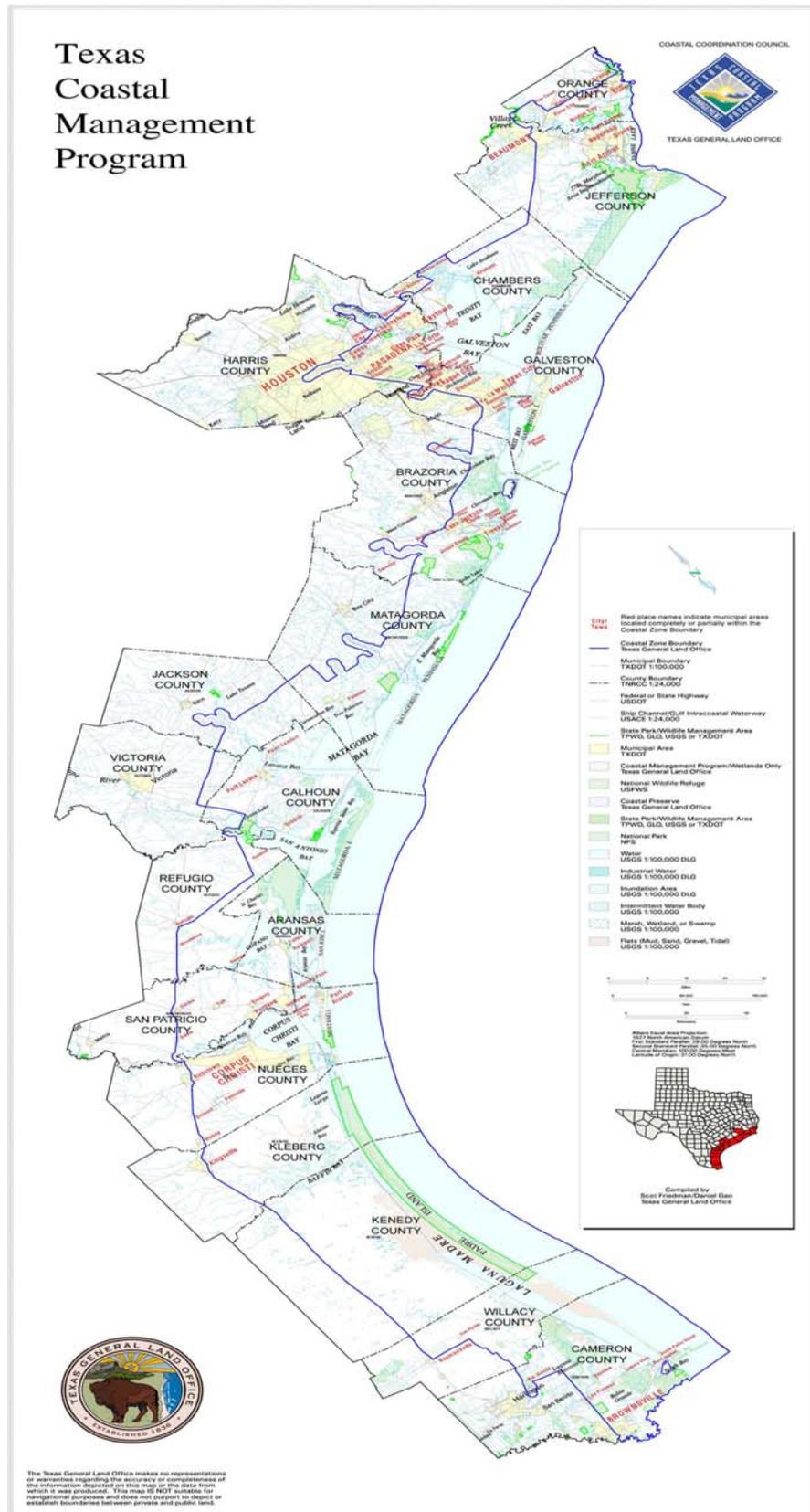


Figure 6 Coastal Boundary Map

4.4 Biological Resources

Vegetation and wildlife communities in the Area of Concern and federal-listed threatened and endangered species residing and that occur in the Area of Concern are discussed in this section.

