



**CITY OF  
CORPUS CHRISTI**

## **Environmental Assessment**

**Determinations and Compliance Findings for HUD-Assisted Projects**

**24 CFR Part 58**

**Oso WWTP Emergency Generator**

February 2026

# **Contents**

## Part 58 Environmental Assessment Form

### Environmental Review Worksheets:

- Airport Hazards Worksheet
- Coastal Barrier Resources Worksheet
- Flood Insurance Worksheet
- Clean Air Act Worksheet
- Coastal Zone Management Worksheet
- Contamination and Toxic Substances Worksheet
- Endangered Species Worksheet
- Explosive and Flammable Hazards Worksheet
- Farmlands Protection Worksheet
- Floodplain Management Worksheet
- Historic Preservation Worksheet
- Noise Abatement and Control Worksheet
- Sole Source Aquifer Worksheet
- Wetlands Protection Worksheet
- Wild and Scenic Rivers Worksheet

### Attachments:

- Attachment A – Accident Potential Zone Map
- Attachment B – USFWS Coastal Barrier Resources System Map
- Attachment C – FEMA Flood Insurance Rate Map
- Attachment D – Current List of Non-Attainment Areas
- Attachment E – Consistency with Texas Coastal Zone Management Program Form and Correspondence with GLO
- Attachment F – Narrative Portion of Phase I ESA prepared for Oso WWTP
- Attachment G – IPAC Documentation
- Attachment H – Acceptable Separation Distance Calculations and Map
- Attachment I – Programmatic Agreement between THC and TGLO
- Attachment J – Tribal Consultation Correspondence
- Attachment K – THC Map and Detail Sheet
- Attachment L – Sole Source Aquifers Map
- Attachment M – NWI Map
- Attachment N – NWSRS Map
- Attachment O – City of Corpus Christi Zoning Map and Zoning Information from Unified Development Code
- Attachment P – NRCS Soil Report
- Attachment Q – USGS Topographic Map
- Attachment R – City of Corpus Christi Noise Ordinance
- Attachment S – Photo Log of Field Inspection
- Attachment T - Copy of Public Notices Posted on the City of Corpus Christi's Website

## **Part 58 Environmental Assessment Form**



**U.S. Department of Housing and Urban  
Development**

451 Seventh Street, SW  
Washington, DC 20410  
www.hud.gov

espanol.hud.gov

## **Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58**

### **Project Information**

**Project Name:** Oso WWTP Emergency Generator

**Responsible Entity:** City of Corpus Christi

**Grant Recipient** (if different than Responsible Entity):

**State/Local Identifier:** 24-065-091-E767

**Preparer:** Tara Ducrest

**Certifying Officer Name and Title:** Paulette M. Guajardo, Mayor

**Grant Recipient** (if different than Responsible Entity):

**Consultant** (if applicable): Hanson Professional Services Inc.

**Direct Comments to:** Mayor Paulette Guajardo  
1201 Leopard Street  
Corpus Christi, Texas 78401

**Project Location:** The project is at the Oso Wastewater Treatment Plant (WWTP), which is located at 501 Nile Drive to the northwest of the intersection of Nile Drive and Ennis Joslin Road in Corpus Christi, Nueces County, Texas 78412. The WWTP is at 27.710111° north latitude and -97.340465° west longitude.

**Description of the Proposed Project** [24 CFR 50.21 & 58.32]: The Oso WWTP is the largest of City's six wastewater treatment plants and serves approximately 50% of the City's population. The Oso WWTP was constructed in 1941. It currently has a rated treatment capacity for average daily flows of 16.2 million gallons per day (MGD) and peak 2-hour flows up to 98.0 MGD.

The Oso WWTP meets the minimum Texas Commission on Environmental Quality (TCEQ) power requirements with dual power supply by AEP, however, it is only equipped with partial emergency generators to deal with the situation of grid electrical power outages.

In February of 2021, Winter Storm Uri “dumped record amounts of snow on Texas, with the frigid temperatures and severe weather impacting all 254 counties in the state” (Texas Division of Emergency Management), and brought state-wide power outages. The Oso WWTP experienced power outages. The partially equipped emergency generators were unable to fully run the plant treatment equipment and resulted in TCEQ permit violations.

The major improvements of this project include:

- Installation of emergency generators with full power capacity
- Instrumentation and electrical control system for automatic switch between AEP power and emergency generators
- Miscellaneous improvements related to emergency generators

**Statement of Purpose and Need for the Proposal:** The purpose of this project is to allow the plant to maintain integrity of the treatment process during extreme weather events such as hurricanes, tropical storms, and winter storms. The service area of the Oso WWTP serves 166,544 people and it is the largest wastewater plant in Corpus Christi. The emergency generator installation will benefit the citizens living in the Oso basin with a lower and moderate income (LMI) of 45%.

**Existing Conditions and Trends [24 CFR 58.40(a):** The Oso WWTP is an existing WWTP that serves 166,544 people in Corpus Christi, Texas. The emergency generators will allow the WWTP to maintain operations during grid power outages. If the project is not completed, potential impacts include more frequent sanitary sewer overflows.

### **Funding Information**

<b>Grant Number</b>	<b>HUD Program</b>	<b>Funding Amount</b>
24-065-091-E767	CDBG-MIT	\$6,660,280.00

**Estimated Total HUD Funded Amount:** \$6,660,280.00

**Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d):** \$9,570,616.00

### **Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities**

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4            and 58.6</b>		
<b>Airport Hazards</b>  24 CFR Part 51 Subpart D	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	A site-specific study titled Final Air Installations Compatible Use Zones Study for Naval Air Station Corpus Christi, Texas Including Naval Auxiliary Landing Fields Waldron and Cabaniss shows that the Oso Wastewater Treatment Plant is not in the clear zone or accident potential zones of NAS Corpus Christi. The Accident Potential Zone map from the site-specific study is provided as Attachment A.
<b>Coastal Barrier Resources</b>  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project is not located in a CBRS unit. A map from the U.S. Fish & Wildlife Service Coastal Barrier Resources System Mapper is provided as Attachment B.
<b>Flood Insurance</b>  Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	No portion of the project area is in a FEMA-designated Special Flood Hazard Area. A FEMA Flood Insurance Rate Map (FIRM) is included as Attachment C.
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 &amp;            58.5</b>		
<b>Clean Air</b>  Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	New construction at the existing WWTP will include installation of new emergency generators. The project area is in Nueces County, which is in attainment status. A current list of all non-attainment areas, which does not include Nueces County, is provided as Attachment D.

<p><b>Coastal Zone Management</b></p> <p>Coastal Zone Management Act, sections 307(c) &amp; (d)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>A Consistency with the Texas Coastal Management Program form was submitted to the Texas General Land Office (GLO) to determine consistency of the project with the Texas Coastal Management Program. GLO responded that the GLO Coastal Management Program does not currently have any listed federal financial assistance activities, so a federal consistency review is not required. The submitted form and correspondence received from GLO is included as Attachment E.</p>
<p><b>Contamination and Toxic Substances</b></p> <p>24 CFR Part 50.3(i) &amp; 58.5(i)(2)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The use of the project area as a wastewater treatment plant (WWTP) was identified as a potential Recognized Environmental Condition (REC) in the Phase I Environmental Site Assessment (ESA) prepared for the site; however, due to the continuing use of the project area as a WWTP, additional assessment was not recommended until the WWTP is decommissioned. Toxic and hazardous substances are stored and used in the project area, consistent with the use of the property as a WWTP. The narrative portion of the Phase I ESA is included as Attachment F.</p>
<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The U.S. Fish &amp; Wildlife Service Information for Planning and Consultation (IPAC) website was used to determine if federally listed species or designated critical habitats were present in the project area. An official species list, biological analysis, and a determination letter for the Tricolored bat are included as Attachment G. The IPAC documentation shows that there is no critical habitat in the project area and that no effects are anticipated for any listed species.</p>
<p><b>Explosive and Flammable Hazards</b></p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The project involves installing emergency generators with secondary containment at the Oso Wastewater Treatment Plant. The HUD Acceptable Separation Distance Assessment Tool was used to determine the acceptable separation distance between the emergency generator fuel tank and nearby buildings and areas of congregation. No residences or other facilities where people may congregate are present within the acceptable separation distances of 103 feet for thermal radiation for people and 17 feet for thermal radiation for buildings. The acceptable separation distance calculations and a map showing that there are no facilities or areas of congregation within acceptable distances are included as Attachment H.</p>

<p><b>Farmlands Protection</b></p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project area is within the boundary of an existing wastewater treatment plant and no farmland will be impacted.</p>
<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>Based on the project including a critical action and using the base flood elevation plus three feet as the FFRMS, the FFRMS would be 12 feet. This was determined by reviewing FEMA Flood Insurance Rate Map, Map Number 48355C0530G. The project is not located in the FFRMS floodplain. Map Number 48355C0530G is included as Attachment C.</p>
<p><b>Historic Preservation</b></p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The activities that will occur for the project are included in a list of activities not requiring review by SHPO in a Programmatic Agreement (PA) between the Texas Historical Commission and the Texas General Land Office. The PA is provided as Attachment I.</p> <p>The Apache Tribe of Oklahoma, the Comanche Nation, Oklahoma, the Tonkawa Tribe of Oklahoma, and the Wichita and Affiliated Tribes were sent consultation letters on 2/12/2026. Tribal consultation correspondence is provided as Attachment J.</p> <p>The Texas Historical Commission (THC) Atlas identified no historic sites on the project area. One historic site, Karankawa Indians, was identified across Ennis Joslin Road from the project area. A THC map and detail sheet on the historic site are provided as Attachment K.</p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project does not involve new construction for residential use, rehabilitation of an existing residential property, or a research demonstration project and is therefore in compliance with the noise regulations of 24 CFR Part 51, Subpart B.</p>
<p><b>Sole Source Aquifers</b></p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project area is not located on a sole source aquifer. A map showing the nearest sole source aquifer and the project area is provided as Attachment L.</p>
<p><b>Wetlands Protection</b></p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project will not impact a wetland in terms Executive Order 11990. A National Wetlands Inventory Map of the project area is included as Attachment M.</p>

<b>Wild and Scenic Rivers</b>  Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project area is not within proximity of a NWSRS river. A map showing the nearest NWSRS river is included as Attachment N.
--	---	---

**Environmental Assessment Factors** [24 CFR 58.40] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

**Impact Codes:** Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	(2) No impact anticipated	The project area is zoned RS-10 (single-family, with 10 units per lot). Based on the City of Corpus Christi’s Unified Development Code, utilities are permitted in zone RS-10, subject to limitations and wastewater utilities are listed as being exempt. The project will not change the land use of the project area. The site will continue to be a wastewater treatment plant. A zoning map and zoning information from the Unified Development Code are provided as Attachment M.

Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	(2) No impact anticipated	Soils of the project area consist mostly of Victoria clay (0 to 3 percent slopes) and Victoria clay (1 to 3 percent slopes). Drainage class for Victoria clay in this location is well drained and soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through Victoria clay is somewhat restricted. Soils of the project area have been suitable for the existing WWTP and are expected to be suitable for the new emergency generators. A soil report from the Natural Resources Conservation Service is provided as Attachment P.  The project area is relatively flat, with gentle sloping towards the tributary that flows to Blind Oso Bay. A topographic map is provided as Attachment Q.  In non-paved portions of the project area, vegetation is established and erosion is not occurring. Ground disturbances made during the project will be permanently stabilized following construction.  Stormwater is generally sheet flow runoff that flows towards the tributary to the Blind Oso Bay that is north of the WWTP.
Hazards and Nuisances including Site Safety and Noise	(2) No impact anticipated	Construction activities have the potential to expose sensitive receptors to noise emissions that are normally unacceptable. There are no sensitive receptors in close proximity to the project area and the City of Corpus Christi has a noise ordinance that limits construction hours to between 7:00 am and 8:00 pm. A copy of the ordinance is included as Attachment R.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>SOCIOECONOMIC</b>		
Employment and Income Patterns	(2) No impact anticipated	The project activities are limited to improvements to an existing WWTP and are not expected to impact employment or income patterns.
Demographic Character Changes, Displacement	(2) No impact anticipated	The project activities are limited to improvements to an existing WWTP and are not expected to impact demographic character or displace any residents.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	(2) No impact anticipated	The project is not anticipated to impact educational or cultural facilities because the project activities are limited to improvements to an existing WWTP.
Commercial Facilities	(2) No impact anticipated	The project is not anticipated to impact commercial facilities because the project activities are limited to improvements to an existing WWTP.

Health Care and Social Services	(2) No impact anticipated	The project is not anticipated to impact healthcare or social services because the project activities are limited to improvements to an existing WWTP.
Solid Waste Disposal / Recycling	(2) No impact anticipated	Solid waste generated during construction activities will need to be managed to avoid a negative impact. Solid waste disposal and recycling services are provided to the existing WWTP.
Waste Water / Sanitary Sewers	(1) Minor beneficial impact	The project is occurring at an existing WWTP. The emergency generators being installed will improve the reliability of power at the WWTP.
Water Supply	(2) No impact anticipated	The project is not anticipated to impact water supply because the project activities are limited to improvements to an existing WWTP.
Public Safety - Police, Fire and Emergency Medical	(2) No impact anticipated	The project is not anticipated to impact public safety services because the project activities are limited to improvements to an existing WWTP.
Parks, Open Space and Recreation	(2) No impact anticipated	The project is not anticipated to impact parks, open spaces, or recreation options because the project activities are limited to improvements to an existing WWTP.
Transportation and Accessibility	(2) No impact anticipated	The project is not anticipated to impact transportation or accessibility because the project activities are limited to improvements to an existing WWTP.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	(2) No impact anticipated	No unique natural features or water resources are located on or near the project area. Blind Oso Bay is located to the east of the project area and a stormwater pollution prevention plan will be implemented for the construction project.
Vegetation, Wildlife	(2) No impact anticipated	The project is located at a previously developed WWTP, with only maintained grass and a few landscaped trees. Disturbed ground will be returned to maintained grass following completion of construction.
Other Factors	(2) No impact anticipated	No other natural features are anticipated to be impacted by the project because the project activities are limited to improvements to an existing WWTP.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>ENERGY</b>		
Energy Efficiency	(1) Minor beneficial impact	The project involves installing emergency generators at an existing WWTP, which will allow the plant to operate during grid electrical power outages.

**Additional Studies Performed:** Phase I Environmental Site Assessment – Oso Wastewater Treatment Plant

**Field Inspection** (Date and completed by): A field inspection of the project area was completed on September 16, 2025 by Tara Ducrest, with Hanson Professional Services Inc., and William Causey, with the City of Corpus Christi. A photo log is provided as Attachment S.

**List of Sources, Agencies and Persons Consulted:**

- HUD Exchange - <https://www.hudexchange.info/programs/environmental-review/>
- 32 CFR § 256.9 - <https://www.govinfo.gov/content/pkg/CFR-2011-title32-vol2/pdf/CFR-2011-title32-vol2-sec256-8.pdf>
- Final Air Installations Compatible Use Zones Study for Naval Air Station Corpus Christi, Texas, Including Naval Auxiliary Landing Fields Waldron and Cabaniss - <https://cnrse.cnrc.navy.mil/LinkClick.aspx?fileticket=bdIi820wObE%3d&portalid=83>
- U.S. Fish and Wildlife Service Coastal Barrier Resources System Mapper - <https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/>
- Federal Emergency Management Agency Flood Map Service Center - <https://msc.fema.gov/portal/home>
- U.S. Environmental Protection Agency Current Nonattainment Counties for All Criteria Pollutants - <https://www3.epa.gov/airquality/greenbook/ancl.html#TX>
- Texas Coastal Management Program Federal Consistency Guidance - <https://www.glo.texas.gov/sites/default/files/resources/glo/coast/coastal-management/federal-consistency/files/federal-consistency-interim-guidance.pdf>
- Agency contacted: Texas General Land Office contacted for consistency determination of project with the Texas Coastal Management Program. Consistency determination form sent to [federal.consistency@glo.texas.gov](mailto:federal.consistency@glo.texas.gov)
- Phase I Environmental Site Assessment – Oso Wastewater Treatment Plant, 501 Nile Drive, Corpus Christi, Nueces County, Texas, October 2025
- U.S. Fish and Wildlife Served Information for Planning and Consultation (IPaC) - <https://ipac.ecosphere.fws.gov/user/login>
- HUD Acceptable Separation Distance Electronic Assessment Tool - <https://www.hudexchange.info/programs/environmental-review/asd-calculator/>
- Programmatic Agreement between the Texas Historical Commission and the Texas General Land Office GLO Contract No. 12-400-000-6445 - <https://www.hudexchange.info/sites/onecpd/assets/File/TX-CDBG-DR-2013-PA-Section-106.pdf>
- HUD Tribal Directory Assessment Tool - <https://egis.hud.gov/tdat/>
- Texas Historical Commission Atlas - <https://atlas.thc.texas.gov/Map>
- Sole Source Aquifer Map - <https://experience.arcgis.com/experience/1bfab371d71e4b868fc9ae7df62a16fe>
- National Wetlands Inventory Map - <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- National Wild and Scenic River System Map - <https://rivers.gov/carp/map>
- City of Corpus Christi Zoning Map - <https://gis-corpus.opendata.arcgis.com/datasets/zoning/explore>

- City of Corpus Christi Unified Development Code - <https://online.encodeplus.com/regs/corpuschristi-tx/index.aspx>
- Natural Resources Conservation Service - <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- United States Geological Survey Topographic Map - <https://store.usgs.gov/map-locator>
- City of Corpus Christi Code of Ordinances - [https://library.municode.com/tx/corpus\\_christi/codes/code\\_of\\_ordinances](https://library.municode.com/tx/corpus_christi/codes/code_of_ordinances)

### **List of Permits Obtained:**

Potential permits to be obtained for the project include a floodplain development permit and a construction stormwater permit.

### **Public Outreach [24 CFR 50.23 & 58.43]:**

- 8/14/2025 – Citizen Participation and Civil Rights Notices Regarding CDBG-MIT Grant to City of Corpus Christi for Greenwood and Oso Wastewater Treatment Plant Improvements posted on City of Corpus Christi website (<https://www.corpuschristitx.gov/media/si4a0dqf/public-noticecitizen-participation-and-civil-rights-notices-regarding-cdbg-mit-grant-20250814.pdf>)
- 8/28/2025 – Wastewater Infrastructure Improvements News Release posted on City of Corpus Christi website (<https://www.corpuschristitx.gov/news/posts/news-release-8-28-25-city-awarded-151-million-for-wastewater-infrastructure-improvements/>)
- 3/28/2026 – Combined Notice of Finding of No Significant Impact and Notice of Intent to Request a Release of Funds planned to be published on City of Corpus Christi website

A copy of public notices posted on the City of Corpus Christi’s website are included as Attachment T.

### **Cumulative Impact Analysis [24 CFR 58.32]:**

The project activities are limited to improvements to an existing WWTP and will not have cumulative impacts.

### **Alternatives [24 CFR 58.40(e)]**

Options considered include Option A, “Oso WWTP Backup Generators,” and Option B, “No Action Alternative.” An alternative site was not considered because the work is occurring at an existing WWTP.

### **No Action Alternative [24 CFR 58.40(e)]:**

Under Option B, the “No Action Alternative,” the City of Corpus Christi would not install emergency generators at the Oso WWTP. The WWTP would continue to potentially impact water quality from sanitary sewer overflows.



This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

# **Airport Hazards Worksheet**

## Airport Hazards (CEST and EA)

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D
References		
<a href="https://www.hudexchange.info/environmental-review/airport-hazards">https://www.hudexchange.info/environmental-review/airport-hazards</a>		

**1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

Yes → *Continue to Question 2.*

**2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

Yes, project is in an APZ → *Continue to Question 3.*

Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

No, project is not within an APZ or RPZ/CZ

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

**3. Is the project in conformance with DOD guidelines for APZ?**

Yes, project is consistent with DOD guidelines without further action.

**Explain how you determined that the project is consistent:**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

Project is not consistent with DOD guidelines, but it has been approved by Certifying Officer or HUD Approving Official.

**Explain approval process:**

**If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

A site-specific study titled Final Air Installations Compatible Use Zones Study for Naval Air Station Corpus Christi, Texas Including Naval Auxiliary Landing Fields Waldron and Cabaniss shows that the Oso Wastewater Treatment Plant is not in the clear zone or accident potential zones of NAS Corpus Christi. The Accident Potential Zone map from the site-specific study is provided as Attachment A.

**Are formal compliance steps or mitigation required?**

- Yes  
 No

# **Coastal Barrier Resources Worksheet**

## Coastal Barrier Resources (CEST and EA)

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	
References		
<a href="https://www.hudexchange.info/environmental-review/coastal-barrier-resources">https://www.hudexchange.info/environmental-review/coastal-barrier-resources</a>		

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

### 1. Is the project located in a CBRS Unit?

- No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*
- Yes → *Continue to Question 2.*

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

### 2. Indicate your selected course of action.

- After consultation with the FWS the project was given approval to continue  
→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map and documentation of a FWS approval.*
- Project was not given approval  
Project cannot proceed at this location.

## Worksheet Summary

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project is not located in a CBRS unit. A map from the U.S. Fish & Wildlife Service Coastal Barrier Resources System Mapper is provided as Attachment B.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Flood Insurance Worksheet**

## Flood Insurance (CEST and EA)

General requirements	Legislation	Regulation	Reference
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.5.	<a href="#">Flood Insurance - HUD Exchange</a>

**1. Does this project involve mortgage insurance, refinance, acquisition, repairs, construction, or rehabilitation of a structure, mobile home, or insurable personal property?**

No. This project does not require flood insurance or is excepted from flood insurance.  
*Continue to the Worksheet Summary.*

Yes *Continue to Question 2.*

**2. Provide a FEMA/FIRM map showing the site.**

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

**Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?**

No *Continue to the Worksheet Summary.*

Yes *Continue to Question 3.*

**3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?**

Yes, the community is participating in the National Flood Insurance Program.

For loans, loan insurance or loan guarantees, flood insurance coverage must be continued for the term of the loan. For grants and other non-loan forms of financial assistance, flood insurance coverage must be continued for the life of the building irrespective of the transfer of ownership. The amount of coverage must equal the total project cost or the maximum coverage limit of the National Flood Insurance Program, whichever is less. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

*Continue to the Worksheet Summary.*

- Yes, less than one year has passed since FEMA notification of Special Flood Hazards.  
If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

*Continue to the Worksheet Summary.*

- No. The community is not participating, or its participation has been suspended.  
Federal assistance may not be used at this location. Cancel the project at this location.

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

No portion of the project area is a FEMA-designated Special Flood Hazard Area. A FEMA Flood Insurance Rate Map (FIRM) is included as Attachment C.

# **Clean Air Act Worksheet**

## Air Quality (CEST and EA)

General Requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93
Reference		
<a href="https://www.hudexchange.info/environmental-review/air-quality">https://www.hudexchange.info/environmental-review/air-quality</a>		

### Scope of Work

- 1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

Yes

→ Continue to Question 2.

No

Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

### Air Quality Attainment Status of Project's County or Air Quality Management District

- 2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

No, project's county or air quality management district is in attainment status for all criteria pollutants

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants.

Describe the findings:

→ Continue to Question 3.

**3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Explain how you determined that the project would not exceed *de minimis* or threshold emissions.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ Continue to Question 4. Explain how you determined that the project would not exceed *de minimis* or threshold emissions in the Worksheet Summary.

**4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

New construction at the existing WWTP will include installation of new emergency generators. The project area is in Nueces County, which is in attainment status. A current list of all non-attainment areas, which does not include Nueces County, is provided as Attachment D.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Coastal Zone Management Worksheet**

## Coastal Zone Management Act (CEST and EA)

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930
References		
<a href="https://www.onecpd.info/environmental-review/coastal-zone-management">https://www.onecpd.info/environmental-review/coastal-zone-management</a>		

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samona	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

### 1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes → *Continue to Question 2.*

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.*

### 2. Does this project include activities that are subject to state review?

Yes → *Continue to Question 3.*

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.*

### 3. Has this project been determined to be consistent with the State Coastal Management Program?

Yes, with mitigation. → *Continue to Question 4.*

Yes, without mitigation. → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.*

No, project must be canceled.

Project cannot proceed at this location.

**4. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the State Coastal Management Program letter of consistency) and any other documentation used to make your determination.*

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

A Consistency with the Texas Coastal Management Program form was submitted to the Texas General Land Office (GLO) to determine consistency of the project with the Texas Coastal Management Program. GLO responded that the GLO Coastal Management Program does not currently have any listed federal financial assistance activities, so a federal consistency review is not required. The submitted form and correspondence received from GLO is included as Attachment E.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Contamination and Toxic Substances Worksheet**

## Contamination and Toxic Substances (Multifamily and Non-Residential Properties)

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
<b>Reference</b>		
<a href="https://www.hudexchange.info/programs/environmental-review/site-contamination">https://www.hudexchange.info/programs/environmental-review/site-contamination</a>		

**1. How was site contamination evaluated?<sup>1</sup> Select all that apply.**

- ASTM Phase I ESA
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.

Continue to Question 2.

**2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)**

- No

**Explain:**

The use of the project area as a wastewater treatment plant (WWTP) was identified as a potential REC in the Phase I ESA prepared for the site; however, due to the continuing use of the project area as a WWTP, additional assessment was not recommended until the WWTP is decommissioned. Toxic and hazardous substances are stored and used in the project area, consistent with the use of the property as a WWTP.

<sup>1</sup> HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

→ Based on the response, the review is in compliance with this section.  
Continue to the Worksheet Summary below.

Yes.

→ Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

### 3. Mitigation

Document the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental effects cannot be mitigated, then HUD assistance may not be used for the project at this site.

#### Can adverse environmental impacts be mitigated?

Adverse environmental impacts cannot feasibly be mitigated

→ Project cannot proceed at this location.

Yes, adverse environmental impacts can be eliminated through mitigation.

→ Provide all mitigation requirements<sup>2</sup> and documents. Continue to Question 4.

### 4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls<sup>3</sup>, or use of institutional controls<sup>4</sup>.

---

<sup>2</sup> Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

<sup>3</sup> Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

<sup>4</sup> Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

**If a remediation plan or clean-up program was necessary, which standard does it follow?**

Complete removal

→ *Continue to the Worksheet Summary.*

Risk-based corrective action (RBCA)

→ *Continue to the Worksheet Summary.*

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The Oso WWTP has been in operation since 1943. Wastewater treatment and sludge management have occurred at the WWTP. This site could potentially be a recognized environmental condition due to the possible presence of contamination from metals, Polychlorinated Biphenyls (PCBs), and Per- and Polyfluoroalkyl Substances (PFAS). Due to the site being an active wastewater treatment plant, additional investigation is not currently recommended. In the event that the Oso WWTP were to be decommissioned, assessment for potential contamination of the property would be recommended. The narrative portion of the Phase I ESA is included as Attachment F.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Endangered Species Worksheet**

## Endangered Species Act (CEST and EA)

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service (“FWS” and “NMFS” or “the Services”).	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i> ); particularly section 7 (16 USC 1536).	50 CFR Part 402
<b>References</b>		
<a href="https://www.hudexchange.info/environmental-review/endangered-species">https://www.hudexchange.info/environmental-review/endangered-species</a>		

### 1. Does the project involve any activities that have the potential to affect species or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.  
 → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.  
 Explain your determination:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes, the activities involved in the project have the potential to affect species and/or habitats. → *Continue to Question 2.*

### 2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#) or you may contact your [local FWS](#) and/or [NMFS](#) offices directly.

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation*

*may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.*

Yes, there are federally listed species or designated critical habitats present in the action area. → *Continue to Question 3.*

**3. What effects, if any, will your project have on federally listed species or designated critical habitat?**

No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ *Continue to Question 4, Informal Consultation.*

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ *Continue to Question 5, Formal Consultation.*

**4. Informal Consultation is required**

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

**Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?**

Yes, the Service(s) concurred with the finding.

→ *Based on the response, the review is in compliance with this section. Continue to Question 6 and provide the following:*

- (1) A biological evaluation or equivalent document*
- (2) Concurrence(s) from FWS and/or NMFS*
- (3) Any other documentation of informal consultation*

*Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.*

No, the Service(s) did not concur with the finding. → Continue to Question 5.

**5. Formal consultation is required**

Section 7 of ESA (16 USC 1536) mandates consultation to resolve potential impacts to federally listed endangered and threatened species and critical habitats. If a HUD assisted project may affect any endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

→ Once consultation is complete, the review is in compliance with this section. Continue to Question 6 and provide the following:

- (1) A biological assessment, evaluation, or equivalent document
- (2) Biological opinion(s) issued by FWS and/or NMFS
- (3) Any other documentation of formal consultation

**6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that will be implemented to mitigate for the impact or effect, including the timeline for implementation.**

Mitigation as follows will be implemented:

No mitigation is necessary.

**Explain why mitigation will not be made here:**

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The U.S. Fish & Wildlife Service Information for Planning and Consultation (IPAC) website was used to determine if federally listed species or designated critical habitats were present in the project area. An official species list, biological analysis, and a determination letter for the Tricolored bat are included as Attachment G. The IPAC documentation shows that there is no critical habitat in the project area and that no effects are anticipated for any listed species.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Explosive and Flammable Hazards Worksheet**

## Explosive and Flammable Hazards (CEST and EA)

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C
<b>Reference</b>		
<a href="https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities">https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities</a>		

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

No

→ Continue to Question 2.

Yes

**Explain:**

The project involves installing emergency generators which store diesel fuel at the Oso Wastewater Treatment Plant.