4.4.1 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) of 1973 gives the U.S. Fish and Wildlife (USFWS) federal legislative authority for the protection of threatened and endangered species. This protection includes a prohibition of direct take (e.g., killing, harassing) and indirect take (e.g., destruction of habitat). The Texas Parks and Wildlife (TPWD) Code also has established a state regulatory mandate for protection of state-listed T&E species by prohibiting the take of such species. The proposed project site is located in southwest Cameron County, Texas. USFWS lists 13 animal and plant species as potentially occurring in Cameron County. Of these 13 listed species, 9 are endangered, 3 are threatened, 1 is a recovery species (delisted) (Table 2). The project site is not located within designated critical habitat for any species; no critical habitat is mapped within 10 miles of the project site (Appendix A-5). TPWD also lists endangered and threatened species for Texas counties. TPWD lists 15 species as endangered, 3 species as threatened and 2 species as concerned for Cameron County.

Table 2 USFWS Endangered Species List (Source: USFWS Website)

Common Name	Scientific Name	Potential to Occur	Federal Status
Birds			
Brown Pelican	<i>Pelecanus occidentalis</i>	Low Potential	Recovery
Northern Aplomado Falcon	<i>Falco femoralis septentrionalis</i>	Low Potential	Endangered
Piping Plover	<i>Charadrius melodus</i>	Low Potential	Threatened
Flowering Plants			
South Texas Ambrosia	<i>Ambrosia Cherianthifolia</i>	No Potential	Endangered
Texas Ayenia	<i>Ayenia limitaris</i>	No Potential	Endangered
Mammals			
West Indian Manatee	<i>Trichechus manatus</i>	No Potential	Endangered
Gulf Coast Jaguarundi	<i>Herpailurus yagouaroundi cacomith</i>	Low Potential	Endangered
Ocelot	<i>Leopardus pardalis</i>	Low Potential	Endangered
Reptiles			
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>	No Potential	Endangered
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	No Potential	Endangered
Kemp's Ridley Sea Turtle	<i>Lepidochelys kempii</i>	No Potential	Endangered
Green Sea Turtle	<i>Chelonia mydas</i>	No Potential	Threatened
Loggerhead Sea Turtle	<i>Caretta caretta</i>	No Potential	Threatened

The proposed location of the SWPS does not provide habitat for federally listed species. Vegetation at the site is limited to riparian-type species that include mesquite, retama, hackberry, cedar elm, and black willow as tree species and mimosa, prickly pear, desert yaupon, chilipiquin, and cenizo as shrub-brush species. Grasses at the site are shoregrass, guinea grass, and buffalo grass (Figure 7). No mature trees or shrubs will need to be removed by project construction and any disturbed soils will be seeded

and stabilized. The site is located at the south end of the levee walls of the City of La Feria drainage channel AN-49 near the southwest corner of La Feria Reservoir, both of which are located north of the Arroyo Colorado watershed boundary (IBWC levee). The drainage channel is maintained to control woody growth from being established to stabilize the channel banks and also prevent impediments to storm water flow. Because of regular maintenance, the AN-49 channel does not support dense vegetation. The proposed pump station would be in a small, single story structure which would not affect migratory birds. The SWPS building would not require any security fencing other than the existing gate that controls site access and is located approximately 500 feet to the northwest.



Figure 7 Vegetation at Proposed Project Site as Viewed from IBWC Levee

The project site does not provide suitable habitat for most of the federally-listed species with potential to occur in the project area. Vegetation along the drainage channel may provide a habitat corridor for movement of federally endangered ocelot (*Leopardus pardalis*) and Gulf Coast jaguarundi (*Herpailurus yagouaroundi cacomitli*). However, this is unlikely because of the lack of dense brush and the proximity of the site to developed areas such as La Feria Reservoir to the northeast and the agricultural lands to the north and northwest of the project site.

Jaguarandis (Figure 8) are slightly larger than a domestic cat with a coat of solid color, generally either rusty brown or charcoal gray. Jaguarandis eat birds, rabbits and small rodents, hunting during early morning and evening. Jaguarandis are endangered because the dense brush and shrublands that provide habitat for these animals are being cleared for farming or to accommodate urban residential growth (TPWD).



Figure 8 Jaguarundi (TPWD)

Ocelots (Figure 9) are medium sized spotted cats with varied body coloration. A key feature is the parallel stripes running down the nape of the neck. The under parts are white with black spots. The



Figure 9 Ocelot (TPWD)

ocelot's long tail is ringed or marked with dark bars on the upper surface. The backs of the rounded ears are black with a white central spot. In Texas, ocelots occur in the dense thorny shrub lands of the Lower Rio Grande Valley and Rio Grande Plains. Conservation of remaining habitat, and maintenance or creation of brush corridors connecting these habitats, is necessary for survival of the ocelot population in Texas (TPWD).

To protect the jaguarundi and ocelot and their habitats and brush corridor, the following mitigation measures would be implemented for the proposed action project:

- Construction activities will be conducted only during daylight hours to avoid noise and lighting impacts during the night.
- If temporary or permanent lighting is used, it must be down shielded and directed away from any brush tracts located near the proposed project site. Lights, if used, will be of the minimum wattage needed and the number of lights will be minimized.

Threatened and endangered species would not be impacted by the no action alternative.

Based upon the information provided above, FEMA has determined that the proposed project will have no effect to threatened and endangered species or critical habitat. The proposed project is not anticipated to have any effect on any other state listed species.

4.4.2 Wildlife and Fish

The proposed project area falls within the Western Gulf Coastal Plain eco-region, characterized by relatively flat coastal plain topography and mainly grassland vegetation. Live oak trees are a major component of the region while other trees and shrubs common in the region include mesquite, huisache, Texas persimmon, and spiny hackberry. This vegetation supports wildlife such as deer, raccoons, dove and migratory birds.

The Magnuson-Stevens Fishery Conservation and Management Act applies to salt water fish including anadromous fish, which swim up rivers from coastal areas to spawn in fresh water. The Act requires that federal agencies identify and protect important marine and anadromous fish habitat, referred to as Essential Fish Habitat. Essential Fish Habitat is defined as those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity. The Texas striped bass is anadromous. The nearest significant waterway or body of water, Arroyo Colorado, is just over 700 feet south from the proposed pump station site. However, anadromous fish cannot swim above the Port of Harlingen hydraulic gate to move from tidal water to freshwater to spawn in the non-tidal Arroyo Colorado. Thus, the Port's gate structure prevents the anadromous fish from reaching the segment of Arroyo Colorado near the project site.

The Migratory Bird Treaty Act (MBTA) decrees that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected. Nearly all native North American bird species are protected by the MBTA. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Projects that are likely to result in the taking of birds protected under the MBTA would require the issuance of incidental take permits from the USFWS. Activities that would require such a permit include destruction of migratory bird nesting habitat during the nesting season when eggs or young birds are likely to be present. Under the MBTA, surveys are required to determine if nests will be disturbed and, if so, a buffer area with a specified radius around the nest would be established so that no disturbance or intrusion would be allowed until the young had fledge and left the nest. If not otherwise specified in the permit, the size of the buffer area would vary depending on species and local conditions (e.g., presence of busy roads), and would be based on the professional judgment of a monitoring biologist.

The proposed project site is maintained to control woody growth from being established to stabilize the channel banks and also prevent impediments to storm water flow. Because of regular maintenance, the project site does not support dense vegetation that might serve as temporary habitat for migratory birds

Under the no action alternative, there would be no impacts to wildlife and fish.

Implementation of the proposed action would not impact Essential Fish Habitat as none exists at the project site. FEMA does not anticipate a take of migratory birds based on the habitat that is available at the project site.

4.5 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies “to take into account” the “effect” that an undertaking would have on historic properties. Historic properties are those included in or eligible for inclusion in the National Register of Historic Places (NRHP) and may include archeological sites, buildings, structures, sites, objects, and districts. In accordance with the Advisory Council on Historic Preservation regulations pertaining to the protection of historic properties (36 CFR 800.4), federal agencies are required to identify and evaluate historic resources for NRHP eligibility and assess the effects that the undertaking would have on historic properties.

To assess the potential for intact, significant cultural resources within the Area of Potential Effect (APE) of the proposed SWPS project, CDM Smith conducted an archival review of the proposed undertaking. The APE for the SWPS includes the area that will be immediately disturbed by the construction, which amounts to approximately .3 acres. The proposed project site was previously disturbed when the AN-49 channel was originally constructed. Archival research conducted via the Texas Historical Commission’s (THC) Texas Archeological Sites Atlas (Atlas) web site indicated that no previously recorded archeological sites have been recorded within the APE. According to the Atlas, Cameron County has 351 registered historic sites; however, no historic sites are located within 500 feet of the proposed project site. A THC map of the project vicinity is located in Appendix A-6. No registered American Indian, Native Hawaiian or Native Alaskan cultural or religious sites are located on or near the proposed project site. The Kickapoo Traditional Tribe of Texas at Eagle Pass is the closest of the three federally-recognized Indian tribes in Texas. Eagle Pass is located about 240 miles from La Feria.

Coordination with the State Historic Preservation Office (SHPO), which is housed at the THC, was initiated via letter on May 26, 2011. On July 6, 2011, the SHPO concluded that the project would not affect historic properties and that the project could proceed as planned (Appendix A-8).