→ Go directly to Question 5.

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes

→ Continue to Question 3.

3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:

- Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR
- Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 version of National Fire Protection Association (NFPA) Code 58.

If all containers within the search area fit the above criteria, answer “no.” For any other type of aboveground storage container within the search area that holds one of the

flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer “yes.”

No

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.*

Yes

→ *Continue to Question 4.*

**4. Visit HUD’s website to identify the appropriate tank or tanks to assess and to calculate the required separation distance using the [electronic assessment tool](#). To document this step in the analysis, please attach the following supporting documents to this screen:**

- **Map identifying the tank selected for assessment, and showing the distance from the tank to the proposed HUD-assisted project site; and**
- **Electronic assessment tool calculation of the required separation distance.**

**Based on the analysis, is the proposed HUD-assisted project site located at or beyond the required separation distance from all covered tanks?**

Yes

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

No

→ *Go directly to Question 6.*

**5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

Yes

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*

No

→ *Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.  
Continue to Question 6.*

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Mitigation measures may include both natural and manmade barriers, modification of the project design, burial or removal of the hazard, or other engineered solutions. Describe selected mitigation measures, including the timeline for implementation, and attach an implementation plan. If negative effects cannot be mitigated, cancel the project at this location.

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project involves installing emergency generators with secondary containment at the Oso Wastewater Treatment Plant. The HUD Acceptable Separation Distance Assessment Tool was used to determine the acceptable separation distance between the emergency generator fuel tank and nearby buildings and areas of congregation. No residences or other facilities where people may congregate are present within the acceptable separation distances of 103 feet for thermal radiation for people and 17 feet for thermal radiation for buildings. The acceptable separation distance calculations and a map showing that there are no facilities or areas of congregation within the acceptable distances are included as Attachment H.

**Are formal compliance steps or mitigation required?**

- Yes  
 No

# **Farmlands Protection Worksheet**

## Farmlands Protection (CEST and EA)

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	<a href="#">7 CFR Part 658</a>
Reference		
<a href="https://www.hudexchange.info/environmental-review/farmlands-protection">https://www.hudexchange.info/environmental-review/farmlands-protection</a>		

**1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?**

- Yes  
 No

**Explain how you determined that agricultural land would not be converted:**

The project area is within the boundary of an existing wastewater treatment plant.

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting your determination.

**2. Does your project meet one of the following exemptions?**

- Project on land already in or committed to urban development or used for water storage ([7 CFR 658.2\(a\)](#)). To check whether the project location is located in an urbanized area, use the following US Census Bureau application: [TIGERweb](#)
  - Construction limited to on-farm structures needed for farm operations
  - Construction is limited to new minor secondary (accessory) structures such as a garage or storage shed
- Yes → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination
- No → Continue to Question 3.

**3. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?**

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs> or your NRCS state soil scientist [http://soils.usda.gov/contact/state\\_offices/](http://soils.usda.gov/contact/state_offices/) for assistance

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes → *Continue to Question 4.*

**4. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.**

- Complete form **AD-1006**, “Farmland Conversion Impact Rating” [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1045394.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf) and contact the state soil scientist before sending it to the local NRCS District Conservationist.  
(NOTE: for corridor type projects, use instead form **NRCS-CPA-106**, "Farmland Conversion Impact Rating for Corridor Type Projects: [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1045395.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf).)
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 (or form NRCS-CPA-106 if applicable) to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

**Document your conclusion:**

Project will proceed with mitigation.

**Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Project will proceed without mitigation.

**Explain why mitigation will not be made here:**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project area is within the boundary of an existing wastewater treatment plant.

**Are formal compliance steps or mitigation required?**

- Yes  
 No

# **Floodplain Management Worksheet**

## **Floodplain Management (CEST and EA)**

<b>General Requirements</b>	<b>Legislation</b>	<b>Regulation</b>
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988 Executive Order 13690 42 USC <u>4001-4128</u> 42 USC 5154a	24 CFR 55

### **Reference**

<https://www.hudexchange.info/environmental-review/floodplain-management>

1. Does this project meet an exemption at [24 CFR 55.12](#) from compliance with HUD's floodplain management regulations in Part 55 or utilize the delayed compliance date for certain Office of Housing programs?

Yes

Select the applicable citation at [24 CFR 55.12](#) and provide supporting documentation for the determination if applicable.

- a)  HUD-assisted activities described in 24 CFR 58.34 and 58.35(b)
- b)  HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19
- c)  The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is placed on the property's continued use for flood control, wetland protection, open space, or park land, but only if:
- (1) The property is cleared of all existing buildings and walled structures; and
  - (2) The property is cleared of related improvements except those which:
    - (i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);
    - (ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and
    - (iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.
- d)  An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance, or other HUD assistance
- e)  Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions
- f)  A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland;

- g)  HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area) but only if:
  - (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and
  - (2) the proposed project will not result in any new construction in or modifications of a wetland
- h)  Issuance or use of Housing Vouchers or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (i.e., do not involve site-specific subsidies)
- i)  Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

*Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes. Office of Housing programs utilizing the January 1, 2025 compliance date. These reviews must comply with the 2013 version of the Part 55 regulations. Continue to Worksheet Summary for 2013 version to upload supporting documentation.

No. *Continue to Question 2.*

**2. Does the project include a Critical Action?**

The project area is a wastewater treatment plant that serves 166,544 people.

Yes. Describe the Critical Action. Examples of Critical Actions include projects involving hospitals, fire and police stations, nursing homes, hazardous chemical storage, storage of valuable records, and utility plants. Continue to Question 4.

No. Continue to Question 3.

**3. Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination.**

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information to determine flood elevation. Include documentation and an explanation of why this

is the best available information for the site. Note that newly constructed and substantially improved structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

**Select one of the following three options:**

CISA for non-critical actions. If using a local tool, data, or resources, ensure that the FFRMS elevation is higher than would have been determined using the 0.2 PFA or the FVA.

0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.

FVA. If neither CISA nor 0.2-PFA is available, for non-critical actions, the FFRMS floodplain is the area that results from adding two feet to the base flood elevation as established by the effective FIRM or FIS or—if available —a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.

**a. Does your project occur in the FFRMS floodplain?**

Yes, continue to part b.

No. Review for floodplain management is complete.

**b. Is your project located in any of the floodplain categories below? Select all that apply. If none apply, continue to question 7.**

Floodway: *Continue to Question 5. Floodways.*

Coastal High Hazard Area (V Zone) or Limit of Moderate Wave Action (LiMWA): *Continue to Question 6. Coastal High Hazard Areas and LiMWAs.*

**4. Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination.**

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), or the higher of the 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information to determine flood elevation. Note that newly constructed and substantially improved structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

**Utilize CISA to determine the FFRMS floodplain for critical actions**

CISA for Critical Actions. If using a local tool, ensure that the FFRMS elevation provided is higher than the 0.2 PFA or 3' above the base flood elevation.

**OR;**

**Choose the higher of 0.2 PFA or FVA elevations**

0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.

FVA. For critical actions, the FFRMS floodplain is the area that results from adding three feet to the base flood elevation as established by the effective FEMA FIRM or FIS or—if available—a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.

**a. Does your project occur in the FFRMS floodplain?**

Yes, continue to part b.

No. Review for floodplain management is complete.

**b. Is your project located in any of the floodplain categories below? Select all that apply. If none apply, continue to question 7.**

Floodway: *Continue to Question 5. Floodways.*

Coastal High Hazard Area (V Zone) or LiMWA: *Continue to Question 6. Coastal High Hazard Areas and LiMWAs.*

**5. Floodways**

**Do the floodway exemptions at [55.8](#) or [55.21](#) apply?**

Yes

The 8-Step Process is required. Document mitigation measures necessary to meet the requirements in 55.8 or 55.21. Provide a completed 8-Step Process, including the early public notice and the final notice.

*Continue to Question 7. 8-Step Process.*

No

**Federal assistance may not be used at this location.** You must either choose an alternate site or cancel the project at this location.

**6. Coastal High Hazard Area (V Zone) and LiMWAs**

**Do the exemptions at [55.8](#) or [55.21](#) apply?**

Yes

The 8-Step Process is required. Document mitigation measures necessary to meet the requirements in 55.8 or 55.21. Provide a completed 8-Step Process, including the early public notice and the final notice.

Continue to Question 7. 8-Step Process.

No

**Federal assistance may not be used at this location. You must either choose an alternate site or cancel the project at this location.**

**7. 8-Step Process.**

**Does the 8-Step Process apply? Select one of the following options:**

8-Step Process is inapplicable per 55.13.

Select the applicable citation:

- (a) HUD's mortgage insurance actions and other financial assistance for the purchasing, mortgaging, or refinancing of existing one- to four-family properties in communities that are in the Regular Program of the NFIP and in good standing ( i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24), where the action is not a critical action and the property is not located in a floodway, coastal high hazard area, or LIMWA;
- (b) Financial assistance for minor repairs or improvements on one- to four-family properties that do not meet the thresholds for "substantial improvement" under § 55.2(b)(12);
- (c) HUD or a recipient's actions involving the disposition of individual HUD or recipient held, one- to four-family properties;
- (d) HUD guarantees under the Loan Guarantee Recovery Fund Program (24 CFR part 573), where any new construction or rehabilitation financed by the existing loan or mortgage has been completed prior to the filing of an application under the program, and the refinancing will not allow further construction or rehabilitation, nor result in any physical impacts or changes except for routine maintenance;
- (e) The approval of financial assistance to lease units within an existing structure located within the floodplain, but only if;
  - (1) The structure is located outside the floodway or coastal high hazard area, and is in a community that is in the Regular Program of the NFIP and in good standing ( i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24); and
  - (2) The project is not a critical action; and
  - (3) The entire structure is or will be fully insured or insured to the maximum extent available under the NFIP for at least the term of the lease.
- (f) Special projects for the purpose of improving efficiency of utilities or installing renewable energy that involve the repair, rehabilitation, modernization, weatherization, or improvement of existing structures or infrastructure, do not meet the thresholds for "substantial improvement" under § 55.2(b)(12), and do not include the installation of equipment below the FFRMS floodplain elevation.

*Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

5-Step Process is applicable per 55.14.

Provide documentation of 5-Step Process.

Select the applicable citation:

- (a) HUD actions involving the disposition of HUD-acquired multifamily housing projects or “bulk sales” of HUD-acquired one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24).
- (b) HUD's actions under the National Housing Act (12 U.S.C. 1701) for the purchase or refinancing of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, and intermediate care facilities, in communities that are in good standing under the NFIP.
- (c) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, intermediate care facilities, and one- to four-family properties, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the number of units is not increased more than 20 percent, the action does not involve a conversion from nonresidential to residential land use, the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10), and the footprint of the structure and paved areas is not increased by more than 20 percent.
- (d) HUD's (or the recipient's) actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing nonresidential buildings and structures, in communities that are in the Regular Program of the NFIP and are in good standing, provided that the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10) and that the footprint of the structure and paved areas is not increased by more than 20 percent
- (e) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, or replacement of existing nonstructural improvements including streets, curbs and gutters, where any increase of the total impervious surface area of the facility is de minimis. This provision does not include critical actions, levee systems, chemical storage facilities (including any tanks), wastewater facilities, or sewer lagoons.

*Continue to Question 8. Mitigation.*

- 8-Step Process applies.

Provide a completed 8-Step Process, including the early public notice and the final notice.

*Continue to Question 8. Mitigation.*

**8. Mitigation**

**For the project to comply with this section, all adverse impacts must be mitigated. Explain in detail the measures that must be implemented to mitigate the impact or effect, including the**

**timeline for implementation. Note: newly constructed and substantially improved structures within the FFRMS floodplain must be elevated to the FFRMS floodplain elevation or floodproofed, if applicable.**

**Which of the following if any mitigation/minimization measures have been identified for this project in the 8-Step or 5-Step Process? Select all that apply.**

- Buyout and demolition or other supported clearance of floodplain structures
- Insurance purchased in excess of statutory requirement under the Flood Disaster Protection Act of 1973
- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology
- Planting or restoring native plant species
- Bioswales
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements or similar easements
- Floodproofing of structures as allowable (e.g. non-residential floors)
- Elevating structures (including freeboard above the required base flood elevations)
- Levee or structural protection from flooding
- Channelizing or redefining the floodway or floodplain through a Letter of Map Revision (LOMR)

*Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- FIRM panel numbers
- CISA data or maps
- Information on other data or tools used or accessed
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Based on the project including a critical action and using the base flood elevation plus three feet as the FFRMS, the FFRMS would be 12 feet. This was determined by reviewing FEMA Flood Insurance Rate Map, Map Number 48355C0530G. The project is not located in the FFRMS floodplain. Map Number 48355C0530G is included as Attachment C.

**Include all documentation supporting your findings in your submission to HUD**

**Are formal compliance steps or mitigation required?**

- Yes
- No

---

**Worksheet Summary for 2013 Version**  
**Compliance Determination**

Attach 'Floodplain Management Partner Worksheet' (OMB No. 2506-0177), FIRM map indicating project location, and summary of 8-step or 5-step decision making process if applicable.

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

**Include all documentation supporting your findings in your submission to HUD**

**Are formal compliance steps or mitigation required?**

- Yes  
 No

# **Historic Preservation Worksheet**

## Historic Preservation (CEST and EA)

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	<a href="#">36 CFR 800 "Protection of Historic Properties"</a>
References		
<a href="https://www.hudexchange.info/environmental-review/historic-preservation">https://www.hudexchange.info/environmental-review/historic-preservation</a>		

### Threshold

#### Is Section 106 review required for your project?

- No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the [PA Database](#) to find applicable PAs.)

**Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:**

The activities that will occur for the project are included in a list of activities not requiring review by SHPO in a Programmatic Agreement between the Texas Historical Commission and the Texas General Land Office. The PA is provided as Attachment I.

→ Continue to the Worksheet Summary.

- No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

**Either provide the memo itself or a link to it here. Explain and justify the other determination here:**

→ Continue to the Worksheet Summary.

Yes, because the project includes activities with potential to cause effects (direct or indirect). → *Continue to Step 1.*

**The Section 106 Process**

After determining the need to do a Section 106 review, initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Note that consultation continues through all phases of the review.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

**Step 1 - Initiate Consultation**

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD’s website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if you should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that consultants may not initiate consultation with Tribes.

**Select all consulting parties below (check all that apply):**

- State Historic Preservation Officer (SHPO)
- Advisory Council on Historic Preservation
- Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native
- Hawaiian Organizations (NHOs)

**List all tribes that were consulted here and their status of consultation:**

Other Consulting Parties

**List all consulting parties that were consulted here and their status of consultation:**

**Describe the process of selecting consulting parties and initiating consultation here:**

*Provide all correspondence, notices, and notes (including comments and objections received) and continue to Step 2.*

### **Step 2 - Identify and Evaluate Historic Properties**

**Define the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE.** Attach an additional page if necessary.

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register.

Refer to HUD's website for guidance on identifying and evaluating historic properties.

**In the space below, list historic properties identified and evaluated in the APE.**

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

**Was a survey of historic buildings and/or archeological sites done as part of the project?**

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

- Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

- No → *Continue to Step 3.*

**Step 3 - Assess Effects of the Project on Historic Properties**

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

**Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.**

- No Historic Properties Affected

**Document reason for finding:**

- No historic properties present. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*
- Historic properties present, but project will have no effect upon them. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.4\(d\)\(1\)](#)) and consult further to try to resolve objection(s).

No Adverse Effect

**Document reason for finding:**

**Does the No Adverse Effect finding contain conditions?**

Yes

**Check all that apply:** (check all that apply)

- Avoidance
- Modification of project
- Other

**Describe conditions here:**

*→ Monitor satisfactory implementation of conditions. Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

No → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.5\(c\)\(2\)](#)) and consult further to try to resolve objection(s).

Adverse Effect

**Document reason for finding:**

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)]

Notify the Advisory Council on Historic Preservation of the Adverse Effect and provide the documentation outlined in [36 CFR 800.11\(e\)](#). The Council has 15 days to decide whether to enter the consultation (Not required for projects covered by a Programmatic Agreement).

→ *Continue to Step 4.*

#### Step 4 - Resolve Adverse Effects

Work with consulting parties to try to avoid, minimize or mitigate adverse effects. Refer to HUD guidance and [36 CFR 800.6 and 800.7](#).

#### Were the Adverse Effects resolved?

Yes

**Describe the resolution of Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation:**

**For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Provide signed Memorandum of Agreement (MOA) or Standard Mitigation Measures Agreement (SMMA). Continue to the Worksheet Summary.*

No

The project must be cancelled unless the “Head of Agency” approves it. Either provide approval from the “Head of Agency” or cancel the project at this location.

**Describe the failure to resolve Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation and “Head of the Agency”:**

**Explain in detail the exact conditions or measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Provide correspondence, comments, documentation of decision, and “Head of Agency” approval. Continue to the Worksheet Summary.*

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The activities that will occur for the project are included in a list of activities not requiring review by SHPO in a Programmatic Agreement (PA) between the Texas Historical Commission and the Texas General Land Office. The PA is provided as Attachment I.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Noise Abatement and Control Worksheet**

## Noise (EA Level Reviews)

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972  General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B
References		
<a href="https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control">https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control</a>		

### 1. What activities does your project involve? Check all that apply:

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

→ *Continue to Question 2.*

- Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

→ *Continue to Question 2.*

- A research demonstration project which does not result in new construction or reconstruction, interstate, land sales registration, or any timely emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

- None of the above

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

**2. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**

**Indicate the findings of the Preliminary Screening below:**

There are no noise generators found within the threshold distances above.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.*

Noise generators were found within the threshold distances.

→ *Continue to Question 3.*

**3. Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:**

Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

**Indicate noise level here:**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.*

Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

**Indicate noise level here:**

If project is rehabilitation:

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.*

If project is new construction:

**Is the project in a largely undeveloped area<sup>1</sup>?**

No

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.*

---

<sup>1</sup> A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses or does not have water and sewer capacity to serve the project.

Yes

→ Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Elevate this review to an EIS-level review.

Unacceptable: (Above 75 decibels)

Indicate noise level here:

If project is rehabilitation:

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels.

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.

If project is new construction:

**Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). You may either complete an EIS or provide a waiver signed by the appropriate authority. Indicate your choice:**

Convert to an EIS

→ Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

Provide waiver

→ Provide an Environmental Impact Statement waiver from the Certifying Officer or the Assistant Secretary for Community Planning and Development per 24 CFR 51.104(b)(2) and noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

- 4. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.**

Mitigation as follows will be implemented:

→ Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures. Continue to the Worksheet Summary.

No mitigation is necessary.

**Explain why mitigation will not be made here:**

→ Continue to the Worksheet Summary.

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project does not involve new construction for residential use, rehabilitation of an existing residential property, or a research demonstration project and is therefore in compliance with the noise regulations of 24 CFR Part 51, Subpart B.

**Are formal compliance steps or mitigation required?**

Yes

No

## **Sole Source Aquifer Worksheet**

## Sole Source Aquifers (CEST and EA)

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149
Reference		
<a href="https://www.hudexchange.info/environmental-review/sole-source-aquifers">https://www.hudexchange.info/environmental-review/sole-source-aquifers</a>		

**1. Does your project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?**

Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

No → *Continue to Question 2.*

**2. Is the project located on a sole source aquifer (SSA)<sup>1</sup>?**

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area.*

Yes → *Continue to Question 3.*

**3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?**

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

Yes → *Provide the MOU or agreement as part of your supporting documentation. Continue to Question 4.*

No → *Continue to Question 5.*

**4. Does your MOU or working agreement exclude your project from further review?**

Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

---

<sup>1</sup> A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

No → *Continue to Question 5.*

**5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?**

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*

Yes → *Work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.*

**6. In order to continue with the project, any threat must be mitigated, and all mitigation must be approved by the EPA. Explain in detail the proposed measures that can be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project area is not located on a sole source aquifer. A map showing the nearest sole source aquifer and the project area is provided as Attachment L.

**Are formal compliance steps or mitigation required?**

Yes

No

# **Wetlands Protection Worksheet**

## Wetlands (CEST and EA)

General requirements	Legislation	Regulation
Executive Order 11990 discourages that direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.
<b>References</b>		
<a href="https://www.hudexchange.info/environmental-review/wetlands-protection">https://www.hudexchange.info/environmental-review/wetlands-protection</a>		

**1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?**

The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 2.*

**2. Will the new construction or other ground disturbance impact an on- or off-site wetland?**

The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands.

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.  
→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

→ You must determine that there are no practicable alternatives to wetlands development by completing the 8-Step Process.

Provide a completed 8-Step Process as well as all documents used to make your determination, including a map. Be sure to include the early public notice and the final notice with your documentation.

Continue to Question 3.

- 3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

**Which of the following mitigation actions have been or will be taken? Select all that apply:**

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology through infiltration
- Native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements
- Compensatory mitigation

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project will not impact a wetland in terms Executive Order 11990. A National Wetlands Inventory Map of the project area is included as Attachment M.

**Are formal compliance steps or mitigation required?**

Yes

No

## **Wild and Scenic Rivers Worksheet**

## Wild and Scenic Rivers (CEST and EA)

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297
References		
<a href="https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers">https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers</a>		

### 1. Is your project within proximity of a NWSRS river as defined below?

**Wild & Scenic Rivers:** These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational

**Study Rivers:** These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.

**Nationwide Rivers Inventory (NRI):** The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

→ Continue to Question 2.

### 2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Continue to Question 3.*

**3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project area is not within proximity of a NWSRS river. A map showing the nearest NWSRS river is included as Attachment N.

**Are formal compliance steps or mitigation required?**

Yes

No

**Attachment A –  
Accident Potential Zone Map**

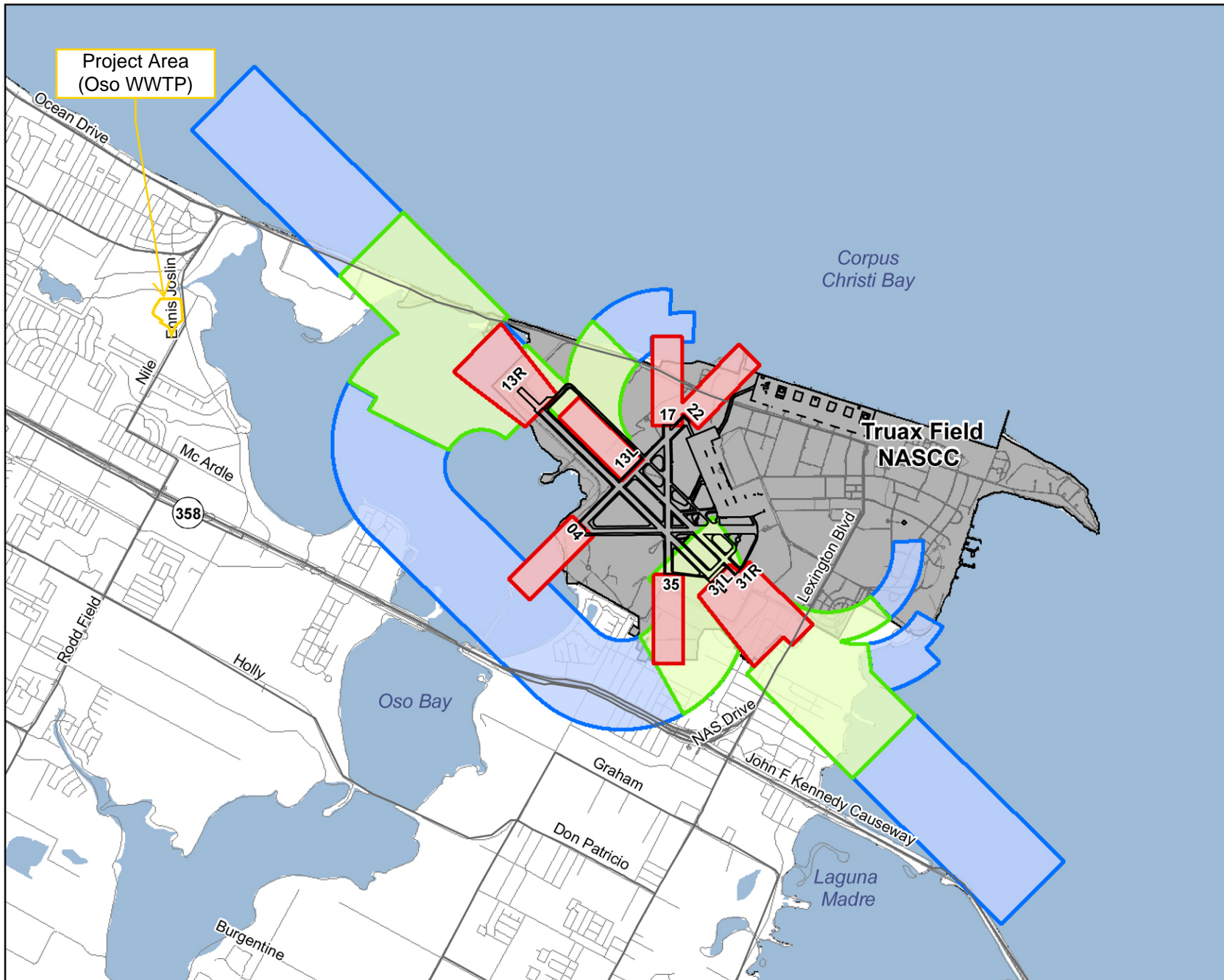
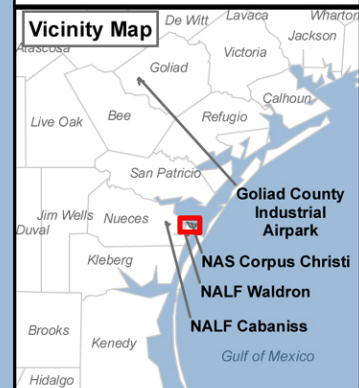
**NAS CORPUS CHRISTI  
2009 AICUZ STUDY**



Source:  
U.S. Department of the Navy, 2004;  
Wyle Laboratories, Inc., 2008;  
ESRI, 2008.

- Military Property
- Runways
- 2009 AICUZ APZs**
- Clear Zone
- APZ I
- APZ II




0 0.25 0.5 Miles



**Figure 5-2: 2009 AICUZ APZs  
Truax Field, NASCC**

**Attachment B –  
USFWS Coastal Barrier Resources System Map**

**CBRS Units**

-  CBRS Buffer Zone X-17P
-  Otherwise Protected Area
-  System Unit

**Project Area  
(Oso WWTP)**



Earthstar Geographics | Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NP...



Note: Property Boundaries Shown are Approximate.

Drawn By:	TLD	Scale:	As Shown
Project Number:	24L0174A_08	Date:	11/3/25

**Coastal Barrier Resources System Map**  
 Oso Wastewater Treatment Plant  
 501 Nile Drive, Corpus Christi, Nueces County, Texas

**Attachment C –  
FEMA Flood Insurance Rate Map**

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Texas State Plane, South Zone (FIPS 4205). The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NINGS12  
National Geodetic Survey, SSMC-3, #9202  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

To obtain current elevation description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at <http://www.ngs.noaa.gov/>.

**Base map** information shown on this FIRM was derived from multiple sources. This information was compiled from the National Geodetic Survey, 2004, U.S. Census Bureau, 2010, U.S. Geological Survey, 1989 and 2004, National Agriculture Imagery Program (NAIP), 2014, Texas Natural Resources Information System (TNRIS), 1995 and 2010.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **FEMA Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/national-flood-insurance-program>

**LIMIT OF MODERATE WAVE ACTION:** The AE Zone category has been divided by a **Limit of Moderate Wave Action (LIMWA)**. The LIMWA represents the approximate landward limit of the 1.5-foot breaking wave. Base flood conditions between the VE Zone and the LIMWA will be similar to, but less severe than those in the VE Zone.



**LEGEND**

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D Boundary
- Limit of Moderate Wave Action
- Boundary dividing Special Flood Hazard Areas and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet\*
- Base Flood Elevation value where uniform within zone; elevation in feet\*
- \*Referenced to the North American Vertical Datum of 1988
- Cross section line
- Transect line
- 97° 07' 30", 32° 22' 30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 6° 76' 00" E 1000-meter Universal Transverse Mercator grid values, zone 14
- 600000 FT 5000-foot grid ticks; Texas State Plane coordinate system, South zone (FIPSZONE 4205), Transverse Mercator
- DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

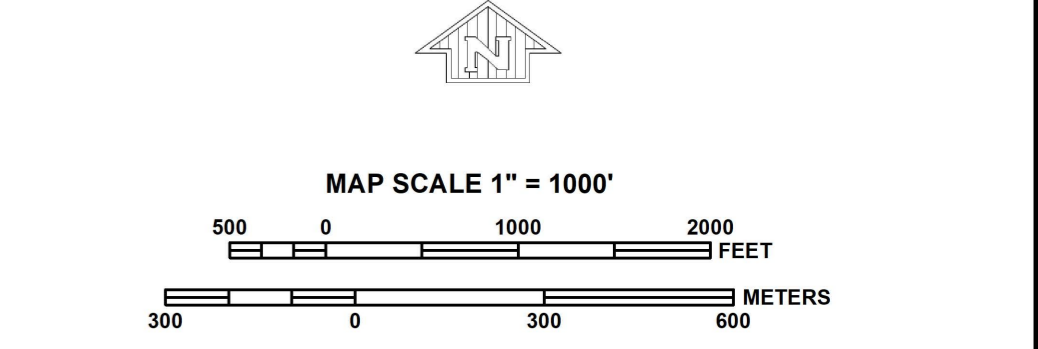
MAP REPOSITORIES  
Refer to Map Repositories list on Map Index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP PANEL  
October 13, 2022

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0530G**

**FIRM**  
FLOOD INSURANCE RATE MAP  
NUECES COUNTY,  
TEXAS  
AND INCORPORATED AREAS

**PANEL 530 OF 775**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORPUS CHRISTI, CITY OF	485464	0530	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
48355C0530G

**EFFECTIVE DATE**  
OCTOBER 13, 2022

Federal Emergency Management Agency

**Attachment D –  
Current List of Non-Attainment Areas**



**You are here:** EPA Home > Green Book > Current Nonattainment Counties for All Criteria Pollutants

# Current Nonattainment Counties for All Criteria Pollutants

Data is current as of October 31, 2025

The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

The asterisk (\*) indicates only a portion of the county is included in the designated nonattainment area (NA).