The no-action alternative would result in no cultural resources, including historic properties, being affected.

Based on archival research and correspondence with the SHPO, FEMA has made the determination that the proposed project will have no impact to historic properties. In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured by the City of La Feria, and access to the sensitive area will be restricted by the City of La Feria. The Applicant will inform FEMA immediately, and FEMA will consult with the SHPO. Work in sensitive areas shall not resume until consultation is completed and until FEMA determines that the appropriate measures have been taken to ensure complete project compliance with the NHPA and its implementing regulations.

4.6 Socioeconomic Resources

The socioeconomic resources in the project area and Cameron County are discussed below.

4.6.1 Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”, providing that “each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low income populations.” In an accompanying memorandum to heads of departments, the President specifically recognized the importance of procedures under NEPA for identifying and addressing environmental justice concerns, stating that “each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by [NEPA].”

The project area (Census Tract 119.02, Block Group 1) has a high percentage of minority residents. The immediate project area also has relatively low median incomes and relatively high poverty rates, but does not qualify as low income population (Table 3). The population of the Block Group is 72 percent Hispanic or Latino as compared with 62.4 percent for Texas as a whole (Table 4). According to the 2010 U.S. Census, the median household income for Cameron County is \$33,770. Individuals with incomes below poverty level comprise 34.7 percent of the population of Cameron County.

Residents in the vicinity of the proposed project are an environmental justice population for purposes of Executive Order 12898. The proposed project would have no significant environmental impacts, however, and would therefore not have a significant disproportionate adverse effect on the surrounding community. These populations are expected to benefit by the reduction in flood risk that will result from implementation of the proposed action.

Under the no action alternative, flooding would remain a threat to populations in southwestern La Feria which could result in loss of utility service, damage to local streets and homes, and compromised evacuation on U.S. Highway 83.

Table 3 Demographic Data for Project Area (Source: U.S. Census)

Parameter	Census Tract 119.02, Block Group 1 (project site)	Census tract 119.02	City of La Feria (northeast of project site)	Cameron County	State of Texas
Total Population	1,574	3,623	6,115	335,227	20,851,820
Total Minority Population ¹	1,150	2,456	4,804	286,548	9,918,507
Minority Percentage	73.1%	67.8%	78.6%	85.5%	47.6%
Percentage of population below poverty level	33.9%	24.2%	29.2%	33.1%	15.4%
Median household income in 1999	\$19,917	\$28,455	\$24,660	\$26,155	\$39,927
Median family income in 1999	\$24,875	\$32,095	\$28,832	\$27,853	\$45,861

¹Persons not “white alone” pulls Hispanic or Latino persons who are “white alone”

Table 4 Population Data (Source: U.S. Census)

Ethnic Composition	Tract 119.02, Block Group 1	Percentage	State of Texas	Percentage
White	1,315	83.5	17,701,552	70.4
Black	0	0	2,979,598	11.8
Asian	2	0.1	964,596	3.8
American Indian	9	0.5	170,972	<1
Native Hawaiian	1	0.1	21,656	<1
Some other race alone	2	0.1	9,460,921	37.6
Hispanic or Latino	1,131	72	15,684,640	62.4
Total Population	1,574		25,145,561	

4.6.2 Hazardous Material

Hazardous materials are those substances defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the Toxic Substances Control Act (TSCA). The Solid Waste Disposal Act (SWDA) as amended by the Resource Conservation and Recovery Act (RCRA), which was further amended by the Hazardous and Solid Waste Amendments, defines hazardous wastes. In general, both hazardous materials and hazardous wastes include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may present substantial danger to public health or welfare or to the environment when released or otherwise improperly managed.

No impacts from waste storage and disposal sites are anticipated because no Superfund sites, toxic release inventory sites, industrial water dischargers, hazardous waste facilities or sites, or multi-activity sites are located within one mile of the proposed project site (USEPA 2012e). There is no evidence of hazardous substances or wastes generated, treated or disposed in the proposed project's vicinity (Appendix A-7) and as shown by USEPA EnviroFacts mapping. Unusable equipment, debris and material shall be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during implementation of the project, applicant shall handle, manage, and dispose of petroleum products, hazardous materials and toxic waste in accordance to the requirements and to the satisfaction of the governing local, state and federal agencies.

There would be no impacts regarding hazardous materials under the no action alternative as no ground would be disturbed.