Download National Dataset of all designated areas (currently nonattainment, maintenance, revoked):  
dbf | xls | Data dictionary (PDF)

---

Listed by State, County, NAAQS \* Part County NA NA Area Name (Classification, if applicable)

---

## ALASKA

Fairbanks North Star Borough  
*PM-2.5 (2006)* \*Fairbanks, AK - (Serious)

## ARIZONA

Cochise County  
*PM-10 (1987)* \*Cochise County; Paul Spur/Douglas planning area, AZ - (Moderate)

Gila County  
*Lead (2008)* \*Hayden, AZ  
*PM-10 (1987)* \*Hayden, AZ - (Moderate)  
*PM-10 (1987)* \*Miami, AZ - (Moderate)  
*Sulfur Dioxide (2010)* \*Hayden, AZ  
*Sulfur Dioxide (2010)* \*Miami, AZ  
*8-Hour Ozone (2015)* \*Phoenix-Mesa, AZ - (Moderate)

Maricopa County  
*PM-10 (1987)* \*Maricopa and Pinal Counties; Phoenix planning area, AZ - (Serious)  
*8-Hour Ozone (2008)* \*Phoenix-Mesa, AZ - (Moderate)  
*8-Hour Ozone (2015)* \*Phoenix-Mesa, AZ - (Moderate)

Pima County  
*PM-10 (1987)* \*Pima County; Rillito planning area, AZ - (Moderate)

Pinal County  
*Lead (2008)* \*Hayden, AZ  
*PM-10 (1987)* \*Hayden, AZ - (Moderate)  
*PM-10 (1987)* \*Maricopa and Pinal Counties; Phoenix planning area, AZ - (Serious)  
*PM-10 (1987)* \*Miami, AZ - (Moderate)  
*PM-10 (1987)* \*Pinal County (part); West Pinal, AZ - (Serious)  
*PM-2.5 (2006)* \*West Central Pinal, AZ - (Moderate)  
*Sulfur Dioxide (1971)* \*Hayden (Pinal County), AZ  
*Sulfur Dioxide (2010)* \*Hayden, AZ  
*8-Hour Ozone (2008)* \*Phoenix-Mesa, AZ - (Moderate)  
*8-Hour Ozone (2015)* \*Phoenix-Mesa, AZ - (Moderate)

Santa Cruz County  
*PM-10 (1987)* \*Santa Cruz County; Nogales planning area, AZ - (Moderate)

Yuma County  
*PM-10 (1987)* \*Yuma, AZ - (Moderate)  
*8-Hour Ozone (2015)* \*Yuma, AZ - (Marginal)

## CALIFORNIA

Alameda County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
Amador County	
<i>8-Hour Ozone (2015)</i>	Amador County, CA - (Marginal)
Butte County	
<i>8-Hour Ozone (2008)</i>	Chico (Butte County), CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	Butte County, CA - (Marginal)
Calaveras County	
<i>8-Hour Ozone (2008)</i>	Calaveras County, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	Calaveras County, CA - (Marginal)
Contra Costa County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
El Dorado County	
<i>PM-2.5 (2006)</i>	*Sacramento, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	*Sacramento Metro, CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	*Sacramento Metro, CA - (Serious)
Fresno County	
<i>PM-2.5 (1997)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2006)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	San Joaquin Valley, CA - (Extreme)
Imperial County	
<i>PM-2.5 (2006)</i>	*Imperial County, CA - (Moderate)
<i>PM-2.5 (2012)</i>	*Imperial County, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	Imperial County, CA - (Moderate)
<i>8-Hour Ozone (2015)</i>	Imperial County, CA - (Marginal)
Inyo County	
<i>PM-10 (1987)</i>	*Inyo County; Owens Valley planning area, CA - (Serious)
Kern County	
<i>PM-10 (1987)</i>	*East Kern County, CA - (Serious)
<i>PM-2.5 (1997)</i>	*San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2006)</i>	*San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	*San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	*Kern County (Eastern Kern), CA - (Severe 15)
<i>8-Hour Ozone (2008)</i>	*San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	*Kern County (Eastern Kern), CA - (Serious)
<i>8-Hour Ozone (2015)</i>	*San Joaquin Valley, CA - (Extreme)
Kings County	
<i>PM-2.5 (1997)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2006)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	San Joaquin Valley, CA - (Extreme)
Los Angeles County	
<i>Lead (2008)</i>	*Los Angeles County-South Coast Air Basin, CA
<i>PM-2.5 (1997)</i>	*Los Angeles-South Coast Air Basin, CA - (Moderate)
<i>PM-2.5 (2006)</i>	*Los Angeles-South Coast Air Basin, CA - (Serious)
<i>PM-2.5 (2012)</i>	*Los Angeles-South Coast Air Basin, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	*Los Angeles-San Bernardino Counties (West Mojave Desert), CA - (Severe 15)
<i>8-Hour Ozone (2008)</i>	*Los Angeles-South Coast Air Basin, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	*Los Angeles-San Bernardino Counties (West Mojave Desert), CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	*Los Angeles-South Coast Air Basin, CA - (Extreme)
Madera County	
<i>PM-2.5 (1997)</i>	San Joaquin Valley, CA - (Serious)

<i>PM-2.5 (2006)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	San Joaquin Valley, CA - (Extreme)
Marin County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
Mariposa County	
<i>8-Hour Ozone (2008)</i>	Mariposa County, CA - (Moderate)
<i>8-Hour Ozone (2015)</i>	Mariposa County, CA - (Moderate)
Merced County	
<i>PM-2.5 (1997)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2006)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	San Joaquin Valley, CA - (Extreme)
Mono County	
<i>PM-10 (1987)</i>	*Mono Basin, CA - (Moderate)
Napa County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
Nevada County	
<i>8-Hour Ozone (2008)</i>	*Nevada County (Western part), CA - (Serious)
<i>8-Hour Ozone (2015)</i>	*Nevada County (Western part), CA - (Serious)
Orange County	
<i>PM-2.5 (1997)</i>	Los Angeles-South Coast Air Basin, CA - (Moderate)
<i>PM-2.5 (2006)</i>	Los Angeles-South Coast Air Basin, CA - (Serious)
<i>PM-2.5 (2012)</i>	Los Angeles-South Coast Air Basin, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	Los Angeles-South Coast Air Basin, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	Los Angeles-South Coast Air Basin, CA - (Extreme)
Placer County	
<i>PM-2.5 (2006)</i>	*Sacramento, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	*Sacramento Metro, CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	*Sacramento Metro, CA - (Serious)
Plumas County	
<i>PM-2.5 (2012)</i>	*Plumas County, CA - (Serious)
Riverside County	
<i>PM-10 (1987)</i>	*Riverside County; Coachella Valley planning area, CA - (Serious)
<i>PM-2.5 (1997)</i>	*Los Angeles-South Coast Air Basin, CA - (Moderate)
<i>PM-2.5 (2006)</i>	*Los Angeles-South Coast Air Basin, CA - (Serious)
<i>PM-2.5 (2012)</i>	*Los Angeles-South Coast Air Basin, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	*Los Angeles-South Coast Air Basin, CA - (Extreme)
<i>8-Hour Ozone (2008)</i>	*Morongo Band of Mission Indians, CA - (Severe 15)
<i>8-Hour Ozone (2008)</i>	*Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	*Riverside County (Coachella Valley), CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	*Los Angeles-South Coast Air Basin, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	*Morongo Band of Mission Indians, CA - (Serious)
<i>8-Hour Ozone (2015)</i>	*Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA - (Moderate)
<i>8-Hour Ozone (2015)</i>	*Riverside County (Coachella Valley), CA - (Severe 15)
Sacramento County	
<i>PM-2.5 (2006)</i>	Sacramento, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	Sacramento Metro, CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	Sacramento Metro, CA - (Serious)
San Bernardino County	
<i>PM-10 (1987)</i>	*San Bernardino County, CA - (Moderate)
<i>PM-10 (1987)</i>	*Trona, CA - (Moderate)
<i>PM-2.5 (1997)</i>	*Los Angeles-South Coast Air Basin, CA - (Moderate)

<i>PM-2.5 (2006)</i>	*Los Angeles-South Coast Air Basin, CA - (Serious)
<i>PM-2.5 (2012)</i>	*Los Angeles-South Coast Air Basin, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	*Los Angeles-San Bernardino Counties (West Mojave Desert), CA - (Severe 15)
<i>8-Hour Ozone (2008)</i>	*Los Angeles-South Coast Air Basin, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	*Los Angeles-San Bernardino Counties (West Mojave Desert), CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	*Los Angeles-South Coast Air Basin, CA - (Extreme)
San Diego County	
<i>8-Hour Ozone (2008)</i>	*Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	*San Diego County, CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	*Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA - (Moderate)
<i>8-Hour Ozone (2015)</i>	*San Diego County, CA - (Severe 15)
San Francisco County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
San Joaquin County	
<i>PM-2.5 (1997)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2006)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	San Joaquin Valley, CA - (Extreme)
San Luis Obispo County	
<i>8-Hour Ozone (2008)</i>	*San Luis Obispo (Eastern San Luis Obispo), CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	*San Luis Obispo (Eastern part), CA - (Marginal)
San Mateo County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
Santa Clara County	
<i>PM-2.5 (2006)</i>	San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	San Francisco Bay Area, CA - (Marginal)
Solano County	
<i>PM-2.5 (2006)</i>	*Sacramento, CA - (Moderate)
<i>PM-2.5 (2006)</i>	*San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	*Sacramento Metro, CA - (Severe 15)
<i>8-Hour Ozone (2008)</i>	*San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	*Sacramento Metro, CA - (Serious)
<i>8-Hour Ozone (2015)</i>	*San Francisco Bay Area, CA - (Marginal)
Sonoma County	
<i>PM-2.5 (2006)</i>	*San Francisco Bay Area, CA - (Moderate)
<i>8-Hour Ozone (2008)</i>	*San Francisco Bay Area, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	*San Francisco Bay Area, CA - (Marginal)
Stanislaus County	
<i>PM-2.5 (1997)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2006)</i>	San Joaquin Valley, CA - (Serious)
<i>PM-2.5 (2012)</i>	San Joaquin Valley, CA - (Serious)
<i>8-Hour Ozone (2008)</i>	San Joaquin Valley, CA - (Extreme)
<i>8-Hour Ozone (2015)</i>	San Joaquin Valley, CA - (Extreme)
Sutter County	
<i>8-Hour Ozone (2008)</i>	*Sacramento Metro, CA - (Severe 15)
<i>8-Hour Ozone (2015)</i>	*Sacramento Metro, CA - (Serious)
<i>8-Hour Ozone (2015)</i>	*Sutter Buttes, CA - (Marginal)
Tehama County	
<i>8-Hour Ozone (2008)</i>	*Tuscan Buttes, CA - (Marginal)
<i>8-Hour Ozone (2015)</i>	*Tuscan Buttes, CA - (Marginal (Rural Transport))
Tulare County	

*PM-2.5 (1997)* San Joaquin Valley, CA - (Serious)  
*PM-2.5 (2006)* San Joaquin Valley, CA - (Serious)  
*PM-2.5 (2012)* San Joaquin Valley, CA - (Serious)  
*8-Hour Ozone (2008)* San Joaquin Valley, CA - (Extreme)  
*8-Hour Ozone (2015)* San Joaquin Valley, CA - (Extreme)

#### Tuolumne County

*8-Hour Ozone (2015)* Tuolumne County, CA - (Marginal)

#### Ventura County

*8-Hour Ozone (2008)* \*Ventura County, CA - (Serious)

*8-Hour Ozone (2015)* \*Ventura County, CA - (Serious)

#### Yolo County

*PM-2.5 (2006)* \*Sacramento, CA - (Moderate)

*8-Hour Ozone (2008)* Sacramento Metro, CA - (Severe 15)

*8-Hour Ozone (2015)* Sacramento Metro, CA - (Serious)

## COLORADO

#### Adams County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Arapahoe County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Boulder County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Broomfield County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Denver County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Douglas County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Jefferson County

*8-Hour Ozone (2008)* Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

#### Larimer County

*8-Hour Ozone (2008)* \*Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* \*Denver Metro/North Front Range, CO - (Serious)

#### Weld County

*8-Hour Ozone (2008)* \*Denver-Boulder-Greeley-Ft. Collins-Loveland, CO - (Severe 15)

*8-Hour Ozone (2015)* Denver Metro/North Front Range, CO - (Serious)

## CONNECTICUT

#### Fairfield County

*8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)

*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)

#### Hartford County

*8-Hour Ozone (2008)* Greater Connecticut, CT - (Serious)

*8-Hour Ozone (2015)* Greater Connecticut, CT - (Serious)

#### Litchfield County

*8-Hour Ozone (2008)* Greater Connecticut, CT - (Serious)

*8-Hour Ozone (2015)* Greater Connecticut, CT - (Serious)

#### Middlesex County

*8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)

*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)

#### New Haven County

*8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)

*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)

#### New London County

*8-Hour Ozone (2008)* Greater Connecticut, CT - (Serious)

*8-Hour Ozone (2015)* Greater Connecticut, CT - (Serious)

**Tolland County***8-Hour Ozone (2008)* Greater Connecticut, CT - (Serious)*8-Hour Ozone (2015)* Greater Connecticut, CT - (Serious)**Windham County***8-Hour Ozone (2008)* Greater Connecticut, CT - (Serious)*8-Hour Ozone (2015)* Greater Connecticut, CT - (Serious)**DELAWARE****New Castle County***8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)**Sussex County***8-Hour Ozone (2008)* Seaford, DE - (Marginal)**DISTRICT OF COLUMBIA****District of Columbia***8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)**GUAM****Guam***Sulfur Dioxide (1971)*\*Piti, GU*Sulfur Dioxide (1971)*\*Tanguisson, GU*Sulfur Dioxide (2010)*\*Piti-Cabras, GU**IDAHO****Bannock County***PM-10 (1987)* \*Power-Bannock Counties; Fort Hall Indian Reservation, ID - (Moderate)**Power County***PM-10 (1987)* \*Power-Bannock Counties; Fort Hall Indian Reservation, ID - (Moderate)**ILLINOIS****Cook County***8-Hour Ozone (2015)* Chicago, IL-IN-WI - (Serious)**DuPage County***8-Hour Ozone (2015)* Chicago, IL-IN-WI - (Serious)**Grundy County***8-Hour Ozone (2015)* \*Chicago, IL-IN-WI - (Serious)**Kane County***8-Hour Ozone (2015)* Chicago, IL-IN-WI - (Serious)**Kendall County***8-Hour Ozone (2015)* \*Chicago, IL-IN-WI - (Serious)**Lake County***8-Hour Ozone (2015)* Chicago, IL-IN-WI - (Serious)**Madison County***8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)**McHenry County***8-Hour Ozone (2015)* Chicago, IL-IN-WI - (Serious)**Monroe County***8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)**St. Clair County***8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)**Will County***8-Hour Ozone (2015)* Chicago, IL-IN-WI - (Serious)**INDIANA****Huntington County***Sulfur Dioxide (2010)*\*Huntington, IN**Lake County***8-Hour Ozone (2015)* \*Chicago, IL-IN-WI - (Serious)**Porter County***8-Hour Ozone (2015)* \*Chicago, IL-IN-WI - (Serious)**IOWA****Muscatine County***Sulfur Dioxide (2010)*\*Muscatine, IA**KANSAS****Saline County***Lead (2008)* \*Saline County, KS

**KENTUCKY**

- Bullitt County
  - 8-Hour Ozone (2015)* Louisville, KY-IN - (Moderate)
- Henderson County
  - Sulfur Dioxide (2010)\**Henderson-Webster Counties, KY
- Jefferson County
  - 8-Hour Ozone (2015)* Louisville, KY-IN - (Moderate)
- Oldham County
  - 8-Hour Ozone (2015)* Louisville, KY-IN - (Moderate)
- Webster County
  - Sulfur Dioxide (2010)\**Henderson-Webster Counties, KY

**LOUISIANA**

- Evangeline Parish
  - Sulfur Dioxide (2010)\**Evangeline Parish (Partial), LA
- St. Bernard Parish
  - Sulfur Dioxide (2010)* St. Bernard Parish, LA

**MARYLAND**

- Anne Arundel County
  - Sulfur Dioxide (2010)\**Anne Arundel County and Baltimore County, MD
  - 8-Hour Ozone (2008)* Baltimore, MD - (Moderate)
  - 8-Hour Ozone (2015)* Baltimore, MD - (Serious)
- Baltimore County
  - Sulfur Dioxide (2010)\**Anne Arundel County and Baltimore County, MD
  - 8-Hour Ozone (2008)* Baltimore, MD - (Moderate)
  - 8-Hour Ozone (2015)* Baltimore, MD - (Serious)
- Baltimore city
  - 8-Hour Ozone (2008)* Baltimore, MD - (Moderate)
  - 8-Hour Ozone (2015)* Baltimore, MD - (Serious)
- Calvert County
  - 8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)
- Carroll County
  - 8-Hour Ozone (2008)* Baltimore, MD - (Moderate)
  - 8-Hour Ozone (2015)* Baltimore, MD - (Serious)
- Cecil County
  - 8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
  - 8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)
- Charles County
  - 8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)
- Frederick County
  - 8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)
- Harford County
  - 8-Hour Ozone (2008)* Baltimore, MD - (Moderate)
  - 8-Hour Ozone (2015)* Baltimore, MD - (Serious)
- Howard County
  - 8-Hour Ozone (2008)* Baltimore, MD - (Moderate)
  - 8-Hour Ozone (2015)* Baltimore, MD - (Serious)
- Montgomery County
  - 8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)
- Prince George's County
  - 8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

**MASSACHUSETTS**

- Dukes County
  - 8-Hour Ozone (2008)* Dukes County, MA - (Marginal)

**MICHIGAN**

- Allegan County
  - 8-Hour Ozone (2015)\**Allegan County, MI - (Serious)
- Berrien County
  - 8-Hour Ozone (2015)* Berrien County, MI - (Serious)
- Muskegon County
  - 8-Hour Ozone (2015)\**Muskegon County, MI - (Serious)
- St. Clair County

*Sulfur Dioxide (2010)*\*St. Clair, MI

Wayne County

*Sulfur Dioxide (2010)*\*Detroit, MI

## MINNESOTA

Dakota County

*Lead (2008)* \*Eagan, MN

## MISSOURI

Dent County

*Lead (2008)* \*Iron, Dent, and Reynolds Counties, MO

Franklin County

*8-Hour Ozone (2015)* \*St. Louis, MO-IL - (Serious)

Iron County

*Lead (2008)* \*Iron, Dent, and Reynolds Counties, MO

Jefferson County

*Lead (1978)* \*Jefferson County (part); Herculaneum, MO

*Lead (2008)* \*Jefferson County, MO

*8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)

New Madrid County

*Sulfur Dioxide (2010)*\*New Madrid County, MO

Reynolds County

*Lead (2008)* \*Iron, Dent, and Reynolds Counties, MO

St. Charles County

*8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)

St. Louis County

*8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)

St. Louis city

*8-Hour Ozone (2015)* St. Louis, MO-IL - (Serious)

## MONTANA

Lake County

*PM-10 (1987)* \*Lake County; Polson, MT - (Moderate)

*PM-10 (1987)* \*Lake County; Ronan, MT - (Moderate)

Rosebud County

*PM-10 (1987)* \*Rosebud County; Lame Deer, MT - (Moderate)

Yellowstone County

*Sulfur Dioxide (1971)*\*Laurel Area (Yellowstone County), MT

## NEVADA

Clark County

*8-Hour Ozone (2015)* \*Las Vegas, NV - (Serious)

## NEW JERSEY

Atlantic County

*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)

*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)

Bergen County

*8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)

*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)

Burlington County

*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)

*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)

Camden County

*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)

*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)

Cape May County

*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)

*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)

Cumberland County

*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)

*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)

Essex County

*8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)

*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)

Gloucester County

	<i>8-Hour Ozone (2008)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
	<i>8-Hour Ozone (2015)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)
Hudson County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Hunterdon County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Mercer County		
	<i>8-Hour Ozone (2008)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
	<i>8-Hour Ozone (2015)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)
Middlesex County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Monmouth County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Morris County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Ocean County		
	<i>8-Hour Ozone (2008)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
	<i>8-Hour Ozone (2015)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)
Passaic County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Salem County		
	<i>8-Hour Ozone (2008)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)
	<i>8-Hour Ozone (2015)</i>	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)
Somerset County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Sussex County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Union County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Warren County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
<b>NEW MEXICO</b>		
Dona Ana County		
	<i>PM-10 (1987)</i>	*Dona Ana County; Anthony, NM - (Moderate)
	<i>8-Hour Ozone (2015)</i>	*El Paso-Las Cruces, TX-NM - (Marginal)
<b>NEW YORK</b>		
Bronx County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Chautauqua County		
	<i>8-Hour Ozone (2008)</i>	Jamestown, NY - (Marginal)
Kings County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
Nassau County		
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)
New York County		
	<i>PM-10 (1987)</i>	New York County, NY - (Moderate)
	<i>8-Hour Ozone (2008)</i>	New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)

**Queens County***8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)**Richmond County***8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)**Rockland County***8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)**St. Lawrence County***Sulfur Dioxide (2010)*\*St. Lawrence County, NY**Suffolk County***8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)**Westchester County***8-Hour Ozone (2008)* New York-N. New Jersey-Long Island, NY-NJ-CT - (Severe 15)*8-Hour Ozone (2015)* New York-Northern New Jersey-Long Island, NY-NJ-CT - (Serious)**OHIO****Cuyahoga County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Geauga County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Lake County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Lorain County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Medina County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Morgan County***Sulfur Dioxide (2010)*\*Muskingum River, OH**Portage County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Stark County***Lead (2008)* \*Canton-Stark County, OH**Summit County***8-Hour Ozone (2015)* Cleveland, OH - (Serious)**Washington County***Sulfur Dioxide (2010)*\*Muskingum River, OH**OREGON****Klamath County***PM-2.5 (2006)* \*Klamath Falls, OR - (Moderate)**PENNSYLVANIA****Allegheny County***PM-2.5 (2012)* Allegheny County, PA - (Moderate)*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)**Armstrong County***Sulfur Dioxide (1971)*\*Armstrong County: Madison, Mahoning, Boggs, Washington, Pine, PA*Sulfur Dioxide (2010)*\*Indiana, PA*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)**Beaver County***Lead (2008)* \*Lower Beaver Valley, PA*Sulfur Dioxide (2010)*\*Beaver, PA*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)**Berks County***Lead (2008)* \*Lyons, PA*Lead (2008)* \*North Reading, PA*8-Hour Ozone (2008)* Reading, PA - (Marginal)**Bucks County***8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)**Butler County**

*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)  
 Cambria County  
*Sulfur Dioxide (2010)\** Cambria-Westmoreland Area, PA  
 Carbon County  
*8-Hour Ozone (2008)* Allentown-Bethlehem-Easton, PA - (Marginal)  
 Chester County  
*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)  
*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)  
 Delaware County  
*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)  
*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)  
 Fayette County  
*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)  
 Indiana County  
*Sulfur Dioxide (2010)* Indiana, PA  
 Lancaster County  
*8-Hour Ozone (2008)* Lancaster, PA - (Marginal)  
 Lehigh County  
*8-Hour Ozone (2008)* Allentown-Bethlehem-Easton, PA - (Marginal)  
 Montgomery County  
*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)  
*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)  
 Northampton County  
*8-Hour Ozone (2008)* Allentown-Bethlehem-Easton, PA - (Marginal)  
 Philadelphia County  
*8-Hour Ozone (2008)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Marginal)  
*8-Hour Ozone (2015)* Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE - (Serious)  
 Warren County  
*Sulfur Dioxide (2010)\** Warren, PA  
 Washington County  
*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)  
 Westmoreland County  
*Sulfur Dioxide (2010)\** Cambria-Westmoreland Area, PA  
*8-Hour Ozone (2008)* Pittsburgh-Beaver Valley, PA - (Marginal)

**PUERTO RICO**

Arecibo Municipio  
*Lead (2008)* \*Arecibo, PR  
 Bayamon Municipio  
*Sulfur Dioxide (2010)\** San Juan, PR  
 Catano Municipio  
*Sulfur Dioxide (2010)* San Juan, PR  
 Guaynabo Municipio  
*Sulfur Dioxide (2010)\** San Juan, PR  
 Salinas Municipio  
*Sulfur Dioxide (2010)\** Guayama-Salinas, PR  
 San Juan Municipio  
*Sulfur Dioxide (2010)\** San Juan, PR  
 Toa Baja Municipio  
*Sulfur Dioxide (2010)\** San Juan, PR

**TENNESSEE**

Sullivan County  
*Sulfur Dioxide (2010)\** Sullivan County, TN

**TEXAS**

Anderson County  
*Sulfur Dioxide (2010)\** Freestone and Anderson Counties, TX  
 Bexar County  
*8-Hour Ozone (2015)* San Antonio, TX - (Serious)  
 Brazoria County  
*8-Hour Ozone (2008)* Houston-Galveston-Brazoria, TX - (Severe 15)  
*8-Hour Ozone (2015)* Houston-Galveston-Brazoria, TX - (Serious)  
 Chambers County

	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Houston-Galveston-Brazoria, TX - (Serious)
Collin County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Dallas County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Denton County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
El Paso County		
	<i>PM-10 (1987)</i>	*El Paso County, TX - (Moderate)
	<i>8-Hour Ozone (2015)</i>	El Paso-Las Cruces, TX-NM - (Marginal)
Ellis County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Fort Bend County		
	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Houston-Galveston-Brazoria, TX - (Serious)
Freestone County		
	<i>Sulfur Dioxide (2010)</i>	*Freestone and Anderson Counties, TX
Galveston County		
	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Houston-Galveston-Brazoria, TX - (Serious)
Harris County		
	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Houston-Galveston-Brazoria, TX - (Serious)
Howard County		
	<i>Sulfur Dioxide (2010)</i>	*Howard County, TX
Hutchinson County		
	<i>Sulfur Dioxide (2010)</i>	*Hutchinson County, TX
Johnson County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Kaufman County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Liberty County		
	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)
Montgomery County		
	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Houston-Galveston-Brazoria, TX - (Serious)
Navarro County		
	<i>Sulfur Dioxide (2010)</i>	*Navarro County, TX
Panola County		
	<i>Sulfur Dioxide (2010)</i>	*Rusk and Panola Counties, TX
Parker County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Rockwall County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
Rusk County		
	<i>Sulfur Dioxide (2010)</i>	*Rusk and Panola Counties, TX
Tarrant County		
	<i>8-Hour Ozone (2008)</i>	Dallas-Fort Worth, TX - (Severe 15)
	<i>8-Hour Ozone (2015)</i>	Dallas-Fort Worth, TX - (Serious)
Titus County		
	<i>Sulfur Dioxide (2010)</i>	*Titus County, TX
Waller County		
	<i>8-Hour Ozone (2008)</i>	Houston-Galveston-Brazoria, TX - (Severe 15)

## Wise County

*8-Hour Ozone (2008)* Dallas-Fort Worth, TX - (Severe 15)

*8-Hour Ozone (2015)* Dallas-Fort Worth, TX - (Serious)

**UTAH**

## Box Elder County

*PM-2.5 (2006)* \*Salt Lake City, UT - (Serious)

## Davis County

*PM-2.5 (2006)* Salt Lake City, UT - (Serious)

*8-Hour Ozone (2015)* Northern Wasatch Front, UT - (Serious)

## Duchesne County

*8-Hour Ozone (2015)* \*Uinta Basin, UT - (Moderate)

## Salt Lake County

*PM-2.5 (2006)* Salt Lake City, UT - (Serious)

*Sulfur Dioxide (1971)* Salt Lake County, UT

*8-Hour Ozone (2015)* Northern Wasatch Front, UT - (Serious)

## Tooele County

*PM-2.5 (2006)* \*Salt Lake City, UT - (Serious)

*Sulfur Dioxide (1971)* \*Tooele County, UT

*8-Hour Ozone (2015)* \*Northern Wasatch Front, UT - (Serious)

## Uintah County

*8-Hour Ozone (2015)* \*Uinta Basin, UT - (Moderate)

## Utah County

*PM-2.5 (2006)* \*Provo, UT - (Serious)

*8-Hour Ozone (2015)* \*Southern Wasatch Front, UT - (Marginal)

## Weber County

*PM-2.5 (2006)* \*Salt Lake City, UT - (Serious)

*8-Hour Ozone (2015)* \*Northern Wasatch Front, UT - (Serious)

**VIRGINIA**

## Alexandria city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Arlington County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Fairfax County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Fairfax city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Falls Church city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Giles County

*Sulfur Dioxide (2010)* \*Giles County, VA

## Loudoun County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Manassas Park city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Manassas city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

## Prince William County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Moderate)

**WISCONSIN**

## Kenosha County

*8-Hour Ozone (2015)* \*Chicago, IL-IN-WI - (Serious)

## Milwaukee County

*8-Hour Ozone (2015)* Milwaukee, WI - (Serious)

## Ozaukee County

*8-Hour Ozone (2015)* Milwaukee, WI - (Serious)

## Racine County

*8-Hour Ozone (2015)* \*Milwaukee, WI - (Serious)

## Sheboygan County

*8-Hour Ozone (2015)* \*Sheboygan County, WI - (Serious)

## Washington County

*8-Hour Ozone (2015)* \*Milwaukee, WI - (Serious)

Waukesha County

*8-Hour Ozone (2015)* \*Milwaukee, WI - (Serious)

**WYOMING**

Lincoln County

*8-Hour Ozone (2008)* \*Upper Green River Basin Area, WY - (Marginal)

Sublette County

*8-Hour Ozone (2008)* Upper Green River Basin Area, WY - (Marginal)

Sweetwater County

*8-Hour Ozone (2008)* \*Upper Green River Basin Area, WY - (Marginal)

**Discover.**

**Connect.**

**Ask.**

**Follow.**

**2025-10-31**

**Attachment E –**

**Consistency with Texas Coastal Zone Management  
Program Form and Correspondence with GLO**



CITY OF CORPUS CHRISTI  
OFFICE OF THE MAYOR  
PAULETTE M. GUAJARDO

December 15, 2025

General Land Office  
Coastal Management Program  
P.O. Box 12873  
Austin, TX 78711-2873  
[federal.consistency@glo.texas.gov](mailto:federal.consistency@glo.texas.gov)

**Re: Consistency Review Requested for Federally Funded Project  
HUD Assisted Project – Grant Number 24-065-091-E767  
Oso WWTP Backup Generators**

Dear Reviewer,

The City of Corpus Christi is pursuing federal funding through the U.S. Department of Housing and Urban Development CDBG-MIT program for installation of backup generators at the existing Oso Wastewater Treatment Plant located at 501 Nile Drive, Corpus Christi, Texas. The purpose of this coordination is to determine consistency of the project with the Texas Coastal Management Program. A Consistency with the Texas Coastal Management Program form and a location map are included as attachments to this letter.