4.6.3 Noise

Noise would be generated by vehicles and equipment involved in site clearing and grading, foundation preparation, facility construction, pipe installation, and project completion work. Noise from construction activities would be limited to daytime hours. There are no homes, commercial establishments, schools, day care facilities, hospitals, nursing homes, churches, or recreational areas within 1,500 feet of the proposed SWPS site.

The increased noise levels from proposed construction at the site are not expected to cause any adverse impacts on the surrounding environment. Under the no action alternative, ambient noise levels would be unchanged.

4.6.4 Traffic

Heavy construction equipment would be driven to the construction site from nearby locations using local highways and streets. A temporary increase in use of the access roads to the site would occur during the mobilization and placement of equipment in the proposed staging areas. The increase in traffic would not be significant. Existing conditions would remain the same under the no action alternative.

4.6.5 Public Services and Utilities

Public services and utilities for the project area are provided by the City of La Feria under its 5-mile extraterritorial jurisdiction. The proposed project would not have any negative impacts on public services and utilities. The proposed SWPS site lies directly west of the southwest corner of La Feria Reservoir, the drinking water source for the City and its Water and Wastewater Services Utility. Existing conditions would remain the same under the no action alternative.

4.6.6 Public Health and Safety

The proposed project would have a positive impact on public health and safety by mitigating the current flood hazard that has been experienced near the proposed project area. Existing conditions would remain the same under the no action alternative and flooding would remain as a threat to the community.

4.7 Summary Table

Table 5 Impacts on Affected Environment

Affected Environmental Resource Area	Impacts	Agency Coordination/Permits	Mitigation/BMPs
Geology & Soils	Minimal short-term impact to soils.	None	Erosion BMPs as implemented through SWPPP.
Air Quality	Temporary air emissions from construction machines	None	Contractors are required to water down construction areas as needed in order to mitigate excess dust. Vehicle running times on site will be kept to a minimum and engines will be properly maintained.
Water Quality	Short-term storm water impacts during construction	TCEQ	A SWPPP will be prepared and implemented, and a Notice of Intent (NOI) will be posted at the construction site. Erosion and sedimentation BMPs will be installed, monitored and maintained during construction to minimize any detrimental effects to water quality during construction. The City of La Feria will obtain a Texas Pollutant Discharge Elimination System (TPDES) storm water permit from TCEQ before the start of construction and comply with all permit conditions.
Waters of the U.S. Including Wetlands	No impact	None USACE	The City of La Feria will ensure that BMPs are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990. N/A
Floodplains	No significant impact	Local Floodplain Administrator IBWC	The City of La Feria must coordinate with the local floodplain administrator and obtain required permits prior to initiating work. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files. The City of La Feria must prepare and provide Public Notice issued 15 days prior to the start of construction of any final decision where proposed floodplain or wetland project is the only practicable alternative. IBWC Issued License No. LSF/G-1810 on March 27, 2012 which grants the City ability to construct, operate, and maintain improvements on the north levee of the Arroyo Colorado Floodway (Appendix A-8)
Coastal Resources	No impact	Texas GLO	N/A
Threatened & Endangered Species/Critical	No effect on listed species or critical habitat.	TPWD	Construction activities will be conducted only during daylight hours to avoid noise and lighting impacts during the night. If

Habitat			temporary or permanent lighting is used, it must be down shielded and directed away from any brush tracts located near the proposed project site. Lights, if used, will be of the minimum wattage needed and the number of lights will be minimized.
Wildlife & Fish	No impact	None	No work will occur during the migratory bird nesting season. Preconstruction bird surveys will be conducted. Nest protection buffers will be implemented, if needed.
Cultural Resources	No impact	THC	In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured by the City of La Feria, and access to the sensitive area will be restricted by the City of La Feria. The Applicant will inform FEMA immediately, and FEMA will consult with the SHPO. Work in sensitive areas shall not resume until consultation is completed and FEMA determines that appropriate measures have been taken to ensure complete project compliance with the NHPA and its implementing regulations.
Environmental Justice	Beneficial impact to all populations.	None	N/A
Hazardous Material	No impact	None	Unusable equipment, debris and material shall be disposed of in an approved manner and location. In the event that significant items (or evidence thereof) are discovered during implementation of the project, applicant shall handle, manage, and dispose of petroleum products, hazardous materials and toxic waste in accordance to requirements and to the satisfaction of the governing local, state and federal agencies.
Noise	Minor short-term impact during construction	None	Construction activities will take place during normal business hours. Equipment and machinery used at the proposed project site will meet all local, state, and federal noise regulations.
Traffic	Slight impact during construction	None	Construction would be during day time only
Public Service & Utilities	No impact	None	N/A
Public Health & Safety	Long-term beneficial impact.	None	N/A

Section 5

Cumulative Impacts

Cumulative impacts can be defined as the impacts of a proposed action when combined with impacts of past, present, or reasonable foreseeable future actions undertaken by any agency or person. This section of the draft Environmental Assessment (EA) addresses the potential cumulative impacts associated with the implementation of the proposed construction of a storm water pump station.