The project involves installation of emergency generators at the Oso Wastewater Treatment Plant. The major improvements include installation of emergency generators, instrumentation and electrical control system for automatic switch between grid power and emergency generators, and miscellaneous improvements related to the emergency generators. The improvements are not anticipated to affect coastal resources.

Please provide any comments you may have regarding the project in regard to your agency's jurisdictional requirements for allowing the project to proceed.

If you have any questions, comments, or need additional information, please contact me at (361) 826-3100 or by e-mail at [paulette.guajardo@corpuschristitx.gov](mailto:paulette.guajardo@corpuschristitx.gov).

Sincerely,

Paulette Guajardo  
Mayor, City of Corpus Christi

Enclosures: Consistency with the Texas Coastal Management Program Form Location Map

# CONSISTENCY WITH THE TEXAS COASTAL MANAGEMENT PROGRAM

THE APPLICANT SHOULD SIGN THIS STATEMENT AND RETURN WITH APPLICATION PACKET TO:

TEXAS GENERAL LAND OFFICE  
COASTAL RESOURCES-FEDERAL CONSISTENCY  
1700 NORTH CONGRESS AVENUE, ROOM 330  
AUSTIN, TEXAS 78701-1495  
federal.consistency@glo.texas.gov

## FOR USACE USE ONLY:

PERMIT #: \_\_\_\_\_

PROJECT MGR: \_\_\_\_\_

## APPLICANT'S NAME AND ADDRESS (PLEASE PRINT):

Title  First  Last  Suffix

Mailing Address  Home

City  State  Zip Code  Work  Mobile

Country  Email  Fax

The Texas Coastal Management Program (CMP) coordinates state, local, and federal programs for the management of Texas coastal resources. Activities within the CMP boundary must comply with the enforceable policies of the Texas Coastal Management Program and be conducted in a manner consistent with those policies. The boundary definition is contained in the CMP rules (31 TAC §27.1).

- To determine whether your proposed activity lies within the CMP boundary, please contact GLO Federal Consistency Staff at [federal.consistency@glo.texas.gov](mailto:federal.consistency@glo.texas.gov)

## PROJECT DESCRIPTION:

Is the proposed activity at a waterfront site or within coastal, tidal, or navigable waters?  Yes  No

If Yes, name affected coastal, tidal, or navigable waters: N/A

Is the proposed activity water dependent?  Yes  No (31 TAC §26.3(a)(14))  
<https://tinyurl.com/TXCMPdefinitions>

Please briefly describe the project and all possible effects on coastal resources:

The project involves installation of emergency generators at the Oso Wastewater Treatment Plant. The major improvements include installation of emergency generators, instrumentation and electrical control system for automatic switch between grid power and emergency generators, and miscellaneous improvements related to the emergency generators. The improvements are not anticipated to effect coastal resources.

Indicate area of impact: 1  acres or  square feet

## ADDITIONAL PERMITS/ AUTHORIZATIONS REQUIRED:

Coastal Easement - Date application submitted: \_\_\_\_\_

Coastal Lease - Date application submitted: \_\_\_\_\_

Stormwater Permit- Date application submitted: \_\_\_\_\_

Water Quality Certification - Date application submitted: \_\_\_\_\_

Other state/federal/local permits/authorizations required:

The Oso WWTP is an existing WWTP and has a Texas Pollutant Discharge Elimination System (TPDES) discharge permit (WQ0010401004), a stormwater discharge permit (TXR05X003), and a wastewater authorization (R10401004).

The proposed activity must not adversely affect coastal natural resource areas (CNRAs).

**PLEASE CHECK ALL COASTAL NATURAL RESOURCE AREAS THAT MAY BE AFFECTED:**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Coastal Barriers       | <input type="checkbox"/> Critical Erosion Areas | <input type="checkbox"/> Submerged Lands              |
| <input type="checkbox"/> Coastal Historic Areas | <input type="checkbox"/> Gulf Beaches           | <input type="checkbox"/> Submerged Aquatic Vegetation |
| <input type="checkbox"/> Coastal Preserves      | <input type="checkbox"/> Hard Substrate Reefs   | <input type="checkbox"/> Tidal Sand or Mud Flats      |
| <input type="checkbox"/> Coastal Shore Areas    | <input type="checkbox"/> Oyster Reefs           | <input type="checkbox"/> Waters of Gulf of Mexico     |
| <input type="checkbox"/> Coastal Wetlands       | <input type="checkbox"/> Special Hazard Areas   | <input type="checkbox"/> Waters Under Tidal Influence |
| <input type="checkbox"/> Critical Dune Areas    |   |   |

*The applicant affirms that the proposed activity, its associated facilities, and their probable effects comply with the relevant enforceable policies of the CMP, and that the proposed activity will be conducted in a manner consistent with such policies.*

**PLEASE CHECK ALL APPLICABLE ENFORCEABLE POLICIES:**

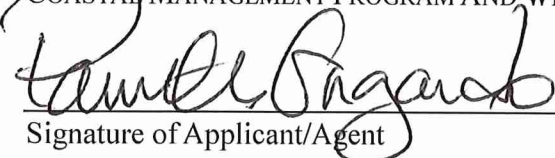
<https://tinyurl.com/TXCMPpolicies>

<input type="checkbox"/>	§26.15 Policy for Major Actions
<input type="checkbox"/>	§26.16 Policies for Construction of Electric Generating and Transmission Facilities
<input type="checkbox"/>	§26.17 Policies for Construction, Operation, and Maintenance of Oil and Gas Exploration and Production Facilities
<input type="checkbox"/>	§26.18 Policies for Discharges of Wastewater and Disposal of Waste from Oil and Gas Exploration and Production Activities
<input type="checkbox"/>	§26.19 Policies for Construction and Operation of Solid Waste Treatment, Storage, and Disposal Facilities
<input type="checkbox"/>	§26.20 Policies for Prevention, Response and Remediation of Oil Spills
<input checked="" type="checkbox"/>	§26.21 Policies for Discharge of Municipal and Industrial Wastewater to Coastal Waters
<input type="checkbox"/>	§26.22 Policies for Nonpoint Source (NPS) Water Pollution
<input type="checkbox"/>	§26.23 Policies for Development in Critical Areas
<input type="checkbox"/>	§26.24 Policies for Construction of Waterfront Facilities and Other Structures on Submerged Lands
<input type="checkbox"/>	§26.25 Policies for Dredging and Dredged Material Disposal and Placement
<input type="checkbox"/>	§26.26 Policies for Construction in the Beach/Dune System
<input type="checkbox"/>	§26.27 Policies for Development in Coastal Hazard Areas
<input type="checkbox"/>	§26.28 Policies for Development Within Coastal Barrier Resource System Units and Otherwise Protected Areas on Coastal Barriers
<input type="checkbox"/>	§26.29 Policies for Development in State Parks, Wildlife Management Areas or Preserves
<input type="checkbox"/>	§26.30 Policies for Alteration of Coastal Historic Areas
<input type="checkbox"/>	§26.31 Policies for Transportation Projects
<input type="checkbox"/>	§26.32 Policies for Emission of Air Pollutants
<input type="checkbox"/>	§26.33 Policies for Appropriations of Water
<input type="checkbox"/>	§26.34 Policies for Levee and Flood Control Projects

Please explain how the proposed project is consistent with the applicable enforceable policies identified above. Please use additional sheets if necessary. *For example: If you are constructing a pier with a covered boathouse, then the applicable enforceable policy is: §26.24 Policies for Construction of Waterfront Facilities and Other Structures on Submerged Lands. The project is consistent because it will not interfere with navigation, natural coastal processes, and avoids/minimizes shading.*

The Oso WWTP is an existing WWTP authorized to discharge municipal wastewater to Blind Oso Bay under TPDES Permit Number WQ0010401004. The permit includes effluent limitations that the facility must comply with. The project involves installation of emergency generators at the WWTP. The project will not include any new outfalls, will not cause an increase in permitted flow, and will not result in an increase in pollutant loads to coastal waters.

BY SIGNING THIS STATEMENT, THE APPLICANT IS STATING THAT THE PROPOSED ACTIVITY COMPLIES WITH THE TEXAS COASTAL MANAGEMENT PROGRAM AND WILL BE CONDUCTED IN A MANNER CONSISTENT WITH SUCH PROGRAM



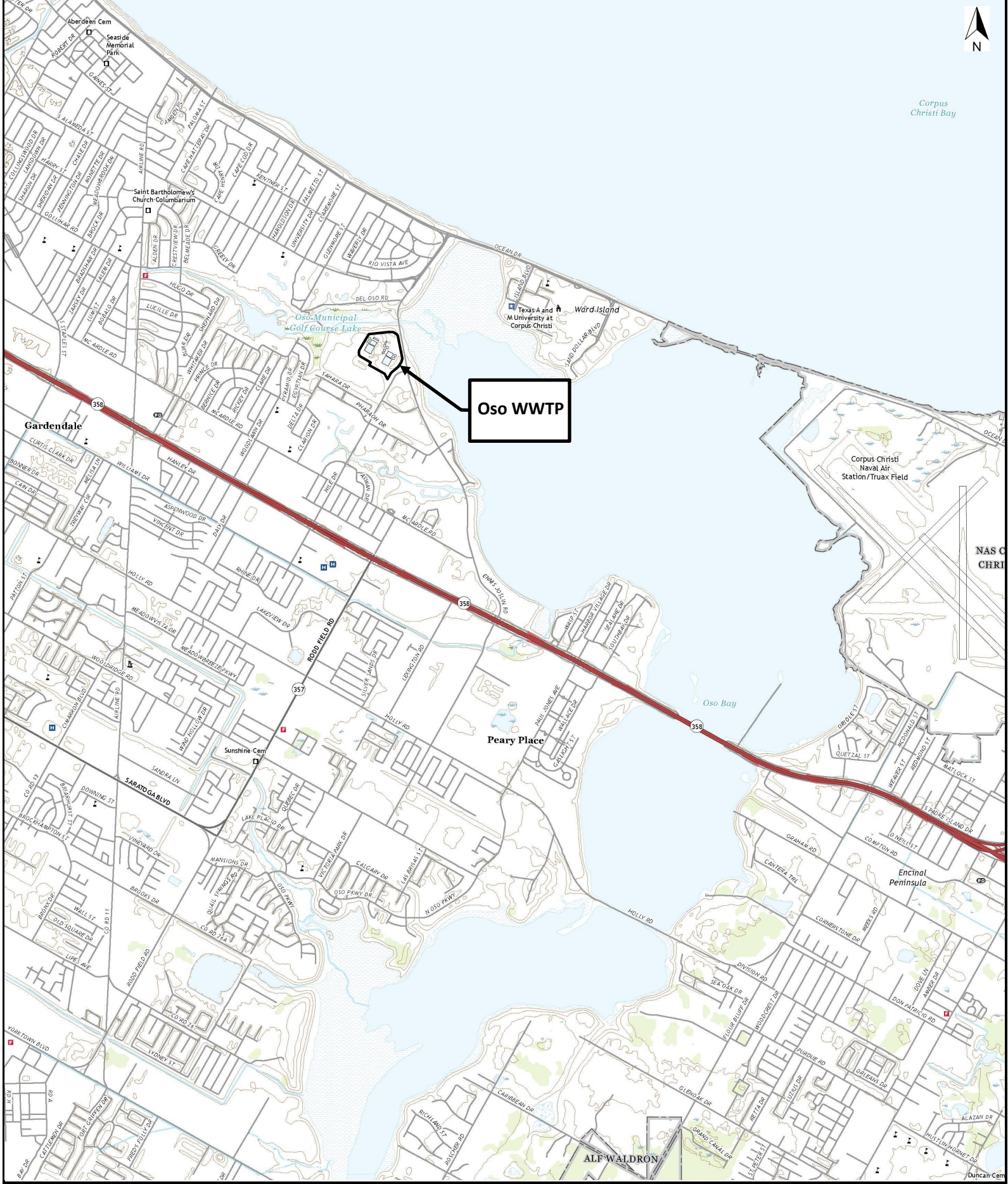
Signature of Applicant/Agent

Date

*Any questions regarding the Texas Coastal Management Program should be referred to:*

Texas General Land Office  
Coastal Resources Division  
1700 North Congress Avenue, Room 330  
Austin, Texas 78701-1495  
Phone: (512) 463-7497  
Toll Free: 1-800-998-4GLO  
[federal.consistency@glo.texas.gov](mailto:federal.consistency@glo.texas.gov)

Print Form



**Oso WWTP**

Note: Property Location Shown is Approximate.



Drawn/Checked By:	TLD	Scale:	1" = 3,520'
Project Number:	24L0174A_05	Date:	10/15/25

**Location Map**  
**Oso WWTP**  
 501 Nile Drive, Corpus Christi,  
 Nueces County, Texas

**From:** [Leslie Koza](#)  
**To:** [Tara Ducrest](#)  
**Subject:** Re: Consistency review for Grant Number 24-065-091-E767  
**Date:** Thursday, December 18, 2025 8:57:47 AM

---

**EXTERNAL SENDER STOP.THINK.QUESTION** If this is unexpected, verify before you click links or open attachments.

Tara,

The GLO Coastal Management Program does not currently have any listed federal financial assistance activities, so a federal consistency review is not required. Please feel free to contact me if you have any questions.

Thanks,

Leslie Koza

Federal Consistency Coordinator

512-463-7497

[leslie.koza@glo.texas.gov](mailto:leslie.koza@glo.texas.gov)

[Federal.Consistency@glo.texas.gov](mailto:Federal.Consistency@glo.texas.gov)

Texas General Land Office

Commissioner Dawn Buckingham, M.D.

---

**From:** Tara Ducrest <TDucrest@hanson-inc.com>  
**Sent:** Tuesday, December 16, 2025 4:55 PM  
**To:** Federal Consistency <Federal.Consistency@GLO.TEXAS.GOV>  
**Cc:** William Causey <williamc8@corpuschristitx.gov>  
**Subject:** [EXTERNAL] Consistency review for Grant Number 24-065-091-E767

You don't often get email from tducrest@hanson-inc.com. [Learn why this is important](#)

Dear Reviewer,

The City of Corpus Christi is pursuing funding through the US HUD CDBG-MIT program for flood mitigation and installation of emergency generators at the Greenwood Wastewater Treatment Plant and installation of emergency generators at the Oso Wastewater Treatment Plant. A Consistency with the Texas Coastal Management Program form and a location map for each site are attached. Please provide any comments you have regarding these projects.

Thank you,

Logo



**Tara Ducrest** | *Environmental Scientist*

[Hanson Professional Services Inc.](#) | 4501 Gollihar | Corpus Christi, TX 78411  
w 361-414-6487 | c 361-215-3282 | [Facebook](#) | [Twitter](#) | [LinkedIn](#)

---

**Disclaimer**

This entire e-mail may contain confidential information belonging to the sender which is legally privileged. This information is intended only for the use of the individual(s) or entity named above. If you are not the intended recipient you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this e-mail in error please notify the sender immediately by e-mail and then delete this e-mail from your system.

Mail delivered by Hanson Professional Services Inc. mail system.

---

**Attachment F –**

**Narrative Portion of Phase I ESA prepared for Oso WWTP**

## **Executive Summary**

Hanson Professional Services Inc. (Hanson) conducted a Phase I Environmental Site Assessment (ESA) for the City of Corpus Christi Oso Water Reclamation Plant, a wastewater treatment plant (WWTP), located at 501 Nile Drive in Corpus Christi, Nueces County, Texas. The ESA was performed in general accordance with the requirements for the American Society for Testing Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-21.

The subject property is located northwest of the intersection of Nile Drive and Ennis Joslin Road in Corpus Christi, Nueces County, Texas 78412. Currently, the subject property is occupied by the City of Corpus Christi Oso Water Reclamation Plant. Several wastewater treatment units are present on the subject property, including an influent structure, lift stations, headworks, clarifiers, aeration tanks, reaeration tanks, aerated sludge holding tanks, a solids dewatering facility, blower houses, electro contaminant removal systems, chlorine contact chambers, sodium hydroxide facilities, sodium hypochlorite facilities, a sodium bisulfite facility, meter vaults, an effluent pump station, and an odor control unit. A plant office and control building for the WWTP is present on the south side of the subject property. Three permanent emergency generators, three temporary emergency generators, and six pad-mounted transformers were observed throughout the facility. No markings were observed to indicate that the transformers did not contain Polychlorinated Biphenyls (PCBs). During the site visit, construction was occurring at the WWTP. A construction equipment storage area was observed along the north boundary of the WWTP. Items observed in the construction storage area include a large crane, a diesel fuel tank with secondary containment, and several cargo containers holding tools and equipment. Dumpsters for sludge storage were observed in the sludge dewatering building. Containers of Clarifloc CE-1323 were observed near the sludge dewatering building. Electric distribution lines are present along the south side of the subject property. Wastewater mains are present on the west, north, and east sides of the subject property. A storm sewer line and a residential gas line are present along the east side of the subject property. A buffer easement exists around the WWTP.

The WWTP on the subject property has been in operation since at least 1943. Prior to 1943, the west and central portions of the subject property appear to have been used as farmland since at least the 1930s and the east portion of the subject property was undeveloped land and a waterbody connecting to Oso Bay.

A drainage feature and the Oso Municipal Golf Course are present to the north of the subject property. To the east, Ennis Joslin Road, Hans & Pat Suter Wildlife Refuge, and Oso Bay are present. Undeveloped land, Nile Drive, and Texas A & M University – Corpus Christi (TAMUCC) sports fields and housing are present to the south of the subject property. To the west, undeveloped land and TAMUCC sports fields are present.

Information pertaining to potential environmental liabilities resulting from the treating, storing, disposing, discharging, or emitting of hazardous and/or regulated substances was obtained by Hanson through ERIS. Twenty-four database findings were reported for the subject property for ERIS IDs 1 and 3. The findings were in the Emergency Response Notification System (ERNS), Facility Registry Service/Facility Index (FINDS/FRS), Notices of Enforcement (NOE), Notice of Violation (NOV), Court Orders & Administrative Orders (ORD), Per- and Poly-Fluoroalkyl Substances Industry Sectors (PFAS IND), Spills (SPILLS), Tier 2 Report (TIER 2), and Integrated Compliance Information System (ICIS) databases. The wastewater treatment plant operations at the subject property are a recognized environmental condition (REC).

ERIS identified five sites within the ASTM search radius beyond the subject property boundary. Based on the available database information and the proximity and physical setting of the identified sites, they are not considered to be RECs.

Oil, gas, and water well records from ERIS were reviewed for the subject property and surrounding land. No wells were identified on the subject property. Well locations identified within one mile of the subject property include one domestic well, two dry hole locations, 20 monitor wells, 28 plugged monitor wells, seven environmental soil borings, two piezometers, two withdrawal of water wells, four water wells, one USGS well, and one observation well. The nearest well identified was a monitor well approximately 967 feet east northeast of the subject property. No oil or gas pipelines are present near the subject property, other than a City of Corpus Christi residential gas line present along the east side of the subject property.

No stained soil or stressed vegetation were observed on the subject property during the site visit. Other than the treatment units associated with operation of the Oso Water Reclamation Plant, no waste disposal pits, ponds, or lagoons were observed on the subject property during the site visit.

## **Findings**

Our review of site information and a property inspection revealed the following potential environmental liabilities associated with the subject property:

### On-Site RECs:

- *Possible Presence of Contamination from Operation of WWTP on Subject Property* – The Oso Water Reclamation Plant on the subject property has been in operation since 1943. Wastewater treatment and sludge management have occurred at the WWTP. This site could potentially be a REC due to the possible presence of contamination from metals, PCBs, and PFAS. In addition, violations have occurred at the WWTP for violation of general air quality rules; unauthorized emissions; unauthorized discharges; failure to comply with permit conditions; failure to comply with sampling and laboratory testing methods; failure to comply with permit submittal requirements and review process; failure to comply with screening and grit disposal, scum removal, and aeration system design requirements; failure to comply with control of hydrogen sulfide requirements; and failure to comply with pretreatment program requirements.

## **Recommendations**

Due to the site being an active wastewater treatment plant, a Phase II Environmental Site Assessment is not currently recommended. In the event that the Oso Water Reclamation Plant were to be decommissioned, assessment for potential contamination of the subject property would be recommended.

## **1. Introduction**

Hanson Professional Services Inc. conducted a Phase I Environmental Site Assessment (ESA) for the City of Corpus Christi Oso Water Reclamation Plant located at 501 Nile Drive in Corpus Christi, Nueces County, Texas. The ESA was conducted for the City of Corpus Christi.

### **1.1. Purpose**

The ESA was performed in general conformance with the requirements of the American Society for Testing Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-21 unless specifically noted in the report. This Standard Practice was developed to address the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in order to qualify for the innocent landowner's defense to CERCLA liability. The purpose of this ESA was to assist the client in developing information to identify recognized environmental conditions (RECs) in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, and a visual non-invasive reconnaissance of the subject property and adjoining properties.

### **1.2. Special Terms and Conditions**

Hanson Professional Services Inc. has performed this ESA for the City of Corpus Christi for the above stated purpose. This study may not contain sufficient information for other purposes or entities. Reference is made in this ESA to public records provided by an information source. No warranty, expressed or implied, is made as to the accuracy of those public records or the accuracy of the information source providing the public records.

### **1.3. General Limitations**

The assessment of subsurface conditions at the subject property was beyond the scope of services for this ESA.

This report does not constitute a property condition assessment since it was prepared principally to address environmental contaminant issues. It does not constitute an asbestos inspection, lead based paint survey, mold inspection, wetland delineation, or other specific type of environmental assessment tied directly to a specific local, state, or federal environmental regulatory program.

A chain of title search was not performed for this Phase I ESA.

### **1.4. Information Sources**

The information pertaining to this ESA was obtained from the following sources:

**Table 1-1 – Information Sources**

1.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Telephone Number:</b> <b>Information Obtained:</b>	ERIS <a href="http://www.order.erisinfo.com/home">http://www.order.erisinfo.com/home</a> (866) 517-5204 Aerial photos, historical topo maps, city directory search, fire insurance maps, database report, & environmental lien search
2.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	Nueces County Appraisal District <a href="https://gis.bisclient.com/nuecescad/">https://gis.bisclient.com/nuecescad/</a> Property parcel description
3.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	Railroad Commission of Texas <a href="https://gis.rrc.texas.gov/GISViewer/">https://gis.rrc.texas.gov/GISViewer/</a> Records on commercial waste disposal sites, oil and gas exploration, and pipelines
4.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	Federal Emergency Management Agency <a href="https://msc.fema.gov/portal">https://msc.fema.gov/portal</a> Floodplain map
5.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	United States Department of Agriculture <a href="https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx">https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</a> Soil information
6.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	Texas Commission on Environmental Quality <a href="https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=home.welcome">https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=home.welcome</a> Central database information
7.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	Texas Commission on Environmental Quality <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications">https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications</a> Administrative Package for TPDES permit renewal
8.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	US Environmental Protection Agency <a href="http://www.epa.gov/frs">http://www.epa.gov/frs</a> Database information
9.	<b>Organization Name:</b> <b>Web Site Address:</b> <b>Information Obtained:</b>	City of Corpus Christi <a href="https://corpus.maps.arcgis.com/apps/webappviewer/index.html?id=364701d357474326839d4099aa526473">https://corpus.maps.arcgis.com/apps/webappviewer/index.html?id=364701d357474326839d4099aa526473</a> Utility location and easement information
10.	<b>Organization Name:</b> <b>Information Obtained:</b>	City of Corpus Christi Existing Master Site Plan
11.	<b>Organization Name:</b> <b>Contact Name:</b> <b>Information Obtained:</b>	City of Corpus Christi Sigifredo De Leon, Plant Superintendent Interview questionnaire

### 1.5. Qualifications Statement

Ms. Tara L. Ducrest, Environmental Scientist for Hanson Professional Services Inc., received a B.S. in Environmental Science with concentration in Chemistry in 2006 from Texas A&M University – Corpus Christi and an M.P.A. with an emphasis in Environmental Science in 2009 from Texas A&M University – Corpus Christi. Ms. Ducrest has performed numerous ESAs on industrial, commercial, residential, and undeveloped properties.

## **2. Property Description**

### **2.1. Location**

The subject property is located at 501 Nile Drive in Corpus Christi, Nueces County, Texas 78412. The center of the subject property lies at approximately 27.710129° north latitude and -97.340449° west longitude. The Subject Property Location Map and Subject Property Detail Map are provided as Figures 1 and 2.

### **2.2. Legal Description**

The subject property consists of Property ID 231710, which has the following legal description in the Nueces County Appraisal District property details: FLOUR BLUFF & ENC FRM GDN TRACT 30.95 ACS OUT OF LTS 15 & 28 SEC 17.

### **2.3. Property and Vicinity Characteristics**

The elevation of the subject property is relatively flat and approximately 15 feet above sea level. Federal Emergency Management Agency (FEMA) flood data was reviewed, and it was determined that the majority of the subject property is located in Zone X, an area of minimal flood hazard and a small portion of the east side is located in Zone X, an area subject to the 0.2-percent annual chance (500-year) flood.

The National Wetlands Inventory (NWI) identified 15 of the wastewater treatment units on the subject property as freshwater ponds. A waterbody to the north of the subject property was identified as an estuarine and marine wetland, a freshwater forested/shrub wetland, and an estuarine and marine deepwater wetland. To the east, Oso Bay was identified as an estuarine and marine deepwater wetland.

Soils of the subject property consist of Victoria clay (0 to 1 percent slopes), Victoria clay (1 to 3 percent slopes), and Gullied land (saline). Drainage class for Victoria clay in this location is well drained and soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through Victoria clay is somewhat restricted. Drainage class for Gullied land in this location is well drained and soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Geologic information shows that the subject property is in the Beaumont Formation, with areas predominantly clay.

Physical feature information was provided by ERIS in the Physical Setting Report, which is included in Exhibit A.

### **2.4. Easements and Right of Ways**

Electric distribution lines are present along the south side of the subject property. Wastewater mains are present on the west, north, and east sides of the subject property. A storm sewer line and a residential gas line are present along the east side of the subject property. A buffer easement exists around the WWTP. A map showing the City of Corpus Christi utilities is provided in Exhibit B.

## 2.5. Title Review

A chain of title search was not performed for this property.

## 2.6. Current Uses of Subject Property

The City of Corpus Christi Oso Wastewater Treatment Plant is currently operating at the subject property.

## 2.7. Past Uses of Subject Property

The WWTP on the subject property has been in operation since at least 1943. Prior to 1943, the west and central portions of the subject property appear to have been used as farmland since at least the 1930s and the east portion of the subject property was undeveloped land and a waterbody connecting to Oso Bay.

## 2.8. Current Uses of Adjacent and Surrounding Properties

The following table lists the current uses of the adjacent and surrounding properties:

**Table 2-1 – Current Uses of Surrounding Properties**

North	East	South	West
Drainage feature and Oso Municipal Golf Course	Ennis Joslin Road, Hans & Pat Suter Wildlife Refuge, and Oso Bay	Undeveloped land, Nile Drive, residential homes, and TAMUCC sports fields and housing	Undeveloped land and TAMUCC sports fields

## 2.9. Past Uses of Adjacent and Surrounding Properties

The following table lists the past uses of the adjacent and surrounding properties determined by review of historical aerial photographs and city directories:

**Table 2-2 – Past Uses of Surrounding Properties**

North	East	South	West
Drainage feature, Oso Municipal Golf Course, and farmland	Ennis Joslin Road, Hans & Pat Suter Wildlife Refuge, and Oso Bay	Undeveloped land, Nile Drive, residential homes, farmland, baseball fields, TAMUCC sports fields and housing	Farmland, undeveloped land, and TAMUCC sports fields

### 3. Record Review

#### 3.1. General

Public and private entities are required to comply with applicable federal and state environmental regulations. The primary regulations, which are pertinent to this assessment, are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). Reasonably obtainable agency records were reviewed in order to determine facilities which might present a potential to release hazardous substances, or petroleum products, which may affect the subject property.

#### 3.2. Database Report Summary

Information pertaining to potential environmental liabilities resulting from the treating, storing, disposing, discharging, or emitting of hazardous and/or regulated substances was obtained by Hanson Professional Services Inc., through ERIS. The minimum ASTM E1527-21 database search distances are identified in the following table.

**Table 3-1 – Minimum ASTM Search Distances**

<b>Standard Environmental Record Sources</b>	<b>ASTM Minimum Search Distances (Miles)</b>
Lists of Federal NPL (Superfund) Sites	1.0
Lists of Federal Delisted NPL Sites	0.5
Lists of Federal Sites Subject to CERCLA removals and CERCLA Orders	0.5
List of Federal CERCLA Sites with NFRAP	0.5
Lists of Federal RCRA Facilities Undergoing Corrective Action	1.0
Lists of Federal RCRA TSD Facilities	0.5
Lists of Federal RCRA Generators	Property and Adjoining Properties
Federal Institutional Control/Engineering Control Registries	Subject Property Only
Federal ERNS List	Subject Property Only
Lists of State/Tribal Superfund Equivalent Sites	1.0
Lists of State/Tribal Hazardous Waste Facilities	0.5
Lists of State/Tribal Landfill and Solid Waste Disposal Facilities	0.5
Lists of State/Tribal Leaking Storage Tanks	0.5
Lists of State/Tribal Registered Storage Tanks	Subject Property and Adjoining Properties
State and Tribal Institutional Control/Engineering Control Registries	Subject Property Only
Lists of State/Tribal Voluntary Cleanup Sites	0.5
Lists of State/Tribal Brownfield Sites	0.5

ERIS provided information available through the following federal, state, local, tribal, and proprietary databases.

**Table 3-2 – Databases/Records Searched**

<b>Federal Listings</b>	
<b>Acronym</b>	<b>Database</b>
NPL	National Priority List
PROPOSED NPL	National Priority List - Proposed
DELETED NPL	Deleted National Priority List
SEMS	Superfund Enterprise Management System List 8R Active Site
ODI	Inventory of Open Dumps, June 1985
SEMS ARCHIVE	SEMS List 8R Archive Sites
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
IODI	EPA Report on the Status of Open Dumps on Indian Lands
CERCLIS NFRAP	CERCLIS – No Further Remedial Action Planned
CERCLIS LIENS	CERCLIS Liens
RCRA CORRACTS	RCRA-CORRACTS-Corrective Action
RCRA TSD	RCRA non-CORRACTS TSD Facilities
RCRA LQG	RCRA Generator List
RCRA SQG	RCRA Small Quantity Generators List
RCRA VSQG	RCRA Very Small Quantity Generators List
RCRA NON GEN	RCRA Non-Generators
RCRA CONTROLS	RCRA Sites with Controls
FED ENG	Federal Engineering Controls
FED INST	Federal Institutional Controls
NPL IC	Institutional Control Boundaries at NPL sites
LUCIS	Land Use Control Information System
ERNS 1982 TO 1986	Emergency Response Notification System
ERNS 1987 TO 1989	Emergency Response Notification System
ERNS	Emergency Response Notification System
FED BROWNFIELDS	The Assessment Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database
FEMA UST	Federal Emergency Management Agency (FEMA) Underground Storage Tank Listing
FRP	Facility Response Plan
DELISTED FRP	Delisted Facility Response Plans
HIST GAS STATIONS	Historical Gas Stations
REFN	Petroleum Refineries
BULK TERMINALS	Petroleum Product and Crude Oil Rail Terminals
SEMS LIEN	Lien on Property
SUPERFUND ROD	Superfund Decision Documents

<b>State (TX) Listings</b>	
SUPERFUND	Superfund Sites Boundaries
SHWS	State Superfund Registry
SDA	Superfund Site Discovery and Assessment Program
DELISTED SHWS	Delisted State Superfund Registry List
SWF/LF	Permitted Solid Waste Facilities
CLI	Closed Landfill Inventory
HGAC CLI	Houston-Galveston Closed Landfill Inventory
AACOG CLI	Alamo Area Council of Governments Closed Landfill Inventory
IHW	Commercial Management Facilities for Hazardous Waste and Industrial Solid Wastes
IHW RECEIVER	Industrial and Hazardous Waste-Receivers
RWS	Radioactive Waste Sites
LPST	Leaking Petroleum Storage Tank Database
DELISTED LST	Delisted Leaking Storage Tanks
UST	Underground Petroleum Storage Tanks
AST	Aboveground Storage Tanks
PST	Petroleum Storage Tanks Database
HIST TANK	Historical Tank Construction Notification
UST AUSTIN	Austin Underground Storage Tanks
PETROL CAVERN	Salt Caverns for Petroleum Storage
DTNK	Delisted Storage Tanks
AUL	Sites with Controls
VCP	Voluntary Cleanup Program
VCP RRC	Texas Railroad Commission Voluntary Cleanup Program
OP CLEANUP	Operator Cleanup Program
IOP	Innocent Owner/Operator Program
BROWNFIELDS	Brownfields Site Assessment Database
BROWN RRC	Texas Railroad Commission Brownfields
MSD	Municipal Setting Designation
<b>Tribal Listings</b>	
INDIAN LUST	Leaking Underground Storage Tanks on Tribal/Indian Lands
INDIAN UST	Underground Storage Tanks on Indian Land
DELISTED ILST	Delisted Tribal Leaking Storage Tanks
DELISTED IUUST	Delisted Tribal Underground Storage Tanks
<b>County Listings</b>	
No County standard environmental records sources available for Texas.	
<b>Additional Environmental Records Sources</b>	
PFAS GHG	PFAS Greenhouse Gas Emissions Data
OSC RESPONSE	On-Scene Coordinator Response Sites
PFAS NPL	PFOA/PFOS Contaminated Sites
FINDS/FRS	Facility Registry Service/Facility Index

TRIS	Toxics Release Inventory Program
PFAS FED SITES	Federal Agency Locations with Known or Suspected PFAS Detections
PFAS SSEHRI	SSEHRI PFAS Contamination Sites
PFAS ERNS	National Response Center PFAS Spills
PFAS NPDES	PFAS NPDES Discharge Monitoring
PFAS TRI	Perfluorinated Alkyl Substances (PFAS) Releases
PFAS WATER	PFAS Water Quality Portal Sampling Data
PFAS TSCA	PFAS TSCA Manufacture and Import Facilities
PFAS E-MANIFEST	PFAS Waste Transfers from RCRA e-Manifest
PFAS IND	PFAS Industry Sectors
HMIRS	Hazardous Materials Information Reporting System
NCDL	National Clandestine Drug Labs
TSCA	Toxic Substances Control Act
HIST TSCA	Historical Toxic Substances Control Act
FTTS ADMIN	Federal Insecticide, Fungicide, & Rodenticide (FIFRA) and Toxic Substances Control Act (TSCA) Administrative Case Listing
FTTS INSP	FTTS Inspection Case Listing
PRP	Potentially Responsible Parties List
SCRD DRYCLEANER	State Coalition for Remediation of Drycleaners Listing
ICIS	Integrated Compliance Information System
FED DRYCLEANERS	Drycleaner Facilities
DELISTED FED DRY	Delisted Drycleaner Facilities
FUDS	Formerly Used Defense Sites
FUDS MRS	FUDS Munitions Response Sites
FORMER NIKE	Former Military Nike Missile Sites
PIPELINE INCIDENT	Pipeline and Hazardous Materials Safety Administration (PHMSA) Pipeline Safety Flagged Incidents
MLTS	Material Licensing Tracking Systems
HIST MLTS	Historic Material Licensing Tracking System Sites
MINES	Mines Master Index File
SMCRA	Surface Mining Control and Reclamation Act Sites
MRDS	Mineral Resource Data System
LM SITES	DOE Legacy Management Sites
ALT FUELS	Alternative Fueling Stations
CONSENT DECREES	Superfunds Consent Decrees
AFS	Air Facility System
SSTS	Registered Pesticide Establishments
PCBT	Polychlorinated Biphenyl (PCB) Transformers
PCB	Polychlorinated Biphenyl Notifiers
POWER PLANTS	Power Plants
HIST RISK	Historical Business Activity Risk
PRIORITY CLEAN	Dry Cleaner Remediation Program Prioritization List
DRYCLEANERS	Registered Dry Cleaning Facilities

DELISTED DRYCLEANERS	Delisted Drycleaning Facility List
GWCC	Groundwater Contamination Cases
GWCC HIST	Historical Groundwater Contamination Cases
APAR	Affected Property Assessment Reports
SPILLS	Spills Database
IHW CORR ACTION	Industrial and Hazardous Waste Sites with Corrective Actions
PFAS	Per- and Polyfluoroalkyl Substances (PFAS)
LAND APPL	Land Application Permits
NOV	Notice of Violation
NOE	Notices of Enforcement
LIENS	Environmental Liens Listing
ORD	Court Orders & Administrative Orders
HIST RCRA NONRCRA	Inactive RCRA and Non-RCRA Facilities
RTOL	Recycle Texas Online Program
UIC	Underground Injection Control
IHW GENERATOR	Industrial and Hazardous Waste – Generators
IHW TRANSPORT	Industrial and Hazardous Waste – Transporters
AIR PERMITS	New Source Review Permits
EMISSIONS	Point Source Emissions Inventory
TIER 2	Tier 2 Report
EDWARDS AQUIFER	Edwards Aquifer Permits
<b>Tribal</b>	
No tribal additional environmental record sources available for Texas.	
<b>County</b>	
No county additional environmental record sources available for Texas.	

ERIS's regulatory database report is provided in Exhibit C.

Subject Property Findings:

Twenty-four database findings were reported for the subject property for ERIS IDs 1 and 3. The findings were in the ERNS, FINDS/FRS, NOE, NOV, ORD, PFAS IND, SPILLS, TIER 2, and ICIS databases.

The ERNS database included information on a release of sodium hypochlorite that occurred at the WWTP on January 27, 2005. A release of 400 pounds of sodium hypochlorite occurred from an aboveground storage tank onto soil due to a leak in a fitting. The material was contained.

According to the FINDS/FRS database, the subject property is regulated under the National Pollutant Discharge Elimination System (NPDES) for wastewater and pretreatment programs.

Several violations associated with the WWTP were identified in the NOE database for the subject property. The violations ranged from May 24, 2012 to June 10, 2021 and were issued for failure to comply with the facility's TPDES permit. Violations are either active, referred to the EPA, resolved, or withdrawn.

Active violations include the following:

- Failure to report any noncompliance which may endanger human health or safety, or the environment orally to TCEQ within 24 hours of becoming aware of the noncompliance, and in writing to TCEQ within five working days of becoming aware of the noncompliance. Upset conditions at the WWTP caused partially treated wastewater and sludge to discharge into Blind Oso Bay on April 2, 2021.
- Failure to ensure that the plant and all of its systems of collection, treatment, and disposal are properly operated and maintained. In the west train, Clarifier No. 1 was offline, and the skimmer arms were removed from Clarifier No. 3 and No. 4. In the east train, Clarifiers No. 5 and No. 7 were offline, and the skimmer arm was removed from Clarifier No. 8.
- Failed to ensure the WWTP and all of its systems of collection, treatment, and disposal are properly operated and maintained. The City of Corpus Christi was not maintaining an appropriate quantity and quality of solids inventory to properly operate the WWTP. Excessive foam was noted on the aeration and reaeration basins. Additionally, excess scum, foam, and sludge were observed in both the east and west clarifier trains (East Clarifier Nos. 6 and 8; and West Clarifier Nos. 2, 3, and 4).

Violations referred to EPA include the following:

- Failure to prevent the discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Failed to maintain compliance with the permitted effluent limit for dissolved oxygen. This violation is being addressed in a joint civil action with EPA through Consent Decree: Civil Action No. 2:20-cv-00235 which was issued on January 11, 2021.
- Failed to dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual.

Resolved violations include the following:

- Failed to prevent the unauthorized discharge of wastewater or any other waste. Specifically, during the time period between January 16, 2012 through March 29, 2012, the WWTP reported a total of 73 unauthorized discharges, for a total of 1,668 gallons. Of the 73 discharges, 65 were caused by line blockage, five were caused by a line break, and three were from other causes. All reported discharges were repaired and remediated. The City of Corpus Christi submitted a Sanitary Sewer Overflow (SSO) preliminary plan on July 19, 2010. The assistant director for the wastewater department stated that although the plan was not officially approved, the City of Corpus Christi has been implementing the plan.
- Failure to discharge subject to the effluent limitations listed in TPDES Permit No. WQ0010401004. Specifically, the permittee reported Enterococci Daily Max excursions during the following months of 2012: May, June, October, November, and December, with respective values (MPN or CFU) of 236, 689, 124, 159, and 308. The Total Suspended Solids (TSS) Daily Max effluent limitation was exceeded on February 5, 2012. Samples collected for Enterococci and TSS during the investigation were compliant with the effluent limitations.
- Failed to take all reasonable steps to minimize or prevent any sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment. Screenings, foam, and grease balls were discharged in other than trace amounts from the outfall into Blind Oso Bay. Additionally, sludge and bloodworms were observed around the outfall. Also, a fish kill of approximately 30 fish was observed. By January 30, 2024, the WWTP ceased discharge of floating solids and sludge from the outfall.

- Failed to ensure the WWTP and all of its systems of collection, treatment, and disposal are properly operated and maintained. The screening and grit containers at the four chlorine contact chambers were not covered. The City of Corpus Christi removed the chlorine contact chamber screening storage containers by July 28, 2021.
- Failed to develop and implement procedures to ensure compliance with the requirements of a pretreatment program and failed to develop and implement an enforcement program response plan (ERP). Specifically, between January 2017 through July 2018 the City of Corpus Christi failed to consistently issue notices of violation and a remedial action plan when addressing ongoing effluent violations by Kane Beef Producers, Inc. Documentation was received demonstrating compliance. The TCEQ approved the ERP and training provided by the City of Corpus Christi on May 5, 2022.

Withdrawn violations include the following:

- Failure to prevent the discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Failed to ensure that the facility and all of its system of collection, treatment, and disposal are properly operated and maintained.

Several violations associated with the WWTP were identified in the NOV database for the subject property. The violations ranged from February 10, 2012 to March 29, 2024 and were issued for violation of general air quality rules; unauthorized emissions; unauthorized discharges; failure to comply with permit conditions; failure to comply with sampling and laboratory testing methods; failure to comply with permit submittal requirements and review process; failure to comply with screening and grit disposal, scum removal, and aeration system design requirements; failure to comply with control of hydrogen sulfide requirements; and failure to comply with pretreatment program requirements.

The ORD database found three TCEQ administrative orders for the subject property. The administrative orders are agreed orders and include Docket Numbers 2007-1436-MWD-E, 2009-0974-MWD-E, and 2020-1231-MWD-E.

Pertinent findings in Agreed Order 2007-1436-MWD-E include that the City of Corpus Christi did not provide notification of unauthorized discharges from the collection system orally within 24 hours after becoming aware of the discharges. Specifically, notification was not provided timely for the unauthorized discharges on October 14, 2006, January 26, 2007, January 28, 2007, February 7, 2007, and February 21, 2007. Corrective measures include updating the Oso Facility and collection system operations guidance and conducting employee training to ensure all reporting requirements are properly accomplished in accordance with 30 Texas Administrative Code (TAC) 305 and TPDES Permit No. WQ0010401004 monitoring and reporting requirements. The City of Corpus Christi completed a Supplemental Environmental Project (SEP) to offset the TCEQ penalty associated with the violations. The SEP required the City of Corpus Christi to contribute the penalty amount to the Colonial Waterbird Rookery Island Enhancement Project on Causeway and Shamrock Islands in Nueces County.

Agreed Order 2009-0974-MWD-E was issued to address a discharge of wastewater from the collection system that feeds into the WWTP. The discharge occurred approximately four miles southwest of the WWTP. Corrective measures included completing a SEP to offset the TCEQ

penalty associated with the violation. The SEP required the City of Corpus Christi to contribute the penalty amount to the Colonial Waterbird Rookery Island Enhancement Project on Causeway and Shamrock Islands in Nueces County.

Pertinent findings in Agreed Order 2020-1231-MWD-E include that the City of Corpus Christi failed to develop and implement procedures to ensure compliance with the requirements of a pretreatment program and failed to develop and implement an enforcement response plan (ERP). Specifically, between January 2017 through July 2018, the City of Corpus Christi failed to consistently issue notices of violation and a remedial action plan when addressing ongoing effluent violations by Kane Beef Producers, Inc. Corrective measures include developing and implementing procedures and conducting employee training to ensure that the ERP and pretreatment enforcement escalation and notification requirements are properly conducted within the required timeframes consistently for all industrial users and updating the Oso Facility and collection system operations guidance and conducting employee training to ensure all reporting requirements are properly accomplished in accordance with 30 Texas Administrative Code (TAC) 305 and TPDES Permit No. WQ0010401004 monitoring and reporting requirements.

The PFAS IND database identified the subject property as having an NPDES permit and being an active facility. The compliance status of the WWTP is shown as no violation identified.

The SPILLS database included details on two spills that occurred on January 27, 2005 and February 5, 2008. On January 27, 2005, approximately 200 gallons of untreated wastewater was released from a manhole approximately 1.5 miles northwest of the subject property due to a blockage in the service line. The line was cleared and the area around the manhole was disinfected. On February 5, 2008, a release of approximately 264 gallons of 10% sodium hypochlorite solution to soil occurred at the WWTP. The release was caused by a leak in a fitting near the pump. TCEQ planned to conduct a record review investigation after receiving a spill report from the City of Corpus Christi.

The TIER2 database included information that the subject property stored up to 9,999 pounds of sodium hypochlorite and sodium bisulfite and up to 4,999 pounds of polyelectrolytes from 2005 to 2012.

The ICIS database showed that the subject property has an NPDES individual permit.

Based on the wastewater treatment plant operations at the subject property, the Oso Wastewater Treatment Plant is a REC.

#### Off-Site Findings:

Additionally, five sites were identified within the ASTM search radius beyond the subject property.

ERIS Site 2, Haas-Anderson Construction, LTD, located at 606 Nile Drive, Corpus Christi, TX 78412, which is approximately 11 feet south southwest of the subject property, was identified in the TIER2 database. The site is listed to have stored up to 200,000 pounds of Portland cement in 2005.

ERIS Site 4, Texas A&M Parking Lot – Tennis Complex, which is approximately 345 feet southeast of the subject property, was identified in the NOE and the ORD databases. The site received a field

citation for failure to obtain a construction general permit (stormwater). The site submitted a Notice of Intent (NOI) and posted the required notices resulting in a resolved violation status. An administrative order was issued, and a penalty was assessed.

ERIS Site 5, Central Power & Light, located at 721 Nile, Corpus Christi, TX, which is approximately 355 feet south southeast of the subject property, was identified in the SPILLS. The database included a record of a 3-gallon spill of transformer oil on February 24, 1990.

ERIS Site 6, Pharaohs Country Club, located at 1035 Nile Drive, Corpus Christi, TX 78412, which is approximately 2,162 feet south southwest of the subject property, was identified in the LPST database. The site is listed as priority status 2A – groundwater other than site 1B site characterization incomplete. TCEQ has issued final concurrence, and the case was closed in 1995.

ERIS Site 7, located at 5702 South Alameda Street, Corpus Christi, TX 78412, which is approximately 2,203 feet north northwest of the subject property, was listed under two names including: Coastal Mart 3011 and 7-Eleven Store 40872. Coastal Mart 3011 was identified in the LPST database. Groundwater was impacted within 500 feet – 0.25 miles to the southwest with use by human and endangered species. TCEQ has issued final concurrence, and the case was closed in 2002. 7-Eleven Store 40872 was identified in the LPST database. Groundwater was impacted and there were no apparent threats or impacts to receptors. TCEQ has issued final concurrence pending plugging of a well, and the case was closed March 31, 2025.

Based on the information available in the database report and the proximity and physical setting of the off-site identified sites, the sites are not considered to be recognized environmental conditions (RECs).

### **3.3. Historical Aerial Photographs**

Sets of readily available historical aerial photographs of the subject property from ERIS can be found in Exhibit D. The aerial photograph coverage illustrates how the subject property and surrounding properties have evolved.

#### **3.3.1. Aerial Photograph – 1938 (1" = 500'±)**

In this aerial photo from 1938, the majority of the subject property appears to be farmland. The north and east portions of the subject property, along Oso Bay, appear to be wetlands/shoreline. Surrounding land to the west and south appears to be farmland. A structure appears to be present to the south of the subject property. To the east, Oso Bay can be seen and to the north, a waterbody connected to Oso Bay can be seen.

#### **3.3.2. Aerial Photograph – 1950 (1" = 500'±)**

In this aerial photo from 1950, treatment units for a wastewater treatment facility can be seen on the north portion of the subject property. A bridge can be seen leading into the north portion of the subject property. Most surrounding land still appears to be farmland and waterbodies. The structure to the south can no longer be seen. Approximately 0.3 miles to the north, residential development can be seen.

### **3.3.3. Aerial Photograph – 1956 (1" = 500'±)**

In this aerial photo from 1956, the wastewater treatment facility appears to be expanding southward on the subject property with the construction of additional treatment units. The Oso Municipal Golf Course can be seen approximately 0.2 miles northwest of the subject property. Additional housing developments appear to the north. To the east and south, roads can be seen.

### **3.3.4. Aerial Photograph – 1960 (1" = 500'±)**

In this aerial photo from 1960, the subject property appears similar to the previous photo. Four baseball/softball fields appear to the south of the subject property. Farmland is still present to the south and west of the subject property.

### **3.3.5. Aerial Photograph – 1967 (1" = 500'±)**

In this aerial photo from 1967, the wastewater treatment plant appears to have expanded within the subject property with the construction of additional treatment units. Additional housing appears to the north and new housing appears to the south of the subject property.

### **3.3.6. Aerial Photograph – 1975 (1" = 500'±)**

In this aerial photo from 1975, the subject property appears similar to the previous photo. The bridge leading into the north portion of the subject property is no longer visible. Additional residential homes can be seen to the north and south of the subject property.

### **3.3.7. Aerial Photograph – 1979 (1" = 500'±)**

In this aerial photo from 1979, construction appears to be occurring at the subject property. Disturbed soil and additional treatment units can be seen. To the west of the subject property, there appears to be an excavated area/pond. Additional baseball/softball fields appear to the south.

### **3.3.8. Aerial Photograph – 1983 (1" = 500'±)**

In this aerial photo from 1983, the subject property still appears to be under construction. To the west, two additional excavated areas/ponds can be seen. To the north, a waterbody connected to Oso Bay, undeveloped land, the Oso Municipal Golf Course, and residential homes can be seen. To the east, Ennis Joslin Road, undeveloped land, and Oso Bay can be seen. To the south, Nile Drive, undeveloped land, baseball fields, and residential homes are present.

### **3.3.9. Aerial Photograph – 1985 (1" = 500'±)**

In this aerial photo from 1985, construction appears to be finished at the subject property. Surrounding properties appear similar to the previous photo.

**3.3.10. Aerial Photograph – 1995 (1" = 500'±)**

In this aerial photo from 1995, the subject property and surrounding properties appear similar to the previous photo.

**3.3.11. Aerial Photograph – 2002 (1" = 500'±)**

In this aerial photo from 2002, the subject property appears similar to the previous photo. To the east, Ennis Joslin Road appears to have been widened. To the south, there appears to be a laydown storage area, possibly associated with the road widening.

**3.3.12. Aerial Photograph – 2004 (1" = 500'±)**

In this aerial photo from 2004, the subject property and surrounding properties appear similar to the previous photo.

**3.3.13. Aerial Photograph – 2005 (1" = 500'±)**

In this aerial photo from 2005, the subject property and surrounding properties appear similar to the previous photo.

**3.3.14. Aerial Photograph – 2006 (1" = 500'±)**

In this aerial photo from 2006, the subject property and most surrounding properties appear similar to the previous photo. To the south, the laydown storage area can no longer be seen.

**3.3.15. Aerial Photograph – 2008 (1" = 500'±)**

In this aerial photo from 2008, the subject property and surrounding properties appear similar to the previous photo.

**3.3.16. Aerial Photograph – 2010 (1" = 500'±)**

In this aerial photo from 2010, the subject property and surrounding properties appear similar to the previous photo.

**3.3.17. Aerial Photograph – 2012 (1" = 500'±)**

In this aerial photo from 2012, the WWTP can still be seen on the subject property. Most surrounding properties appear similar to the previous photo. To the south, tennis courts and signs of ongoing construction can be seen.

**3.3.18. Aerial Photograph – 2014 (1" = 500'±)**

In this aerial photo from 2014, a new sludge dewatering facility can be seen in the northwest portion of the subject property. To the south, a soccer field and parking lot can be seen near the tennis courts. To the southeast, the baseball fields are no longer present.

### **3.3.19. Aerial Photograph – 2016 (1" = 500'±)**

In this aerial photo from 2016, the subject property and most surrounding properties appear similar to the previous photo. TAMUCC housing can be seen to the southeast of the subject property.

### **3.3.20. Aerial Photograph – 2018 (1" = 500'±)**

In this aerial photo from 2018, the subject property and surrounding properties appear similar to the previous photo.

### **3.3.21. Aerial Photograph – 2020 (1" = 500'±)**

In this aerial photo from 2020, the subject property and most surrounding properties appear similar to the previous photo. To the south, the TAMUCC Momentum Recreational Fields can be seen.

### **3.3.22. Aerial Photograph – 2022 (1" = 500'±)**

In this aerial photo from 2022, the subject property and surrounding properties appear similar to the previous photo.

### **3.3.23. Aerial Photograph – 2025 (1" = 500'±)**

In this aerial photo from 2025, wastewater treatment units can still be seen on the subject property. To the north, the waterbody connected to Oso Bay, Oso Municipal Golf Course, and residential homes can still be seen. To the east, Ennis Joslin Road, undeveloped land, and Oso Bay can still be seen. To the south, undeveloped land, TAMUCC recreation/sports fields, TAMUCC housing, and residential homes can still be seen. To the west, undeveloped land, TAMUCC sports fields, and residential homes can still be seen.

## **3.4. Historical Topographic Maps**

Historical topographic maps provide information on the topography of the subject property and surrounding properties and may contain information on oil and gas exploration and waste disposal. The maps did not show signs of oil and gas exploration or waste disposal on the subject property. The 1951, 1968, 1975, 2016, 2019, and 2022 maps show several wastewater treatment units on the subject property. The 1925 map shows a road leading onto the subject property and a structure to the south of the subject property. The 1951 maps show a bridge leading into the north portion of the subject property. The 1951 through 2022 maps show the Oso Municipal Golf Course to the northwest of the subject property. The historical topographic maps are provided in Exhibit E.

## **3.5. City Directories**

City Directory services were requested from ERIS for this report; the City Directory Report is provided in Exhibit F. Listings identified for the subject property at 501 Nile Drive include Corpus Christi Wastewater in 2003 and 2016 and Corpus Christi Wastewater/Oso Wastewater Treatment Plant in 2007, 2012, 2020 and 2024.

Nearby listings for Nile Drive include Cont Pony League/Oso Senior League (baseball fields) in 1975; Padre Senior Baseball/Oso Pony-Colt (baseball fields) in 1985, 1990, and 1995; and Dr. Jack Dugan Soccer Track in 2020.

No nearby listings were identified for Ennis Joslin Road.

### **3.6. Fire Insurance Map Records**

Historical fire insurance maps were requested from ERIS to evaluate the past uses and relevant characteristics of the subject property and surrounding properties. No maps were available for the subject property or surrounding properties. The Fire Insurance Map Report is supplied in Exhibit G.

### **3.7. Environmental Liens**

The environmental lien search was performed by ERIS for the subject property; the results are provided in Exhibit H. According to the environmental lien search, no environmental liens or activity and use limitations were found.

### **3.8. Oil and Gas Exploration and Water Well Records**

Oil, gas, and water well records from ERIS were reviewed for the subject property and surrounding land. No wells were identified on the subject property. Well locations identified within one mile of the subject property include one domestic well, two dry hole locations, 20 monitor wells, 28 plugged monitor wells, seven environmental soil borings, two piezometers, two withdrawal of water wells, four water wells, one USGS well, and one observation well. The nearest well identified was a monitor well approximately 967 feet east northeast of the subject property. No oil or gas pipelines are present near the subject property, other than a City of Corpus Christi residential gas line present along the east side of the subject property.

Well and pipeline information can be found in ERIS's Physical Setting Report in Exhibit A.

### **3.9. Additional Records**

An Administrative Package submitted to TCEQ to renew the Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010401004 for the Oso Water Reclamation Plant was available for review. The renewal package included information stating that the facility has a stormwater permit (No. TXR05X003) and a reclaimed water authorization (No. R10401004). Information was also provided that the requirements of Agreed Order No. 2020-1231-MWD-E have been met. Photos provided in the administrative package showed that some treatment units at the facility have been in place since 1943.