The “no action” alternative will not mitigate flooding of U.S. Highway 83. Given the nature of flooding and the prolonged time that property and roadways are flooded following extreme rain events, taking no action is not a viable option and will not provide hazard mitigation.

The primary purpose of the proposed project is to reduce potential future flood damage to existing structures in the southwestern portion of the City of La Feria. The project is not intended to provide for increased development potential in the area. Therefore, it is not expected that this project will lead to other significant secondary impacts. The proposed project would lead to a net long term increase in floodplain capacity. Therefore, the cumulative effects to floodplains would be positive and beneficial to flood storage and damage reduction in the vicinity of the project area. No other cumulative effects to environmental resources beyond short term construction related effects and long term beneficial effects are anticipated. The proposed project does not have impacts that are of such significance as to add materially to cumulative impacts in the region.

At this time, to the City’s knowledge, no other current or planned water control projects are being constructed or planned in the project vicinity.

Section 6

Agency Coordination, Public Involvement and Permits

6.1 Agency Coordination

Table 6 Agency Coordination

AGENCY	Coordination Letter	Concurrence Letter	Comment Letter	Contact Information	Comments
U.S. Army Corps of Engineers (USACE)	May 24, 2011			CESWG-CO-RE USACE Galveston Dist. PO Box 1229 Galveston, Texas 77553	
Texas General Land Office	May 26, 2011			Ms. Tammy S. Brooks Coastal Coordination Council Secretary Consistency Review Coordinator P.O. Box 12873 Austin, TX 78711	
Texas Parks & Wildlife Department (TPWD)	May 26, 2011			Wildlife Habitat Assessment Program Wildlife Division 4200 Smith School Rd. Austin, TX 78744	
State Historic Preservation Officer (SHPO) Texas Historical Commission (THC)	May 26, 2011	July 7, 2011		Mr. Mark Wolfe, Executive Director & SHPO PO Box 12276 Capitol Station Austin, TX 78711	
Texas Commission on Environmental Quality (TCEQ)	May 26, 2011	June 2, 2011		Chief Engineer's Office TCEQ (MC 168) PO Box 13087 Austin, TX 78711	No significant long term environmental impacts anticipated from the SWPS project. TCEQ recommended the City take steps to ensure BMPs are utilized to control runoff from construction sites.

AGENCY	Coordination Letter	Concurrence Letter	Comment Letter	Contact Information	Comments
International Boundary & Water Commission (IBWC) – U.S. Section	April 18, 2011	April 13, 2012		IBWC –U.S. Section Environmental Review 4171 N. Mesa St., Suite C-100 El Paso. TX 79902-1441	IBWC Issued License No. LSF/G-1810 on March 27, 2012 which grants the City ability to construct, operate, and maintain improvements on the north levee of the Arroyo Colorado Floodway (Appendix A-8)

6.2 Public Participation

The public information process for the proposed storm water pump station (SWPS) project has involved one 30-day Public Notice that was placed in the Harlingen Valley Morning Star, the local general circulation newspaper that covers La Feria and the project area. The public notice, published on May 23, 2009, stated that information on the proposed SWPS was available at the La Feria City Hall located at 115 Commercial Street (Appendix A-8). A City of La Feria Public Commission Meeting was held on May 26, 2009 when the proposed project was approved by Resolution. The notice requested the public to submit written comments, for or against, so that they could be considered and evaluated. No substantive public comments were presented by La Feria citizens.

Another public notice will be released when the Draft Environmental Assessment is complete. A Notice of Availability of the Draft Environmental Assessment will be published in the La Feria News and on FEMA's website (<<http://www.fema.gov/plan/ehp/envdocuments/ea-region6.shtm>>) requesting public comments. Additionally, the Draft EA will be made available for review for a period of 30 days at a physical location in the project area. FEMA will consider and respond to all public comments in the Final EA. If no substantive comments are received, the Draft EA will become final and a Finding of No Significant Impact (FONSI) will be issued for the project. At this time, a public meeting is not planned as part of the proposed SWPS project because it is not controversial.