Drawings were provided by the City of Corpus Christi for the Oso Water Reclamation Plant Process Upgrade & Breakpoint Chlorination (BPC) Facility Decommissioning project. The drawings were reviewed and the Existing Master Site Plan is provided in Exhibit I.

## **4. Property Reconnaissance**

### **4.1. General**

Ms. Tara Ducrest, an environmental scientist with Hanson Professional Services Inc., conducted the property reconnaissance visit of the subject property on September 16, 2025. Photographs taken during the property visit are provided in Exhibit J.

### **4.2. Observations**

Currently, the subject property is occupied by the City of Corpus Christi Oso Water Reclamation Plant. Several wastewater treatment units are present on the subject property, including an influent structure, lift stations, headworks, clarifiers, aeration tanks, reaeration tanks, aerated sludge holding tanks, a solids dewatering facility, blower houses, electro contaminant removal systems, chlorine contact chambers, sodium hydroxide facilities, sodium hypochlorite facilities, a sodium bisulfite facility, meter vaults, an effluent pump station, and an odor control unit. A plant office and control building for the WWTP is present on the south side of the subject property. Three permanent emergency generators, three temporary emergency generators, and six pad-mounted transformers were observed throughout the facility. No markings were observed to indicate that the transformers did not contain Polychlorinated Biphenyls (PCBs). During the site visit, construction was occurring at the WWTP. A construction equipment storage area was observed along the north boundary of the WWTP. Items observed in the construction storage area include a large crane, a diesel fuel tank with secondary containment, and several cargo containers holding tools and equipment. Dumpsters for sludge storage were observed in the sludge dewatering building. Containers of Clarifloc CE-1323 were observed near the sludge dewatering building. Electric distribution lines are present along the south side of the subject property.

A drainage feature and the Oso Municipal Golf Course are present to the north of the subject property. To the east, Ennis Joslin Road, Hans & Pat Suter Wildlife Refuge, and Oso Bay are present. Undeveloped land, Nile Drive, and Texas A & M University – Corpus Christi (TAMUCC) sports fields and housing are present to the south of the subject property. To the west, undeveloped land and TAMUCC sports fields are present.

### **4.3. Improvements**

A plant office/control building and wastewater treatment units are present on the subject property, including an influent structure, lift stations, headworks, clarifiers, aeration tanks, reaeration tanks, aerated sludge holding tanks, solids dewatering facility, blower houses, electro contaminant removal systems, chlorine contact chambers, sodium hydroxide facilities, sodium hypochlorite facilities, sodium bisulfite facility, meter vaults, effluent pump station, and an odor control unit. A fence surrounds the subject property.

### **4.4. Pits, Ponds, and Lagoons**

Several concrete treatment units are present on the subject property. No other pits, ponds, or lagoons were observed on the subject property during the site visit.

#### **4.5. Stained Soils**

No stained soils were observed on the subject property during the site visit.

#### **4.6. Stressed Vegetation**

No signs of stressed vegetation were observed on the subject property during the site visit.

#### **4.7. Possible Presence of Polychlorinated Biphenyls (PCBs)**

Six pad mounted transformers were observed on the east side of the subject property. No markings were observed to indicate that the units are PCB-free.

Treatment units for processing sewage sludge are present on the subject property and PCBs may accumulate in sewage sludge.

#### **4.8. Solid Waste Disposal**

No signs of solid waste disposal were observed on the subject property during the site visit.

#### **4.9. Identification of Contaminant Migration Paths**

The most likely migration paths for the subject property would be via soil or groundwater infiltration or from buried piping on the subject property.

#### **4.10. Wastewater**

The subject property is a wastewater treatment plant.

#### **4.11. Other Issues**

Wastewater treatment and sludge management have occurred at the WWTP on the subject property. Sewage sludge could potentially contain Per- and Polyfluoroalkyl Substances (PFAS).

## **5. Interviews**

Mr. Sigifredo De Leon, the Plant Superintendent, completed an interview questionnaire regarding the Oso Wastewater Treatment Plant. Mr. De Leon's knowledge of the subject property covers from 2016 to the present. He stated that historic uses of the subject property include use of the property as a wastewater treatment plant. He stated that chemicals used at the WWTP include paint, polymer, oil, gear lube, hydraulic fluid, diesel, gasoline, sodium hypochlorite, and sodium bisulfite and that aboveground storage tanks for sodium hypochlorite, sodium bisulfite, diesel, and reuse effluent are present. Hydrogen sulfide odors from the WWTP have occurred at the subject property. Mr. De Leon stated that waste generated onsite is disposed of at a landfill and that no chemicals have been spilled on the subject property, no wastes have been disposed of onsite, no pits/ponds/lagoons are on the subject property, no oil or gas exploration has occurred on the subject property, the subject property is not a concentrated animal feeding operation or a silviculture facility, and has not been used for hunting or shooting. Mr. De Leon's questionnaire response is provided in Exhibit K.

## 6. Conclusion

Hanson Professional Services Inc. (Hanson) conducted a Phase I Environmental Site Assessment (ESA) for the City of Corpus Christi Oso Water Reclamation Plant, a wastewater treatment plant (WWTP), located at 501 Nile Drive in Corpus Christi, Nueces County, Texas. The ESA was performed in general accordance with the requirements for the American Society for Testing Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-21.

The subject property is located northwest of the intersection of Nile Drive and Ennis Joslin Road in Corpus Christi, Nueces County, Texas 78412. Currently, the subject property is occupied by the City of Corpus Christi Oso Water Reclamation Plant. Several wastewater treatment units are present on the subject property, including an influent structure, lift stations, headworks, clarifiers, aeration tanks, reaeration tanks, aerated sludge holding tanks, a solids dewatering facility, blower houses, electro contaminant removal systems, chlorine contact chambers, sodium hydroxide facilities, sodium hypochlorite facilities, a sodium bisulfite facility, meter vaults, an effluent pump station, and an odor control unit. A plant office and control building for the WWTP is present on the south side of the subject property. Three permanent emergency generators, three temporary emergency generators, and six pad-mounted transformers were observed throughout the facility. No markings were observed to indicate that the transformers did not contain Polychlorinated Biphenyls (PCBs). During the site visit, construction was occurring at the WWTP. A construction equipment storage area was observed along the north boundary of the WWTP. Items observed in the construction storage area include a large crane, a diesel fuel tank with secondary containment, and several cargo containers holding tools and equipment. Dumpsters for sludge storage were observed in the sludge dewatering building. Containers of Clarifloc CE-1323 were observed near the sludge dewatering building. Electric distribution lines are present along the south side of the subject property. Wastewater mains are present on the west, north, and east sides of the subject property. A storm sewer line and a residential gas line are present along the east side of the subject property. A buffer easement exists around the WWTP.

The WWTP on the subject property has been in operation since at least 1943. Prior to 1943, the west and central portions of the subject property appear to have been used as farmland since at least the 1930s and the east portion of the subject property was undeveloped land and a waterbody connecting to Oso Bay.

A drainage feature and the Oso Municipal Golf Course are present to the north of the subject property. To the east, Ennis Joslin Road, Hans & Pat Suter Wildlife Refuge, and Oso Bay are present. Undeveloped land, Nile Drive, and Texas A & M University – Corpus Christi (TAMUCC) sports fields and housing are present to the south of the subject property. To the west, undeveloped land and TAMUCC sports fields are present.

Information pertaining to potential environmental liabilities resulting from the treating, storing, disposing, discharging, or emitting of hazardous and/or regulated substances was obtained by Hanson through ERIS. Twenty-four database findings were reported for the subject property for ERIS IDs 1 and 3. The findings were in the Emergency Response Notification System (ERNS), Facility Registry Service/Facility Index (FINDS/FRS), Notices of Enforcement (NOE), Notice of Violation (NOV), Court Orders & Administrative Orders (ORD), Per- and Poly-Fluoroalkyl Substances Industry Sectors (PFAS IND), Spills (SPILLS), Tier 2 Report (TIER 2), and Integrated Compliance Information System (ICIS) databases. The wastewater treatment plant operations at the subject property are a recognized environmental condition (REC).

ERIS identified five sites within the ASTM search radius beyond the subject property boundary. Based on the available database information and the proximity and physical setting of the identified sites, they are not considered to be RECs.

Oil, gas, and water well records from ERIS were reviewed for the subject property and surrounding land. No wells were identified on the subject property. Well locations identified within one mile of the subject property include one domestic well, two dry hole locations, 20 monitor wells, 28 plugged monitor wells, seven environmental soil borings, two piezometers, two withdrawal of water wells, four water wells, one USGS well, and one observation well. The nearest well identified was a monitor well approximately 967 feet east northeast of the subject property. No oil or gas pipelines are present near the subject property, other than a City of Corpus Christi residential gas line present along the east side of the subject property.

No stained soil or stressed vegetation were observed on the subject property during the site visit. Other than the treatment units associated with operation of the Oso Water Reclamation Plant, no waste disposal pits, ponds, or lagoons were observed on the subject property during the site visit.

## **Findings**

Our review of site information and a property inspection revealed the following potential environmental liabilities associated with the subject property:

### On-Site RECs:

- *Possible Presence of Contamination from Operation of WWTP on Subject Property* – The Oso Water Reclamation Plant on the subject property has been in operation since 1943. Wastewater treatment and sludge management have occurred at the WWTP. This site could potentially be a REC due to the possible presence of contamination from metals, PCBs, and PFAS. In addition, violations have occurred at the WWTP for violation of general air quality rules; unauthorized emissions; unauthorized discharges; failure to comply with permit conditions; failure to comply with sampling and laboratory testing methods; failure to comply with permit submittal requirements and review process; failure to comply with screening and grit disposal, scum removal, and aeration system design requirements; failure to comply with control of hydrogen sulfide requirements; and failure to comply with pretreatment program requirements.

## **Recommendations**

Due to the site being an active wastewater treatment plant, a Phase II Environmental Site Assessment is not currently recommended. In the event that the Oso Water Reclamation Plant were to be decommissioned, assessment for potential contamination of the subject property would be recommended.

**Attachment G –  
IPAC Documentation**

# USFWS Official Species List



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Texas Coastal & Central Plains Esfo  
17629 El Camino Real, Suite 211  
Houston, TX 77058-3051  
Phone: (281) 286-8282 Fax: (281) 488-5882

In Reply Refer To:  
Project Code: 2026-0012098  
Project Name: Oso WWTP Emergency Generator

11/04/2025 19:59:27 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

## To Whom It May Concern:

The U.S. Fish and Wildlife Service (Service) field offices in Clear Lake, Corpus Christi, Fort Worth, and Alamo, Texas, have combined administratively to form the Texas Coastal & Central Plains Field Office. All project related correspondence should be sent to the field office address listed below responsible for the county in which your project occurs:

Project Leader; U.S. Fish and Wildlife Service; 17629 El Camino Real Ste. 211; Houston, Texas 77058

*Angelina, Austin, Brazoria, Brazos, Chambers, Colorado, Fayette, Fort Bend, Freestone, Galveston, Grimes, Hardin, Harris, Houston, Jasper, Jefferson, Leon, Liberty, Limestone, Madison, Matagorda, Montgomery, Newton, Orange, Polk, Robertson, Sabine, San Augustine, San Jacinto, Trinity, Tyler, Walker, Waller, and Wharton.*

Assistant Field Supervisor, U.S. Fish and Wildlife Service; 4444 Corona Drive, Ste 215; Corpus Christi, Texas 78411

*Aransas, Atascosa, Bee, Brooks, Calhoun, De Witt, Dimmit, Duval, Frio, Goliad, Gonzales, Jackson, Jim Hogg, Jim Wells, Karnes, Kenedy, Kleberg, La Salle, Lavaca, Live Oak, Maverick, McMullen, Nueces, Refugio, San Patricio, Victoria, and Wilson.*

U.S. Fish and Wildlife Service; Santa Ana National Wildlife Refuge; Attn: Texas Ecological Services Sub-Office; 3325 Green Jay Road, Alamo, Texas 78516

*Cameron, Hidalgo, Starr, Webb, Willacy, and Zapata.*

For questions or coordination for projects occurring in counties not listed above, please contact [arles@fws.gov](mailto:arles@fws.gov).

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your

proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <http://www.fws.gov/media/endangered-species-consultation-handbook>.

Non-Federal entities may consult under Sections 9 and 10 of the Act. Section 9 and Federal regulations prohibit the take of endangered and threatened species, respectively, without special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined (50 CFR § 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. "Harass" is defined (50 CFR § 17.3) as intentional or negligent actions that create the likelihood of

injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Should the proposed project have the potential to take listed species, the Service recommends that the applicant develop a Habitat Conservation Plan and obtain a section 10(a)(1)(B) permit. The Habitat Conservation Planning Handbook is available at: <https://www.fws.gov/library/collections/habitat-conservation-planning-handbook>.

#### Migratory Birds:

In addition to responsibilities to protect threatened and endangered species under the Act, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts visit: <https://www.fws.gov/program/migratory-birds>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable National Environmental Policy Act (NEPA) documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

#### Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Marine Mammals
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Texas Coastal & Central Plains Esfo**

17629 El Camino Real, Suite 211

Houston, TX 77058-3051

(281) 286-8282

## PROJECT SUMMARY

Project Code: 2026-0012098

Project Name: Oso WWTP Emergency Generator

Project Type: Wastewater Facility - Maintenance / Modification

Project Description: The purpose of this project is to install emergency generators at the Oso WWTP.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@27.7098921,-97.34071298661055,14z>



Counties: Nueces County, Texas

## ENDANGERED SPECIES ACT SPECIES

There is a total of 13 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

**MAMMALS**

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered
West Indian Manatee <i>Trichechus manatus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <b>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</b> Species profile: <a href="https://ecos.fws.gov/ecp/species/4469">https://ecos.fws.gov/ecp/species/4469</a>	Threatened

**BIRDS**

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a>	Threatened
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> Population: Wherever found, except where listed as an experimental population No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1923">https://ecos.fws.gov/ecp/species/1923</a>	Endangered
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Endangered

**REPTILES**

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: North Atlantic DPS There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a>	Threatened
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i>	Endangered

NAME	STATUS
There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a>	
Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5523">https://ecos.fws.gov/ecp/species/5523</a>	Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## FLOWERING PLANTS

NAME	STATUS
Slender Rush-pea <i>Hoffmannseggia tenella</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5298">https://ecos.fws.gov/ecp/species/5298</a>	Endangered
South Texas Ambrosia <i>Ambrosia cheiranthifolia</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3331">https://ecos.fws.gov/ecp/species/3331</a>	Endangered

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA). Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

## MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/10561">https://ecos.fws.gov/ecp/species/10561</a>	Breeds elsewhere
American Oystercatcher <i>Haematopus palliatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8935">https://ecos.fws.gov/ecp/species/8935</a>	Breeds Apr 15 to Aug 31

NAME	BREEDING SEASON
<p><b>Black Skimmer</b> <i>Rynchops niger</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/5234">https://ecos.fws.gov/ecp/species/5234</a></p>	Breeds May 20 to Sep 15
<p><b>Chimney Swift</b> <i>Chaetura pelagica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a></p>	Breeds Mar 15 to Aug 25
<p><b>Dickcissel</b> <i>Spiza americana</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/9453">https://ecos.fws.gov/ecp/species/9453</a></p>	Breeds May 5 to Aug 31
<p><b>Forster's Tern</b> <i>Sterna forsteri</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/11953">https://ecos.fws.gov/ecp/species/11953</a></p>	Breeds Mar 1 to Aug 15
<p><b>Gull-billed Tern</b> <i>Gelochelidon nilotica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9501">https://ecos.fws.gov/ecp/species/9501</a></p>	Breeds May 1 to Jul 31
<p><b>Hudsonian Godwit</b> <i>Limosa haemastica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9482">https://ecos.fws.gov/ecp/species/9482</a></p>	Breeds elsewhere
<p><b>King Rail</b> <i>Rallus elegans</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/8936">https://ecos.fws.gov/ecp/species/8936</a></p>	Breeds May 1 to Sep 5
<p><b>Le Conte's Sparrow</b> <i>Ammospiza leconteii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9469">https://ecos.fws.gov/ecp/species/9469</a></p>	Breeds elsewhere
<p><b>Least Tern</b> <i>Sternula antillarum antillarum</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/11919">https://ecos.fws.gov/ecp/species/11919</a></p>	Breeds Apr 25 to Sep 5
<p><b>Lesser Yellowlegs</b> <i>Tringa flavipes</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere

NAME	BREEDING SEASON
<p>Long-billed Curlew <i>Numenius americanus</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/5511">https://ecos.fws.gov/ecp/species/5511</a></p>	Breeds elsewhere
<p>Marbled Godwit <i>Limosa fedoa</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9481">https://ecos.fws.gov/ecp/species/9481</a></p>	Breeds elsewhere
<p>Painted Bunting <i>Passerina ciris</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9511">https://ecos.fws.gov/ecp/species/9511</a></p>	Breeds Apr 25 to Aug 15
<p>Pectoral Sandpiper <i>Calidris melanotos</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9561">https://ecos.fws.gov/ecp/species/9561</a></p>	Breeds elsewhere
<p>Prairie Loggerhead Shrike <i>Lanius ludovicianus excubitorides</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/8833">https://ecos.fws.gov/ecp/species/8833</a></p>	Breeds Feb 1 to Jul 31
<p>Prothonotary Warbler <i>Protonotaria citrea</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9439">https://ecos.fws.gov/ecp/species/9439</a></p>	Breeds Apr 1 to Jul 31
<p>Red Knot <i>Calidris canutus roselaari</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/8880">https://ecos.fws.gov/ecp/species/8880</a></p>	Breeds elsewhere
<p>Reddish Egret <i>Egretta rufescens</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/7617">https://ecos.fws.gov/ecp/species/7617</a></p>	Breeds Mar 1 to Sep 15
<p>Ruddy Turnstone <i>Arenaria interpres morinella</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/10633">https://ecos.fws.gov/ecp/species/10633</a></p>	Breeds elsewhere
<p>Sandwich Tern <i>Thalasseus sandvicensis</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9731">https://ecos.fws.gov/ecp/species/9731</a></p>	Breeds Apr 25 to Aug 31

NAME	BREEDING SEASON
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a>	Breeds elsewhere
Sprague's Pipit <i>Anthus spragueii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8964">https://ecos.fws.gov/ecp/species/8964</a>	Breeds elsewhere
Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8938">https://ecos.fws.gov/ecp/species/8938</a>	Breeds Mar 10 to Jun 30
Whimbrel <i>Numenius phaeopus hudsonicus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/11991">https://ecos.fws.gov/ecp/species/11991</a>	Breeds elsewhere
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/10669">https://ecos.fws.gov/ecp/species/10669</a>	Breeds Apr 20 to Aug 5
Wilson's Plover <i>Charadrius wilsonia</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9722">https://ecos.fws.gov/ecp/species/9722</a>	Breeds Apr 1 to Aug 20

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

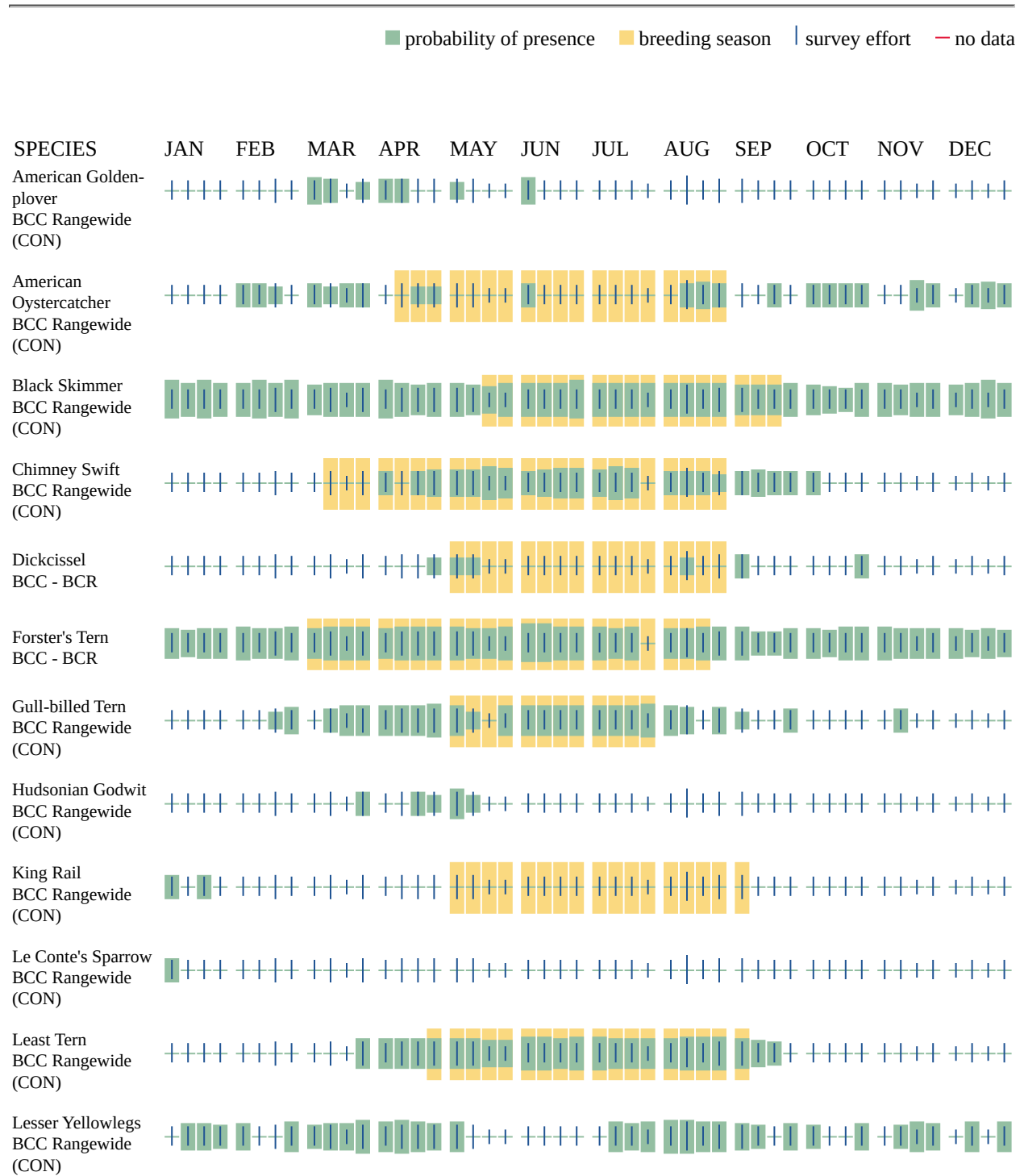
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

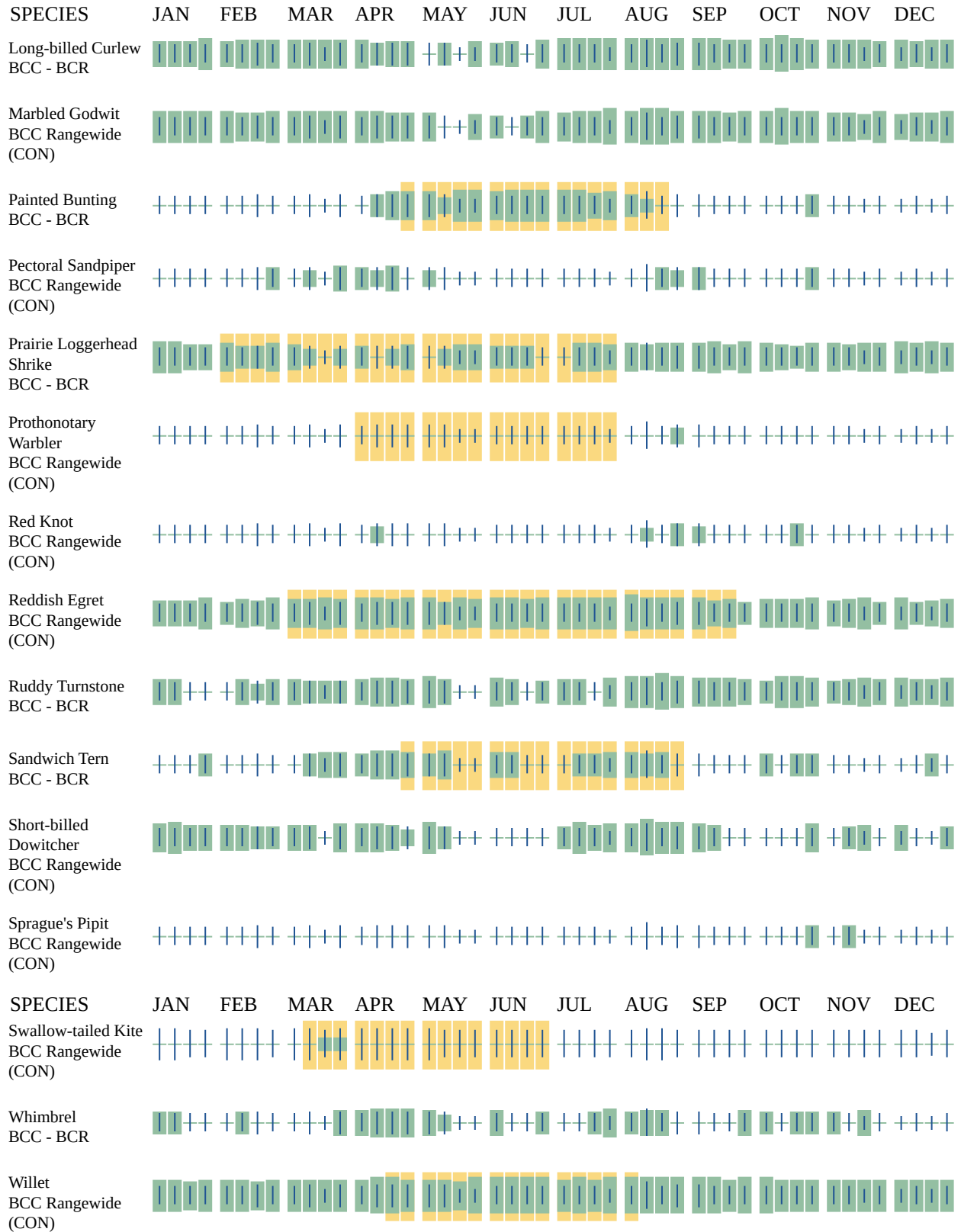
### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data (-)**

A week is marked as having no data if there were no survey events for that week.





Wilson's Plover  
BCC Rangewide  
(CON)



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## MARINE MAMMALS

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act<sup>1</sup> and the Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>2</sup>.

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries<sup>3</sup> [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

- 
1. The [Endangered Species Act](#) (ESA) of 1973.
  2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
  3. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

NAME

West Indian Manatee *Trichechus manatus*

Species profile: <https://ecos.fws.gov/ecp/species/4469>

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

### FRESHWATER POND

- PUBKx

## **IPAC USER CONTACT INFORMATION**

Agency: Corpus Christi city  
Name: Tara Ducrest  
Address: 4501 Gollihar  
City: Corpus Christi  
State: TX  
Zip: 78411  
Email: tducrest@hanson-inc.com  
Phone: 3618149900

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Texas General Land Office

# IPAC Biological Analysis

# OSO WWTP EMERGENCY GENERATOR

## BIOLOGICAL ANALYSIS

Prepared using IPaC

Generated by Tara Ducrest (tducrest@hanson-inc.com)

December 9, 2025

The purpose of this document is to assess the effects of the proposed project and determine whether the project may affect any federally threatened, endangered, proposed, or candidate species. If appropriate for the project, this document may be used as a biological assessment (BA), as it is prepared in accordance with legal requirements set forth under [Section 7 of the Endangered Species Act \(16 U.S.C. 1536 \(c\)\)](#).

In this document, any data provided by U.S. Fish and Wildlife Service is based on data as of November 4, 2025.

Prepared using IPaC version 6.128.17-rc2

# OSO WWTP EMERGENCY GENERATOR BIOLOGICAL ASSESSMENT

## TABLE OF CONTENTS

1 Description of the action	5
1.1 Project name	5
1.2 Executive summary	5
1.3 Effect determination summary	5
1.4 Project description	6
1.4.1 Location	6
1.4.2 Description of project habitat	6
1.4.3 Project proponent information	7
1.4.4 Project purpose	7
1.4.5 Project type and deconstruction	7
1.4.6 Anticipated environmental stressors	11
1.5 Action area	12
1.6 Conservation measures	13
1.7 Prior consultation history	13
1.8 Other agency partners and interested parties	13
1.9 Other reports and helpful information	13
2 Species effects analysis	14
2.1 Eastern Black Rail	14
Justification for exclusion	14
2.2 Green Sea Turtle	14
Justification for exclusion	14
2.3 Hawksbill Sea Turtle	14
Justification for exclusion	14
2.4 Monarch Butterfly	15
Justification for exclusion	15
2.5 Northern Aplomado Falcon	15
Justification for exclusion	15
2.6 Piping Plover	15
Justification for exclusion	15
2.7 Rufa Red Knot	15
Justification for exclusion	15
2.8 Slender Rush-pea	16
Justification for exclusion	16
2.9 South Texas Ambrosia	16
Justification for exclusion	16

2.10 West Indian Manatee	16
Justification for exclusion	16
2.11 Whooping Crane	16
Justification for exclusion	16
3 Critical habitat effects analysis	17
4 Summary Discussion and Conclusion	18
4.1 Summary discussion	18
4.2 Conclusion	18



# 1 DESCRIPTION OF THE ACTION

## 1.1 PROJECT NAME

Oso WWTP Emergency Generator

## 1.2 EXECUTIVE SUMMARY

This project involves installation of emergency generators within the existing footprint of the Oso Wastewater Treatment Plant. No effects to species or critical habitat are anticipated from this project.

## 1.3 EFFECT DETERMINATION SUMMARY

SPECIES (COMMON NAME)	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
<a href="#">Eastern Black Rail</a>	<i>Laterallus jamaicensis</i> ssp. <i>jamaicensis</i>	Threatened	No	NE
<a href="#">Green Sea Turtle</a>	<i>Chelonia mydas</i>	Threatened	No	NE
<a href="#">Hawksbill Sea Turtle</a>	<i>Eretmochelys imbricata</i>	Endangered	No	NE
<a href="#">Monarch Butterfly</a>	<i>Danaus plexippus</i>	Proposed Threatened	Excluded from analysis	Excluded from analysis
<a href="#">Northern Aplomado Falcon</a>	<i>Falco femoralis septentrionalis</i>	Endangered	No	NE
<a href="#">Piping Plover</a>	<i>Charadrius melodus</i>	Threatened	No	NE
<a href="#">Rufa Red Knot</a>	<i>Calidris canutus rufa</i>	Threatened	No	NE
<a href="#">Slender Rush-pea</a>	<i>Hoffmannseggia tenella</i>	Endangered	No	NE
<a href="#">South Texas Ambrosia</a>	<i>Ambrosia cheiranthifolia</i>	Endangered	No	NE
Tricolored Bat <sup>†</sup> . This species or critical habitat is covered by a DKey.	<i>Perimyotis subflavus</i>	Proposed Endangered		NE
<a href="#">West Indian Manatee</a>	<i>Trichechus manatus</i>	Threatened	No	NE
<a href="#">Whooping Crane</a>	<i>Grus americana</i>	Endangered	No	NE

<sup>†</sup> This species or critical habitat has been analyzed through a Determination Key.

## 1.4 PROJECT DESCRIPTION

### 1.4.1 LOCATION



#### LOCATION

Nueces County, Texas

### 1.4.2 DESCRIPTION OF PROJECT HABITAT

The site is a previously developed wastewater treatment plant.

### 1.4.3 PROJECT PROPONENT INFORMATION

Provide information regarding who is proposing to conduct the project, and their contact information. Please provide details on whether there is a Federal nexus.

#### REQUESTING AGENCY

**FULL NAME**

Tara Ducrest

**STREET ADDRESS**

4501 Gollihar

**CITY**

Corpus Christi

**STATE**

TX

**ZIP**

78411

**PHONE NUMBER**

3618149900

**E-MAIL ADDRESS**

tducrest@hanson-inc.com

#### LEAD AGENCY

State of Texas

Texas General Land Office

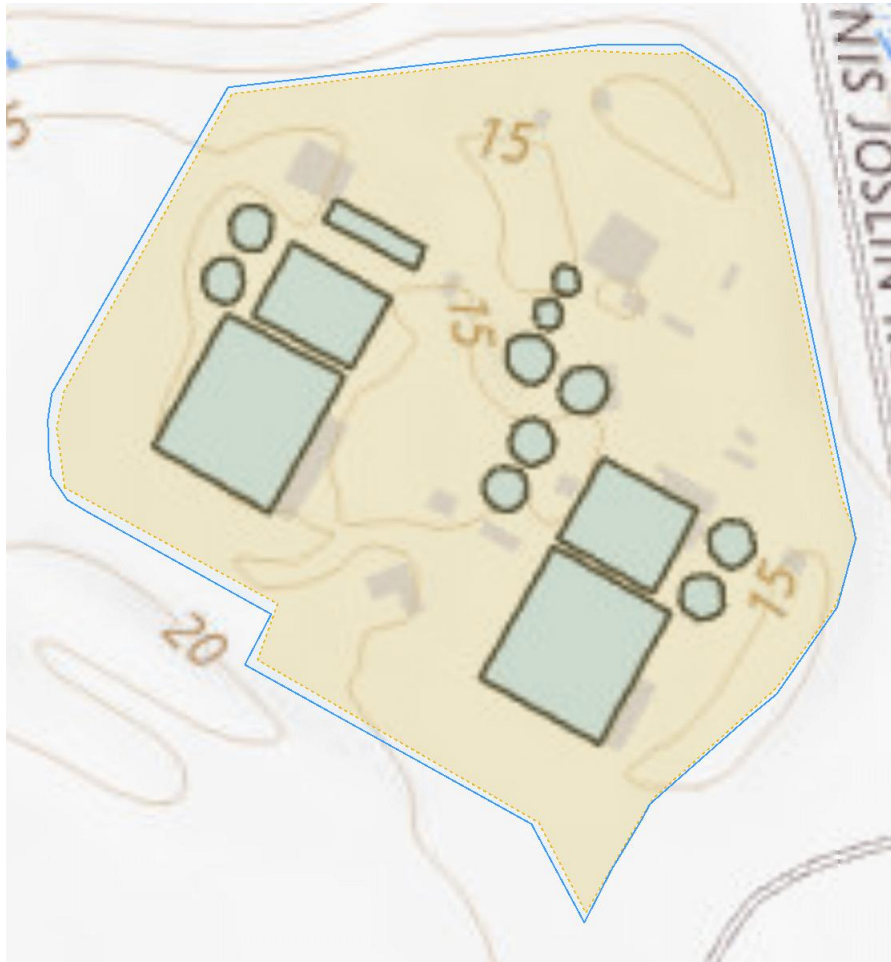
### 1.4.4 PROJECT PURPOSE

The project is at the Oso Wastewater Treatment Plant (WWTP), which is located at 501 Nile Drive to the northwest of the intersection of Ennis Joslin Road and Nile Drive in Corpus Christi, Nueces County, Texas 78412. The WWTP is at 27.710205° north latitude and -97.340432° west longitude. The purpose of this project is to install emergency generators at the Oso WWTP.



### 1.4.5 PROJECT TYPE AND DECONSTRUCTION

This project is a wastewater treatment plant construction project.

### 1.4.5.1 PROJECT MAP



#### LEGEND

-  Project footprint
-  Emergency Generators, Site Grading, Utility Tie In: Finish grading, in-ground utilities construction, install specific wastewater treatment components, prepare the project site (terrestrial), wastewater treatment plant emergency generator (structure)

#### **1.4.5.2 WASTEWATER TREATMENT PLANT EMERGENCY GENERATOR**

**STRUCTURE COMPLETION DATE**

January 01, 2027

**REMOVAL/DECOMMISSION DATE (IF APPLICABLE)**

January 01, 2028

**STRESSORS**

This activity is not expected to have any impact on the environment.

**DESCRIPTION**

Emergency generators will be installed within the existing footprint of the Oso WWTP. Stressors are not anticipated to occur.

#### **1.4.5.3 FINISH GRADING**

**ACTIVITY START DATE**

January 01, 2027

**ACTIVITY END DATE**

January 01, 2028

**STRESSORS**

This activity is not expected to have any impact on the environment.

**DESCRIPTION**

Finish grading will occur with installation of the emergency generators. Stressors are not anticipated to occur.

#### **1.4.5.4 IN-GROUND UTILITIES CONSTRUCTION**

**ACTIVITY START DATE**

January 01, 2027

**ACTIVITY END DATE**

January 01, 2028

**STRESSORS**

This activity is not expected to have any impact on the environment.

**DESCRIPTION**

The project will involve installation of emergency generators at the Oso WWTP. Construction will include buried conduit/cables to connect the WWTP to the generators.

#### **1.4.5.5 INSTALL SPECIFIC WASTEWATER TREATMENT COMPONENTS**

**ACTIVITY START DATE**

January 01, 2027

**ACTIVITY END DATE**

January 01, 2028

**STRESSORS**

This activity is not expected to have any impact on the environment.

**DESCRIPTION**

The emergency generators will be installed in the existing footprint of the Oso WWTP. Stressors are not anticipated to occur.

#### **1.4.5.6 PREPARE THE PROJECT SITE (TERRESTRIAL)**

**ACTIVITY START DATE**

January 01, 2027

**ACTIVITY END DATE**

January 01, 2028

**STRESSORS**

This activity is not expected to have any impact on the environment.

**DESCRIPTION**

The project will involve preparing the site for installation of emergency generators within the existing footprint of the Oso WWTP. Stressors are not anticipated to occur.



#### **1.4.6 ANTICIPATED ENVIRONMENTAL STRESSORS**

*Describe the anticipated effects of your proposed project on the aspects of the land, air and water that will occur due to the activities above. These should be based on the activity deconstructions done in the previous section and will be used to inform the action area.*

## 1.5 ACTION AREA



### LEGEND

-  Project footprint
-  Stressor location

## **1.6 CONSERVATION MEASURES**

## **1.7 PRIOR CONSULTATION HISTORY**

No prior consultation for this project has occurred.

## **1.8 OTHER AGENCY PARTNERS AND INTERESTED PARTIES**

No other agencies are involved in the project.

## **1.9 OTHER REPORTS AND HELPFUL INFORMATION**

No other reports are available for this project.

## **2 SPECIES EFFECTS ANALYSIS**

*This section describes, species by species, the effects of the proposed action on listed, proposed, and candidate species, and the habitat on which they depend. In this document, effects are broken down as direct interactions (something happening directly to the species) or indirect interactions (something happening to the environment on which a species depends that could then result in effects to the species).*

*These interactions encompass effects that occur both during project construction and those which could be ongoing after the project is finished. All effects, however, should be considered, including effects from direct and indirect interactions and cumulative effects.*

### **2.1 EASTERN BLACK RAIL**

*This species has been excluded from analysis in this environmental review document.*

#### **JUSTIFICATION FOR EXCLUSION**

The required habitat of dense vegetative cover is not present at the previously developed project area.

### **2.2 GREEN SEA TURTLE**

*This species has been excluded from analysis in this environmental review document.*

#### **JUSTIFICATION FOR EXCLUSION**

The required habitat of inshore and nearshore waters is not present at the previously developed project area.

### **2.3 HAWKSBILL SEA TURTLE**

*This species has been excluded from analysis in this environmental review document.*

#### **JUSTIFICATION FOR EXCLUSION**

The required habitat of ocean and nearshore foraging grounds is not present at the previously developed project area.

## **2.4 MONARCH BUTTERFLY**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of sufficient quantity/quality of milkweed is not present at the previously developed project area.

## **2.5 NORTHERN APLOMADO FALCON**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of palm and oak savannahs, desert grassland, and open pine woodlands is not present at the previously developed project area.

## **2.6 PIPING PLOVER**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of sand spits, small islands, tidal flats, shoals, and sandbars with inlets is not present at the previously developed project area.

## **2.7 RUFA RED KNOT**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of coastal marine and estuarine habitats with large areas of exposed intertidal sediments is not present at the previously developed project area.

## **2.8 SLENDER RUSH-PEA**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of openings amongst mesquite and other woody plants that have invaded short-grass coastal prairie remnants is not present at the previously developed project area.

## **2.9 SOUTH TEXAS AMBROSIA**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of grasslands and mesquite dominated shrublands is not present at the previously developed project area.

## **2.10 WEST INDIAN MANATEE**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of marine, brackish, and freshwater systems in coastal and riverine areas is not present at the previously developed project area.

## **2.11 WHOOPING CRANE**

*This species has been excluded from analysis in this environmental review document.*

### **JUSTIFICATION FOR EXCLUSION**

The required habitat of coastal marshes, estuaries, inland marshes, lakes, open ponds, shallow bays, salt marsh, sand flats, tidal flats, upland swales, wet meadows, rivers, pastures, and agricultural fields is not present at the previously developed project area.

### **3 CRITICAL HABITAT EFFECTS ANALYSIS**

*No critical habitats intersect with the project action area.*

## **4 SUMMARY DISCUSSION AND CONCLUSION**

### **4.1 SUMMARY DISCUSSION**

The project involves installation of emergency generators within the existing footprint of the Oso WWTP. No effects to species or critical habitat are anticipated from this project.

### **4.2 CONCLUSION**

No effects are anticipated from this project.

## Determination Letter for Tricolored Bat



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Texas Coastal & Central Plains Esfo  
17629 El Camino Real, Suite 211  
Houston, TX 77058-3051  
Phone: (281) 286-8282 Fax: (281) 488-5882

In Reply Refer To:  
Project code: 2026-0012098  
Project Name: Oso WWTP Emergency Generator

12/09/2025 23:11:35 UTC

Federal Nexus: yes  
Federal Action Agency (if applicable): Texas General Land Office

**Subject:** Record of project representative's no effect determination for 'Oso WWTP Emergency Generator'

Dear Tara Ducrest:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on December 09, 2025, for 'Oso WWTP Emergency Generator' (here forward, Project). This project has been assigned Project Code 2026-0012098 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

## **Ensuring Accurate Determinations When Using IPaC**

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. *Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.*

## **Determination for the Northern Long-Eared Bat and/or Tricolored Bat**

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
----------------	-----------------------	----------------------

Tricolored Bat (*Perimyotis subflavus*)Proposed  
Endangered

No effect

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

### **Other Species and Critical Habitat that May be Present in the Action Area**

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Green Sea Turtle *Chelonia mydas* Threatened
- Hawksbill Sea Turtle *Eretmochelys imbricata* Endangered
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Northern Aplomado Falcon *Falco femoralis septentrionalis* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Rufa Red Knot *Calidris canutus rufa* Threatened
- Slender Rush-pea *Hoffmannseggia tenella* Endangered
- South Texas Ambrosia *Ambrosia cheiranthifolia* Endangered
- West Indian Manatee *Trichechus manatus* Threatened
- Whooping Crane *Grus americana* Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

### **Next Steps**

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Texas Coastal & Central Plains Esfo and reference Project Code 2026-0012098 associated with this Project.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Oso WWTP Emergency Generator

**2. Description**

The following description was provided for the project 'Oso WWTP Emergency Generator':

The purpose of this project is to install emergency generators at the Oso WWTP.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@27.7099104,-97.34072207373906,14z>



## DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

**Automatically answered**

Yes

3. Your project overlaps with Zone 2 of the area where northern long-eared bats and tricolored bats may be present and roosting in trees year-round.

Do you understand that your project may impact bats at any time during the year?

Yes

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

**Note for projects in Pennsylvania:** Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer 'yes' to this question.

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

*No*

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

**Note:** This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

*No*

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

*No*

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

*No*

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

**Automatically answered**

*No*

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

*No*

12. Will the action cause effects to a bridge?

**Note:** Covered bridges should be considered as bridges in this question.

*No*

13. Will the action result in effects to a culvert or tunnel at any time of year?

*No*

14. Are trees present within 1000 feet of the action area?

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

*Yes*

15. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

*No*

16. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

*No*

17. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

*No*

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

*No*

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

*No*

20. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

**Note:** For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

*No*

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

*No*

22. Will the action include drilling or blasting?

*No*

23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

*No*

24. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

*No*

25. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

*No*

26. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

*No*

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

*No*

28. Will the proposed action result in the use of prescribed fire?

**Note:** If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

*No*

29. Does the action area intersect the tricolored bat species list area?

**Automatically answered**

*Yes*

30. Is the action area located within 0.5-mile of radius of an entrance/opening to any known tricolored bat hibernacula or winter roost?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

**Automatically answered**

*No*

31. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

*No*

32. Your project overlaps with an area where tricolored bats may be present and roosting in trees year-round.

Has a presence/probable absence survey for the tricolored bat following the Service's [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area? If unsure, answer "No."

*No*

33. Your project overlaps with an area where tricolored bats may be present and roosting in trees year-round.

Is suitable tricolored bat habitat present within 1000 feet of project activities? Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer "Yes." Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

34. Do you have any documents that you want to include with this submission?

No

# PROJECT QUESTIONNAIRE

## **IPAC USER CONTACT INFORMATION**

Agency: Corpus Christi city  
Name: Tara Ducrest  
Address: 4501 Gollihar  
City: Corpus Christi  
State: TX  
Zip: 78411  
Email: tducrest@hanson-inc.com  
Phone: 3618149900

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Texas General Land Office

## **Attachment H –**

# **Acceptable Separation Distance Calculations and Map**

Home (/) > Programs (/programs/) > Environmental Review (/programs/environmental-review/) > ASD Calculator

# Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft<sup>2</sup> - hr - people and 10,000 BTU/ft<sup>2</sup> - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

**Note:** Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

## Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
What is the volume (gal) of the container?	<input type="text"/>
What is the Diked Area Length (ft)?	<input type="text" value="25"/>
What is the Diked Area Width (ft)?	<input type="text" value="15"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text" value="375"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>

ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	
ASD for Thermal Radiation for Buildings (ASDBPU)	
ASD for Thermal Radiation for People (ASDPNPD)	102.67
ASD for Thermal Radiation for Buildings (ASDBNPD)	16.89

**For mitigation options, please click on the following link: [Mitigation Options \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

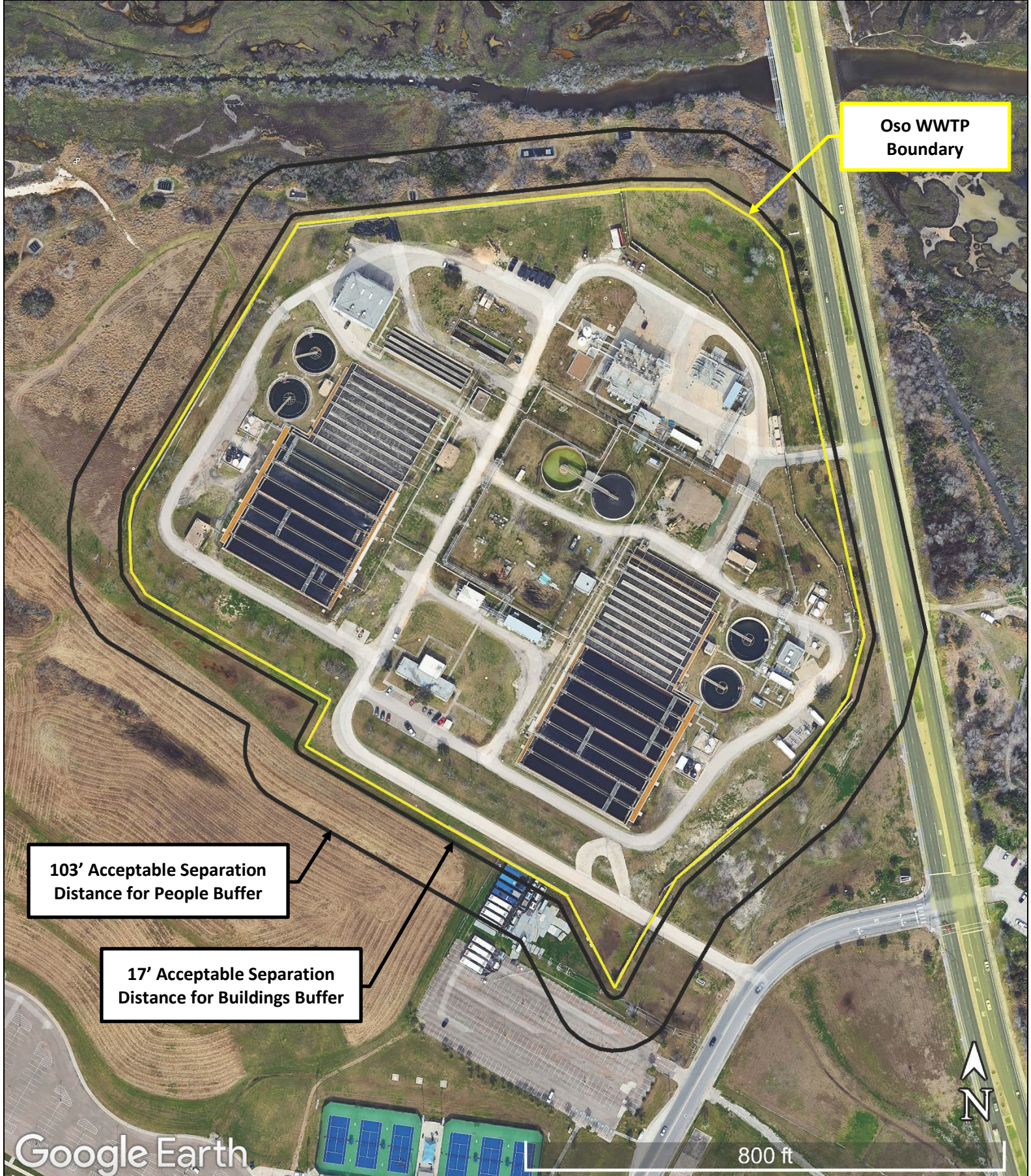
## Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us** (<https://www.hudexchange.info/contact-us/>) form.

## Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)



Oso WWTP  
Boundary

103' Acceptable Separation  
Distance for People Buffer

17' Acceptable Separation  
Distance for Buildings Buffer

Google Earth

800 ft



Note: Property Boundaries Shown  
are Approximate.

Drawn By:	TLD	Scale:	As Shown
Project Number:	24L0174A_08	Date:	12/15/25

**Acceptable Separation Distances Map**

Oso WWTP  
501 Nile Drive, Corpus Christi,  
Nueces County, Texas

**Attachment I –  
Programmatic Agreement between THC and TGLO**



**AMENDMENT NO. 1 TO  
GLO CONTRACT NO. 19-127-000-B465**

**THE GENERAL LAND OFFICE** (the “GLO”) and **TEXAS HISTORICAL COMMISSION** (“THC”), each a “Party” and collectively “the Parties” to GLO Contract No. 19-127-000-B465 (the “Agreement”), desire to amend the Agreement.

**WHEREAS**, the Parties desire to amend the Agreement to reflect all GLO Programs that are subject to the terms of the Agreement; and

**WHEREAS**, the Parties desire to revise or replace certain language in the Agreement to clarify and accurately reflect the Parties’ respective responsibilities under the Agreement; and

**WHEREAS**, the Parties desire to extend the term of the Agreement; and

**WHEREAS**, the GLO will send a copy of this executed amendment to the ACHP;

**NOW, THEREFORE**, in accordance with Article XII of the Agreement, the Parties agree as follows:

1. The first three recitals of the Agreement are deleted in their entirety and replaced with the following:

“**WHEREAS**, the GLO administers the U.S. Department of Housing and Urban Development (“HUD”) Community Development Block Grant – Disaster Recovery (“CDBG-DR”) and Community Development Block Grant – Mitigation (“CDBG-MIT”) programs (collectively, the “Program”) to provide financial assistance with funds appropriated by the Congress of the United States to facilitate disaster recovery, disaster relief, long-term recovery, restoration, economic revitalization, and mitigation and to affirmatively further fair housing, in accordance with Executive Order 12892, in areas which are Presidentially-declared major disaster areas under Title IV of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. § 5121 et seq.); and

**WHEREAS**, the GLO, in consultation with the THC, has determined that activities funded under the Program may have an effect on a CDBG-MIT-served or CDBG-DR-served historic property’s eligibility to be included in the National Register and the GLO must consult with the State Historic Preservation Officer (“SHPO”) for Texas, pursuant to Section 106 of the NHPA (herein, a “Section 106 Review”); and

**WHEREAS**, the GLO has determined that certain routine Program activities, listed in Attachment A, attached hereto and incorporated herein for all purposes, will have no effect on a CDBG-MIT-served or CDBG-DR-served historic property’s eligibility to be included in the National Register, and should be excluded from a Section 106 Review; and”

2. **ARTICLE III (B)** of the Agreement is deleted in its entirety and replaced with the following:

“(B) For all CDBG-DR and CDBG-MIT program submissions, an expedited review process of fourteen (14) calendar days upon receipt of complete documentation by SHPO will be in effect. This expedited review process shall only cover reviews submitted pursuant to **ARTICLES V and VI**, using the THC’s online eTRAC (electronic THC Review and Compliance) system, accessible at <https://www.thc.texas.gov/etrac-system>. For properties listed in or eligible for the NRHP, the THC may contact the GLO within the fourteen (14) day period to indicate that up to thirty (30) calendar days are required for the response. Additionally, for Undertakings where a report involving fieldwork is submitted, THC staff archeologists shall be allowed the full thirty (30) day period to review and comment.”

3. **ARTICLE IV (C)** of the Agreement is deleted in its entirety and replaced with the following:

“(C) **For cumulative effects:** For the purposes of this document and paraphrasing the National Environmental Policy Act definition (40 CFR § 1508.7), cumulative effects on historic properties are the effects that result from the incremental impact of the Undertaking when added to other past, present and reasonably foreseeable future Undertakings regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. GLO and THC shall notify the other Party if potential NRHP-eligible historic or archaeological districts are identified through consultation with interested parties during the course of program activities. Each potential district shall be evaluated for formal inclusion in CDBG-DR program evaluations as a historic district using criteria defined by the National Park Service in National Register Bulletin 15.”

4. **ARTICLE V (A) (3)** of the Agreement is deleted in its entirety and replaced with the following:

“(3) If an architectural property is at least forty-five (45) years of age, is not listed in the National Register, and has not been evaluated for National Register eligibility, the Responsible Entity shall submit documentation to the SHPO for review per **ARTICLE V (A) (5)** of this Agreement. The forty-five-year age limit was selected to ensure historic age resources were captured in the event of unforeseen potential Undertaking delays and to afford flexibility to account for potential inaccuracies in building dates. The Parties agree that prefabricated manufactured homes do not constitute an architectural property type of concern and do not need to be submitted to THC for historic property review regardless of age if this origin is confirmed by a SOI-qualified architectural historian.”

5. **ARTICLE VI (A) (1)** of the Agreement is deleted in its entirety and replaced with the following:

“(1) For Undertakings that involve new ground disturbance and are not listed as an Exempt activity under Attachment A, the Responsible Entity shall coordinate with the SHPO to determine whether archeological investigations are warranted. Documentation to aid in this determination may be provided by the Responsible Entity as outlined in **ARTICLE V (A) (5) (a)-(c)**, above. Documentation shall include, at minimum: the address (including city and county); a U.S. Geological Survey 7.5 minute quadrangle map with the property location and boundary shown; documentation establishing

whether the property is owned or controlled by a public agency; an Undertaking description noting impacts that will occur to the ground surface and the depth of the impact; and documentation of any extenuating circumstances that may be important for review, such as evidence of severe erosion or previous construction within the Undertaking area.”


6. **ARTICLE XIV** of the Agreement is amended to reflect a termination date of **October 9, 2028**.
7. **ATTACHMENT A** to the Agreement, **List of Exempt Activities**, is deleted in its entirety and replaced with the **Revised List of Exempt Activities**, attached hereto and incorporated herein in its entirety for all purposes as **ATTACHMENT A-1**.
8. This Amendment shall be effective upon the date of the last signature.
9. The terms and conditions of the Agreement not amended herein shall remain in force and effect.


**SIGNATURE PAGE FOLLOWS**






**SIGNATURE PAGE FOR AMENDMENT NO. 1 TO  
GLO CONTRACT No. 19-127-000-B465**

**GENERAL LAND OFFICE**

**TEXAS HISTORICAL COMMISSION**

DocuSigned by:  
  
7C299F4374E7497...  
Mark A. Havens, Chief Clerk/  
Deputy Land Commissioner  
Date of execution: 4/4/2023

DocuSigned by:  
  
01632F3C4E7946A...  
Name: Mark wolfe  
Title: Executive Director  
Date of execution: 4/4/2023

- OGC 
- PM 
- SDD 
- DGC 
- GC 

**ATTACHED TO THIS AMENDMENT:**

**ATTACHMENT A-1 – Revised List of Exempt Activities**

## LIST OF EXEMPT ACTIVITIES

The GLO, in consultation with the THC, has determined that the following activities do not meet the definition of an Undertaking since they either: (1) do not have the potential to cause effects on historic properties per 36 CFR § 800.4(d)(1); or (2) have limited potential to affect historic properties per 36 CFR § 800.5 and will have no adverse effect if carried out as described. The activities in this list require no further review under the terms of this Agreement. The GLO and Responsible Entities shall maintain a list of Undertakings completed per these exemptions and shall make the list available upon the request of the THC and include the updated list in the annual report.

### **GENERAL ACTIVITIES (Categorically Excluded under 24 CFR § 58.34)**

- A. Environmental and other studies, resource identification, and the development of plans and strategies. (Implementation of such plans with federal funds may require consultation. If historic properties may be affected, SHPO recommends early consultation during planning stages.)
- B. Information and financial services.
- C. Administrative and management activities.
- D. Public services that will not have a physical impact or result in any physical changes to buildings, structures, sites, or objects, including but not limited to services concerned with employment, crime prevention, child care, health, drug abuse, education, counseling, energy conservation, and welfare or recreational needs.
- E. Inspections and testing of properties for hazards or defects. (Action taken pursuant to such inspections with federal funds will require consultation.)
- F. Purchase of insurance (e.g. homeowners or flood insurance; does not include HUD mortgage insurance).
- G. Purchase of tools.
- H. Engineering or design costs. (Construction activities undertaken with federal funds will require consultation. If historic properties may be affected, SHPO recommends early consultation during design.)
- I. Technical assistance and training.
- J. Assistance for temporary or permanent improvements that do not alter environmental conditions and are limited to protection, repair, or restoration activities necessary only to control or arrest the effects from disasters or imminent threats to public safety including those resulting from physical deterioration.
- K. Payment of principal and interest on loans made or obligations guaranteed by HUD;

### **REHABILITATION OF BUILDINGS**

#### **Interior Rehabilitation:**

Undertakings limited to interior spaces of single- or multifamily residential buildings to be retained in the same use where the work will not be visible from the exterior of the building; no structural alterations are made; no demolition of walls, ceilings, or floors occurs; no drop ceilings are added; and no walls are leveled with furring or moved.