6.3 Permits

Permits required for this proposed SWPS project primarily address the temporary concerns associated with construction. One required permit is a Texas Pollutant Discharge Elimination System (TPDES) construction storm water general permit under TXR150000. The TPDES TXR150000 construction general permit will require the development of a site-specific storm water pollution prevention plan (SWPPP) that must be kept onsite and maintained with any updates submitted during the course of the project. The SWPPP identifies the storm water best management practices (BMPs) that will be implemented and site erosion controls designed to protect the AN-49 drainage channel and the Arroyo Colorado receiving water. In addition, the City of La Feria will contact the local floodplain administrator and obtain and comply with any permits that may be required for construction in the floodplain. No other state or federal permits appear to be necessary to construct the SWPS facility. Local permits are not needed because the proposed location is not within city limits.

Section 7

References

- Arroyo Colorado Watershed Partnership, 2007, A Watershed Protection Plan for the Arroyo Colorado Phase I, <http://arroyocolorado.org/watershed-protection-plan/>, accessed June 14, 2012.
- Bureau of Economic Geology, The University of Texas at Austin, 1976, Geologic Atlas of Texas, McAllen-Brownsville Sheet.
- Espey Consultants, Inc, 2011, City of La Feria Flood Protection Plan, Internet site: http://www.twdb.state.tx.us/RWPG/rpgm_rpts/0904830949_laFeria.pdf, accessed June 18, 2012.
- Federal Emergency Management Agency (FEMA), 2012, What is the Hazard Mitigation Grant Program, Internet site: <http://www.fema.gov/news/newsrelease.fema?id=60756>, accessed June 7, 2012.
- Federal Emergency Management Agency (FEMA), 2010, President Declares Major Disaster for Texas, Internet site: <http://www.fema.gov/news/newsrelease.fema?id=52303>, accessed June 7, 2012.
- Federal Emergency Management Agency (FEMA), 2008a, Flood Neighborhood in Texas. Internet site: http://www.fema.gov/photolibrary/photo_details.do;jsessionid=58BD4ADC124BF9657F2D611FD585C8CD.WorkerPublic3?id=37485, accessed June 7, 2012.
- Federal Emergency Management Agency (FEMA), 2008b, President Declares Major Disaster for Texas, Internet site: <http://www.fema.gov/news/newsrelease.fema?id=45216>, accessed June 7, 2012.
- Federal Emergency Management Agency (FEMA), 1983, Flood Insurance Rate Map, Cameron County, Texas Panel 225 of 400, Community-Panel Number 4801010225B
- Interagency Wild and Scenic Rivers Council, 2011, *Designated Wild & Scenic Rivers*, Internet site: <http://www.rivers.gov/wsr-rio-grande-texas.html>, accessed June 14, 2012.
- International Boundary and Water Commission (IBWC), 2010, Final Environmental Assessment: Improvements to the Arroyo Colorado South Levee, Hidalgo and Cameron Counties, Texas, Internet site: http://www.ibwc.state.gov/Files/EA-FONSI_ACS_11-26-10.pdf, accessed June 14, 2012.
- National Weather Service, 2009, Hurricane Dolly – July 24, 2008 Impacts on the Texas Coastal Bend & Rio Grande Plains. Internet site: <http://www.srh.noaa.gov/crp/?n=hurricane-dolly>, accessed June 14, 2012.

National Oceanic and Atmospheric Administration (NOAA), 2006, Final Evaluation Findings Texas Coastal Management Program, Internet site:
<http://coastalmanagement.noaa.gov/mystate/docs/TexasCMP2007.pdf>, accessed June 14, 2012.

Texas Commission on Environmental Quality (TCEQ), 2012, 2010 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d), Internet site:
<http://www.tceq.texas.gov/waterquality/assessment/10twqi/10twqi>, accessed June 14, 2012.

Texas Commission on Environmental Quality (TCEQ), 2011, Arroyo Colorado: A TMDL Project for Legacy Pollutants and Organics, Internet site: <http://www.tceq.texas.gov/waterquality/tmdl/07-arroyoleg.html>, accessed June 14, 2012.

Texas Commission on Environmental Quality (TCEQ), 2006, Pollutant Reduction Plan for the Arroyo Colorado Segments 2201 and 2202 Hidalgo, Cameron, and Willacy Counties, Internet site:
http://m.tceq.texas.gov/assets/public/implementation/water/tmdl/13arroyo/13-arroyo_prp_july2006.pdf, accessed June 14, 2012.

Texas Commission on Environmental Quality (TCEQ), 2003, Twelve Total Maximum Daily Loads for Legacy Pollutants in the Arroyo Colorado Above Tidal and the Donna Reservoir and Canal System, Internet site:
http://www.tceq.texas.gov/assets/public/implementation/water/tmdl/07arroyoleg/07-arroyo_legacy_tmdl.pdf, accessed June 14, 2012.

Texas Department of State Health Services (TDSHS), 2008, Fish Consumption Advisories: Advisory 34, Advisory 19, Advisory 6, Advisory 5, Internet site:
<http://www.dshs.state.tx.us/seafood/survey.shtm>, accessed June 14, 2012.

Texas Historical Commission (THC), Section 106, Internet site:
<http://www.thc.state.tx.us/tribal/section.shtml>, accessed June 14, 2012.

Texas Parks and Wildlife Department (TPWD), Management Guidelines for the Jaguarundi and Ocelot, Internet site:
http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_0013_jaguarundi_ocelot_mgmt.pdf, accessed June 14, 2012.

Texas Parks and Wildlife Department (TPWD), Nongame and Rare Species Program: Federal/State Threatened and Endangered Species, Internet site:
http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/texas_rare_species/listed_species/, accessed June 14, 2012.

Texas Parks and Wildlife Department (TPWD), Ocelot, Internet site:
http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_0013_ocelot.pdf, accessed June 14, 2012.

- Texas Water Development Board (TWDB), 2006a, Major Aquifers of Texas, Internet site: http://www.twdb.state.tx.us/mapping/doc/maps/aqu_maj_8x11.pdf, accessed June 13, 2012.
- Texas Water Development Board (TWDB), 2006b, Minor Aquifers of Texas, Internet site: http://www.twdb.state.tx.us/mapping/doc/maps/aqu_min_8x11.pdf, accessed June 13, 2012.
- Texas Water Development Board (TWDB), WIID System: Water Information Integration & Dissemination, Internet site: <http://wiid.twdb.texas.gov/>, accessed June 14, 2012.
- U.S. Census Bureau, 2010a, 2010 Census Interactive Population Search, Internet site: <http://2010.census.gov/2010census/popmap/ipmtext.php?fl=48>, accessed June 14, 2012.
- U.S. Census Bureau, 2010b, American FactFinder, Internet site: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>, accessed June 14, 2012.
- U.S. Census Bureau, 2010c, Cameron County, Texas QuickLinks, Internet site: <http://quickfacts.census.gov/qfd/states/48/48061lk.html>, accessed June 14, 2012.
- U.S. Census Bureau, 2010d, Interactive Population Map, Internet site: <http://2010.census.gov/2010census/popmap/>, accessed June 14, 2012.
- U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), 2012, Web Soil Survey (WSS), Internet site: <http://websoilsurvey.nrcs.usda.gov>, accessed June 13, 2012.
- U.S. Department of Homeland Security, 2004, Environmental Assessment Port Isabel/Brownsville Border Patrol Station, Internet site: http://ww3.swg.usace.army.mil/pep/Brownsville/PIB_BPS_Final_EA.pdf, accessed June 13, 2012.
- U.S. Environmental Protection Agency (USEPA), 2012a, Currently Designated Nonattainment Areas for All Criteria Pollutants, Internet site: <http://www.epa.gov/air/oaqps/greenbk/ancl.html#TEXAS>, accessed June 14, 2012.
- U.S. Environmental Protection Agency (USEPA), 2012b, AirData: Air Quality Index Report, Internet site: http://www.epa.gov/airdata/ad_rep_aqi.html, accessed June 14, 2012.
- U.S. Environmental Protection Agency (USEPA), 2012c, National Ambient Air Quality Standards (NAAQS), Internet site: <http://www.epa.gov/air/criteria.html>, accessed June 14, 2012.
- U.S. Environmental Protection Agency (USEPA), 2012d, Clean Water Act, Section 404, Internet site: <http://water.epa.gov/lawsregs/guidance/wetlands/sec404.cfm>, accessed June 14, 2012.
- U.S. Environmental Protection Agency (USEPA), 2012e, Envirofacts, Internet site: <http://www.epa.gov/enviro/>, accessed June 18, 2012.

U.S. Environmental Protection Agency (USEPA), 2012f, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States* and *Carabell v. United States*, Internet site: http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf.

U.S. Fish & Wildlife Service, 2012, National Wetlands Inventory, Internet site: <http://www.fws.gov/wetlands/Data/Mapper.html>, accessed June 14, 2012.

Section 8

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