The following list of activities that do not need consultation with the SHPO provides further clarity for residential work and establishes standards for civic, commercial, and other property types.

A. Disaster recovery measures:

1. Temporary repair to single-family residential buildings to ensure safe shelter with access to essential electrical supply, HVAC, hot water, natural gas and potable water, and protection from elements such as weatherproofing and securing broken doors and windows.
2. Interior repairs to pre-disaster condition of single- or multifamily residential buildings, excluding structural repairs (e.g. foundation, framing), or other elements requiring architectural or engineering services.

B. Heating, ventilation, and air conditioning (HVAC):

1. Installing mechanical equipment in residential buildings in a manner that does not affect the exterior of the building.
2. Installing mechanical equipment in other building types within existing mechanical closets, chases, and unfinished attics or basements when ducts are not visible within occupied spaces of the building and access to the ducts does not require demolition of walls or ceilings in occupied spaces of the building.
3. Routine maintenance or retrofits to existing mechanical equipment, provided there is no physical impact on the building.
4. Replacement of existing mechanical equipment or installation of supplemental equipment, provided that exterior equipment is installed within the same footprint on the same pad, and interior equipment is installed within an existing mechanical closet or unoccupied attic or basement.
5. Upgrading existing facility and infrastructure-related pumps and motors, including those for HVAC systems, to variable-speed or premium efficiency standards.
6. Sealing, restoring, or insulating HVAC ducts, provided that the ducts are not visible in occupied spaces of the building and access to the ducts does not require demolition of walls or ceilings in occupied spaces of the building.
7. Adding or replacing existing building controls systems including HVAC control systems and the replacement of building-wide pneumatic controls with digital controls, thermostats, dampers, and other individual sensors like smoke detectors or carbon monoxide detectors (wired or non-wired).

C. Lighting and appliances:

1. Installation of fire, smoke, or carbon monoxide detectors.
2. Installation of compact fluorescent or LED bulbs in existing fixtures.
3. Replacement of fluorescent bulbs, ballasts, and/or wiring in existing fixtures.
4. Replacement of existing fluorescent fixtures with new fixtures, provided that the fixtures are not original to the building.
5. Installation of motion/occupancy sensors for lighting control.
6. Replacement of existing lighting in street lighting fixtures with high efficiency lighting.

7. Replacement of existing appliances.

D. Insulation:

1. Attic insulation with proper ventilation, provided that insulation is fiberglass batt or loose fill only (not spray foam).
2. Under-floor insulation in basements or crawl spaces, provided that insulation is fiberglass batt or loose fill only (not spray foam), and ventilation of crawl spaces.
3. Exterior blown-in wall insulation (not spray foam) where holes are not drilled through exterior wall material or decorative plasterwork on the interior and result in no permanent visible alteration to the structure.
4. Water heater tank and pipe insulation.
5. Radiant barriers in unoccupied attic spaces.

E. Plumbing:

1. Repairing plumbing systems in a manner that does not affect the interior or exterior of the building.
2. Water heater repair or replacement that does not require a visible new supply or venting.
3. Restroom improvements for handicapped access, provided the work is contained within the existing restroom.
4. Water conservation measures, such as installation of low-flow faucets, toilets, showerheads, urinals, or distribution device controls, in residential properties; and water conservation measures in other building types, provided that plumbing fixtures to be replaced are not original to the building.
5. Upgrading existing facility and infrastructure-related pumps and motors, including those for water/wastewater facilities, to variable-speed or premium efficiency standards.

F. Electrical:

Repairing or upgrading electrical systems in a manner that does not affect the interior or exterior of the building.

**Exterior Rehabilitation:**

A. Roofing:

1. In-kind replacement of existing roofing material.
2. Replacement of existing gutters and downspouts.
3. Installation of continuous ridge vents covered with ridge shingles or boards, or roof jacks/vents, bath and kitchen fan vents, gable vents, soffit and frieze board vents, and combustion appliance flues, if not located on a primary roof elevation or visible from the public right-of-way.
4. Installation of reflective roof coatings, with materials that closely match the historic materials and form, or with materials that restore the original feature based on historic evidence, and in a manner that does not alter the roofline.

5. Installation of new roofing or reflective roof coatings on a flat-roofed building with a parapet, such that the roofing material is not visible from any public right-of-way.
6. Replacement of asbestos tile roofing with composition shingle/asphalt shingle roofing matching the shape and pattern of the asbestos tile.

B. Siding, soffits, fascia, and masonry:

1. Repair or limited, in-kind replacement of existing siding, soffits, and fascia. Limited replacement shall not exceed 25% of the overall exterior area, and new material shall match existing in material, profile, and other characteristics.
2. Limited repair of masonry, including chimneys, where mortar matches the existing in color, texture, strength, joint width, and joint profile and methods are consistent with the preservation techniques in *Preservation Brief #2; Repointing Mortar Joints in Historic Masonry Buildings*. Limited repair shall not exceed 10% of the overall exterior wall area.

C. Painting:

1. Painting previously painted exterior surfaces, provided destructive surface preparation treatments, including but not limited to water-blasting, sandblasting and chemical removal, are not used.
2. Conducting lead-based paint abatement or interim controls pursuant to 24 CFR § 35.115(a)(13), if carried out by a qualified contractor using current best practices and methods that are consistent with the preservation techniques in *Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing*. (Any removal of historic building materials or encapsulation with vinyl siding or other materials is not included in this exemption.)

D. Windows and doors:

1. Weatherstripping around windows and doors, installing thresholds, and other air infiltration control measures that do not harm or obscure historic windows, doors, or trim.
2. Caulking around windows and doors, provided that the color of the sealant matches adjacent materials.
3. Installing interior storm windows or doors, or exterior storm or wood screen doors, on residential buildings, in a manner that does not harm or obscure historic windows or trim.
4. Repair or repainting of existing storm windows.
5. Installing removable film on windows (if the film is transparent), solar screens, or window louvers, on residential buildings, in a manner that does not harm or obscure historic windows or trim.
6. Repair or replacement of missing or damaged window glass.
7. Repair of windows using in-kind materials.
8. Replacement of non-historic exterior doors with compatible wood panel doors.

E. Porches:

1. Repair (not replacement) of porch ceilings, steps, floors, or railings.

2. Repair of existing wheelchair ramps.
3. Installing a new wheelchair ramp on the side or rear entrance of a home, when not visible from any public right-of-way.
4. Installing a new wheelchair ramp on the front of a home, or other entrance visible from a public right-of-way, in a manner that does not remove, compromise, or damage existing historic materials or features and would be completely reversible without damage to historic fabric.

F. Ground-disturbing activity and site work:

1. Repairing or replacing in-kind existing driveways, parking areas, and walkways with materials of similar appearance in a manner that does not disturb historic landscape materials or features.
2. Excavating to gain access to existing underground utilities to repair or replace them, in a manner that does not disturb historic exterior building or landscape materials or features, and where all construction occurs within existing trenches.
3. Repair or replacement of metal utilitarian structures (e.g. pump houses, storage buildings) less than 45 years old, when performed in previously disturbed soils.
4. Ground disturbance that is minimal and occurs in documented, previously disturbed soil.

G. Elevation: Elevation of pier-and-beam, wood frame structures four feet or less if the front entrance stair configuration is unaltered. Foundation skirting and piers shall be extended or replaced with in-kind materials; brick or stucco piers with lattice or board and batten skirting is preferred in instances where historic materials are no longer present. This exemption does not apply to buildings with other structural systems, such as masonry construction or slab-on-grade foundations.

H. Generators: Installation of generators at existing facilities, where:

1. Ground-level equipment is located to the rear or side of the building or is otherwise screened from view from any public right-of-way, and any new equipment slabs and trenching occurs within previously disturbed soils.
2. Roof-mounted equipment is not visible from the ground level.

## **SINGLE-FAMILY HOUSING**

- A. For single-family residential CDBG-DR or CDBG-MIT programs that involve new ground disturbance, archeological review by THC is not required if the Responsible Entity's SOI-qualified archaeologist verifies and documents that no known archaeological sites, archaeological districts, or natural water features (including wetlands) are located within 100 meters of the parcel boundary.
- B. The Louisiana-Rio Grande Canal Company Irrigation System is a collection of very large NRHP-listed historic districts within the Lower Rio Grande Valley, defined by local historic events and engineering design. Archeological review by THC is not required if project ground disturbances will occur more than 100 meters from an irrigation district canal or engineering feature, unless it is in proximity to a recorded archeological site or natural water feature, as noted Paragraph A, above.

## INFRASTRUCTURE

The following projects may be exempt from review when they occur 25 feet or greater from the fence line or boundary of a cemetery, or where no work will occur within 15 feet of a cemetery. Projects which involve work within 15 feet of a cemetery must be submitted in accordance with **ARTICLE VI, ARCHEOLOGICAL REVIEW**, and will require archeological studies to verify whether or not there are any unmarked graves beyond the marked cemetery boundary. These studies may include scrapings or informant interviews with the manager of the cemetery association, local historians, funeral home directors, or other informed individuals.

- A. Routine road maintenance and resurfacing where work is confined to the existing right-of-way and previously maintained surfaces, ditches, culverts, and cut and fill slopes where there are no known historic properties, or historic properties would not be affected because the proposed work is clearly within a disturbed context. This exemption shall not apply in areas with brick streets or with tile curb markers or other decorative street features.
- B. Point repair to an existing water or wastewater line where construction occurs in the original trench
- C. Replacement of existing water or wastewater lines where all construction occurs within the original trench.
- D. Replacement of existing water or wastewater lines in a new trench paralleling the existing line if the following conditions are met:
  1. Replacement occurs beneath city streets or adjacent drainage rights-of-way (as in item A);
  2. Replacement does not occur within a National Register historic district or locally designated historic district;
  3. Replacement does not occur within the historic towns of Goliad, San Augustine, Jefferson, Nacogdoches, Bastrop, Castroville, San Ygnacio, Roma, Refugio, Ysleta, San Elizario, and Presidio;
  4. Replacement does not occur beneath brick-paved streets; and
  5. Replacement does not occur adjacent to roads in rural areas of the county (where abandoned cemeteries or unrecorded archeological sites might be impacted by a new trench).
- E. Minor alterations or additions to existing water or wastewater treatment plants or other facilities that are less than 45 years old. (Excavation of new treatment ponds or enlargement of existing ponds are not considered minor alterations and are subject to review).
- F. Installation of generators at existing water/wastewater or shelter facilities, where:
  1. Ground-level equipment is located to the rear or side of the building or is otherwise screened from view from any public right-of-way, and any new equipment slabs and trenching occurs within previously disturbed soils.
  2. Roof-mounted equipment is not visible from the ground level.
- G. Addition or replacement of equipment within the same location and footprint (Examples include but not limited to; Computer monitoring equipment, bar screens, clarifiers, chlorination equipment, SCADA equipment etc.).
- H. Repair of bridges less than 45 years old.



# **ORIGINAL PROGRAMMATIC AGREEMENT**



**PROGRAMMATIC AGREEMENT  
BETWEEN THE TEXAS HISTORICAL COMMISSION  
AND  
THE TEXAS GENERAL LAND OFFICE  
GLO CONTRACT NO. 19-127-000-B465**

The **TEXAS GENERAL LAND OFFICE** (“GLO”) and the **TEXAS HISTORICAL COMMISSION** (“THC”), agencies of the State of Texas (each a “Party” and, collectively, the “Parties”), hereby enter into this Programmatic Agreement (the “Agreement”) concerning projects (each, an “Undertaking”) possibly affecting properties eligible for inclusion in the National Register of Historic Places (“National Register”), pursuant to Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (“NHPA”), and its implementing regulations at 36 C.F.R. Part 800; and

**WHEREAS**, the GLO administers the U.S. Department of Housing and Urban Development (“HUD”) Community Development Block Grant Disaster Recovery (“CDBG-DR”) programs (collectively, the “Program”) to provide financial assistance with funds appropriated by the Congress of the United States to facilitate disaster recovery, restoration, economic revitalization, and to affirmatively further fair housing, in accordance with Executive Order 12892, in areas which are Presidentially-declared major disaster areas under Title IV of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. § 5121 *et seq.*); and

**WHEREAS**, the GLO, in consultation with the THC, has determined that activities funded under the Program may have an effect on a CDBG-DR-served historic property’s eligibility to be included in the National Register and the GLO must consult with the State Historic Preservation Officer (“SHPO”) for Texas, pursuant to Section 106 of the NHPA (herein, a “Section 106 Review”); and

**WHEREAS**, the GLO has determined that certain routine Program activities, listed in **Attachment A**, attached hereto and incorporated herein for all purposes, will have no effect on a CDBG-DR-served historic property’s eligibility to be included in the National Register, and should be excluded from a Section 106 Review; and

**WHEREAS**, 24 C.F.R. Part 58 allows State, tribal, and local governments to assume HUD’s environmental review responsibilities as a “Responsible Entity,” including obligations under Section 106 of the NHPA and its implementing regulations at 36 C.F.R. Part 800; and

**WHEREAS**, certain subrecipients selected by the GLO may be designated as a Responsible Entity participating in the Program and will be required to comply with 24 C.F.R. Part 58, 36 C.F.R. Part 800, and any other applicable statutes and rules, and will further be required to fulfill the GLO’s roles, responsibilities, and terms of this Agreement and any amendments hereto; and

**WHEREAS**, in accordance with 24 C.F.R. Part 58, in instances in which a subrecipient lacks the capacity to act as a Responsible Entity, the GLO is designated the Responsible Entity; and

**WHEREAS**, the NHPA has implemented regulations at 36 C.F.R. § 800.14(b) to allow for the use of programmatic agreements for the efficient administration of the Section 106 Review process; and

**WHEREAS**, the GLO and the THC, as the SHPO for the State of Texas, agree that it is in the best interest of the State to streamline the Section 106 Review process through the use of this Agreement; and

**WHEREAS**, the GLO has invited the Advisory Council on Historic Preservation (ACHP) to determine whether the ACHP wishes to enter into consultation on this agreement and the ACHP has chosen not to participate in consultation.

**NOW, THEREFORE**, the GLO and the THC agree that this Program shall be administered in accordance with the following terms and conditions in satisfaction of NHPA requirements:

#### **ARTICLE I – EXEMPTIONS FROM REVIEW**

A. The Responsible Entity shall, within a reasonable time and with good faith effort, evaluate each historic-age property to determine the potential for effects. Activities not requiring SHPO review (“Exempt Activities”), listed in **Attachment A**, attached hereto and incorporated herein for all purposes, are determined by the Parties to not have the potential to cause effects on historic properties per 36 C.F.R. § 800.4(d)(1) or have limited potential to affect historic properties per 36 C.F.R. § 800.5, with no adverse effect if carried out as described. The Responsible Entity is not required to consult with the SHPO regarding Exempt Activities. The Responsible Entity shall keep documentation of its determination of exempt status on file and available for periodic review by the SHPO and shall include this information in annual reports prepared per **ARTICLE IX** below.

B. The GLO and the SHPO may add or remove activities from **Attachment A** by written amendment to this Agreement per **ARTICLE XII**.

#### **ARTICLE II - RESPONSIBILITIES OF THE RESPONSIBLE ENTITY**

The Parties have determined that activities not listed in **Attachment A** may have the potential to have an effect on a historic property and require review pursuant to this **ARTICLE II** and **ARTICLES III** through **VIII**, below. The Responsible Entity shall ensure that the following measures are carried out:

A. General Requirements of the Responsible Entity. For each Undertaking contemplated under this Agreement, the Responsible Entity shall consult with, and submit documentation for review to, the SHPO and other consulting parties, including, but not limited to, federally recognized Indian Tribes/Tribal Historic Preservation Officers (THPOs); representatives or local governments; and applicants for Federal assistance, permits, licenses, and other approvals, for the following:

1. Establish whether the Undertaking has the potential to affect historic properties (36 C.F.R. § 800.3(a), (c), and (d));

2. Identify the consulting parties who should be invited to participate in the Undertaking (36 C.F.R. § 800.3);
3. Seek public comment for individual Undertakings, and conduct public involvement activities (36 C.F.R. § 800.3(e));
4. Determine and document the scope of identification efforts and level of effort through the internal review and screening process of the Undertaking, including the Area of Potential Effect (APE) of the Undertaking (36 C.F.R. § 800.4(a) and (b));
5. Identify historic-age properties located within the Undertaking APE (36 C.F.R. § 800.4) and evaluate the National Register eligibility of each;
6. Apply the Criteria of Adverse Effect on historic properties to determine whether the properties may be affected by the Undertaking (36 C.F.R. § 800.5(a)(1));
7. Initiate consultation on the resolution of adverse effects with appropriate consulting parties (36 C.F.R. § 800.6);
8. Consult, as appropriate, regarding the determination of the Undertaking APE, the evaluation of National Register eligibility, and the effects of a Program Undertaking on historic properties;
9. Coordinate Section 106 Review with other relevant Undertaking reviews; and
10. Document individual Undertakings and maintain a record of all Undertaking reviews carried out pursuant to this Agreement.

B. Compliance. The Responsible Entity shall comply, and ensure each subrecipient's compliance through subrecipient agreements, if any, with the terms of this Agreement for all applicable Undertakings that are funded entirely or in part by monies from the Program. For purposes of this Agreement, the GLO and each self-performing GLO subrecipient are hereafter referred to, collectively, as the "Responsible Entity," except in instances where either such entity is named individually.

C. Professional Qualifications Standards. The Responsible Entity shall ensure that all actions prescribed in this Agreement involving the identification, evaluation, assessment of effects, treatment, monitoring, or disposition of historic properties, or involving the reporting or documentation of such actions, shall be carried out by or under the direct supervision of a person or persons meeting the Secretary of the Interior's ("SOI") Professional Qualifications Standards (48 Fed. Reg. 44738, September 29, 1983; [http://www.nps.gov/history/local-law/arch\\_stnds\\_9.htm](http://www.nps.gov/history/local-law/arch_stnds_9.htm)) in the fields of History, Archeology, Architectural History, or other applicable discipline, as appropriate based on the nature of the Undertaking, for the identification of historic properties and assessment of effects. Completion of mitigation under **ARTICLE V(D)** of this Agreement shall be performed or overseen by appropriately qualified professionals.

D. Public Participation. The Responsible Entity shall arrange, in a manner consistent with 36 C.F.R. § 800.8(c), for public participation appropriate to the scope of the programs covered by this Agreement in consideration of the nature of the activities undertaken in the Program and the likely

effects on historic properties. The Responsible Entity shall make appropriate efforts, in accordance with HUD regulations governing the Program, to involve the interested individuals, organizations, and entities.

E. Completion Required. The Section 106 Review required under this Agreement must be resolved before the Responsible Entity's final approval of any Undertaking application; before an irrevocable commitment to an Undertaking by the Responsible Entity; and before the Responsible Entity or the property owner alters a historic property.

### ARTICLE III – RESPONSIBILITIES OF THE SHPO

A. Unless otherwise provided for in **ARTICLE III(B)** or **ARTICLE VII**, the SHPO shall review and comment on Responsible Entity-submitted documentation concerning an Undertaking within thirty (30) calendar days of receipt. If any Responsible Entity-submitted documentation is determined to be inadequate, the SHPO shall respond within thirty (30) days of receipt, and any supplemental documentation will be reviewed within thirty (30) days of its receipt by the SHPO. If the SHPO does not provide comments within the appropriate time period established herein for its response, the Responsible Entity may assume the SHPO concurs with its determination and may proceed with the Undertaking in accordance with all other terms of this Agreement.

B. For state-run program submissions, an expedited review process of fourteen (14) calendar days upon receipt of complete documentation by SHPO will be in effect. This expedited review process shall only cover reviews submitted pursuant to **ARTICLE V**, using the THC's online eTRAC (electronic THC Review and Compliance) system, accessible at <http://www.thc.texas.gov/etrac-system>. For properties listed in or eligible for the NRHP, the THC may contact the GLO within the fourteen (14) day period to indicate that up to thirty (30) calendar days are required for the response. Additionally, Undertakings requiring input from SHPO staff archeologists under **ARTICLE VI** will be allowed the full thirty (30) day period.

C. The SHPO response to a request for comment will include:

1. a statement of concurrence or non-concurrence with the Responsible Entity's findings and recommendations; and/or
2. any comments related to effects findings.

### ARTICLE IV – AREA OF POTENTIAL EFFECTS

The Responsible Entity shall consult with the SHPO to determine and document the Area of Potential Effects ("APE"), as defined in 36 C.F.R. § 800.16(d), for an Undertaking, as follows:

- (A) **For direct effects:** The APE shall include the footprint to be directly affected by new construction, staging areas, and access areas, with regard to the identification of archeological sites. For the rehabilitation of any building without associated new construction or additions, the APE shall consist solely of the building being rehabilitated.
- (B) **For indirect effects:** A broader APE will be required to assess Undertakings that have the potential for visual or other indirect effects on nearby architectural properties, herein defined as non-archeological historic properties, including any significant structures and/or

landscape features located on the properties. Indirect effects may change the character of the property's use or physical features within the property's setting that contribute to its historic significance; are often audible, atmospheric, and visual effects; and may relate to viewshed issues.

- (C) **For cumulative effects:** For the purposes of this document and paraphrasing the National Environmental Policy Act definition (40 CFR § 1508.7), cumulative effects on historic properties are the effects that result from the incremental impact of the Undertaking when added to other past, present and reasonably foreseeable future Undertakings regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

#### **ARTICLE V – ARCHITECTURAL REVIEW**

(A) **Identification and Evaluation of Historic Properties.**

The Responsible Entity shall make a reasonable and good faith effort to identify historic properties located within the APE, as follows:

- (1) For Undertakings involving ground disturbance, the Responsible Entity shall coordinate with the SHPO to determine whether archeological background research and/or a field survey is warranted pursuant to **ARTICLE VI, ARCHEOLOGICAL REVIEW**. In making this determination, all parties shall reference HUD's HP Factsheet 6 ([http://portal.hud.gov/hudportal/documents/huddoc?id=env\\_factsheet\\_6.pdf](http://portal.hud.gov/hudportal/documents/huddoc?id=env_factsheet_6.pdf)) and the ACHP's Policy Statement on Affordable Housing and Historic Preservation, Implementation Principle VIII (<http://www.achp.gov/docs/fr7387.pdf>).
- (2) For Undertakings with the potential for direct or visual effects to architectural properties, the Responsible Entity shall determine if properties within the APE are individually listed in the National Register, within the boundaries of a National Register historic district, or previously determined to be eligible for inclusion in the National Register. The Responsible Entity may reference the Texas Historic Sites Atlas at <http://atlas.thc.state.tx.us> to determine if a property already has historical designations, and may rely on previous coordination with SHPO for eligibility determinations. Properties listed or eligible for listing in the National Register shall require coordination with the SHPO per **ARTICLE V** of this Agreement.
- (3) If an architectural property is at least forty-five (45) years of age, is not listed in the National Register, and has not been evaluated for National Register eligibility, the Responsible Entity shall submit documentation to the SHPO for review per **ARTICLE V(A)(5)** of this Agreement. The forty-five-year age limit was selected to ensure historic age resources were captured in the event of unforeseen potential Undertaking delays and to afford flexibility to account for potential inaccuracies in building dates.
- (4) If the Responsible Entity determines that an Undertaking application involves an architectural property constructed fewer than forty-five (45) years ago, or a property

at least forty-five (45) years of age that has been determined ineligible for the National Register within the past five (5) years, and the property is not within the boundaries of a National Register-listed or -eligible historic district, no further coordination with SHPO shall be required for that property. The Responsible Entity shall keep documentation of this determination on file and available for periodic review by the SHPO per **ARTICLE IX** of this Agreement.

- (5) The Responsible Entity shall submit documentation of each architectural property requiring Section 106 Review to the SHPO for consultation. Documentation may be provided:
  - (a) Through the THC's online eTRAC system, accessible at <http://www.thc.texas.gov/etrac-system>;
  - (b) By using a "Request for SHPO Consultation" form, submitted in hard copy by mail or delivery service, or
  - (c) In a cover letter, with attachments including required information, submitted in hard copy by mail or delivery service.

Documentation should include, at a minimum, the address of the subject property (including city and county), a map showing the property location, the known or estimated date of construction, a brief architectural description, history of the property and names of architects or builders, if known, and current, clear overall photographs of the property. The submittal should indicate whether the property is listed in the National Register, if known, or determine whether it is eligible for listing in the National Register. Upon review, the SHPO shall concur or disagree with the eligibility determination provided within thirty (30) days.

- (6) If a property within the APE is determined eligible for National Register listing, further coordination shall be required per **ARTICLE V (B)**. If all properties within the APE are determined not eligible for the National Register and are not within a National Register-eligible historic district, and no historic properties are affected by the Undertaking, the Section 106 Review process is complete and no further coordination with the SHPO shall be required for the Undertaking.
- (7) Disputes regarding determinations of eligibility shall be referred by the Responsible Entity, through the GLO, to the Keeper of the National Register in accordance with 36 CFR § 800.4(c)(2) and 36 CFR § 63.2.

**(B) Assessment of Adverse Effect**

The Responsible Entity shall make a reasonable and good faith effort to assess adverse effects on historic properties within the APE, as follows:

- (1) For properties listed in, or determined eligible for, the National Register, the Responsible Entity shall submit to the SHPO documentation of any proposed activities that do not fall within the exclusions listed in **Attachment A**. Documentation may be provided as outlined in **ARTICLE V(A)(5)(a)-(c)**, above, and

shall include a scope of work, plans and specifications, or other detailed description of the Undertaking. Photographs of the areas in which work is to be performed shall be included. The Responsible Entity shall assess whether the Undertaking would have an adverse effect on the historic property per 36 C.F.R. § 800.5 and the SHPO shall concur or disagree with the determination.

- (2) Upon concurrence of the Parties that an Undertaking is designed and planned in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (36 C.F.R. § 68, hereinafter, the "Applicable Standards"), or the Undertaking otherwise does not meet the criteria to create an adverse effect, the Undertaking shall be considered to have no adverse effect, and no further coordination with the SHPO will be required for the Undertaking.
- (3) The Responsible Entity and the SHPO shall make best efforts to expedite reviews through a finding of "no adverse effect with conditions" when the scope of work can be modified to ensure adherence with the Applicable Standards. If the Undertaking cannot meet the Applicable Standards or otherwise would result in an adverse effect to historic properties, the Responsible Entity shall proceed with further consultation.

(C) **Resolution of Adverse Effect**

The Responsible Entity shall make a reasonable and good faith effort to resolve adverse effects on historic properties located within the APE. To resolve adverse effects, the Responsible Entity shall consult with the SHPO, any consulting parties, and the public, as appropriate, to seek alternatives to avoid, minimize, or mitigate the effect of the Undertaking per 36 C.F.R. § 800.6. To document alternatives considered in the planning process, Undertaking Applicants should provide written justification for the proposed action that will cause an adverse effect, summarize and provide documentation of alternatives to the action, and cite the specific reasons why the proposed action was selected over other alternatives. Consultation to resolve adverse effects shall result in the issuance of a Memorandum of Agreement ("MOA") per 36 C.F.R. § 800.6(c), or where appropriate, the Responsible Entity or the SHPO may propose the use of standard mitigation measures per **ARTICLE V(D)**.

(D) **Standard Mitigation Measures.**

In instances which the Responsible Entity, in consultation with the SHPO and other consulting parties, if any, determines one or more Undertakings will cause adverse effects to multiple historic properties, in lieu of negotiating separate MOAs for specific Undertakings, the Responsible Entity may use the standard mitigation measures described below in their entirety or as part of a broader mitigation plan. The use of standard mitigation measures and the specific scope of the mitigation measures shall be agreed upon by a letter exchange between the Responsible Entity and the SHPO, which the letter(s) shall become a part of the Responsible Entity's files.

(1) **Historic American Building Survey ("HABS") Documentation**

- (a) The Responsible Entity shall be responsible for performing archival-quality documentation of a historic property affected by the Undertaking. The

documentation shall meet the Secretary of the Interior's *Standards and Guidelines for Architectural and Engineering Documentation: HABS/HAER Standards* and National Park Service (“NPS”) guidance documents, including the May 2010 transmittal guidelines *Preparing HABS/HAER/HALS Documentation; Historic American Buildings Survey Guidelines for Historical Reports*; December 2008 *HABS Guidelines; Recording Historic Structures and Sites with HABS Measured Drawings*; and June 2001 *HABS/HAER Photographs Specifications and Guidelines*; or the latest guidance from NPS at <http://www.nps.gov/history/hdp/standards/index.htm>.

- (b) The level of documentation shall be determined in consultation with the SHPO and NPS Intermountain Regional Office, and may be one of the following three (3) options:

Level I: measured drawings, large-format photography, and written history and description; or

Level II: existing drawings, large format photography, and written history and description; or

Level III: sketch plan, large format photography, and architectural data form.

- (c) The Responsible Entity shall submit the completed HABS documentation to the SHPO and NPS for review and approval. Within thirty (30) days of receipt, the SHPO shall advise the Responsible Entity if the submitted documentation is satisfactory or shall request specific revisions. The NPS may also request specific revisions to meet HABS standards. If any HABS documentation is determined to be inadequate, the SHPO shall respond within thirty (30) days of receipt, and any supplemental documentation will be reviewed within thirty (30) days of its receipt by the SHPO and NPS. Upon acceptance of the documentation by the SHPO and NPS, the Undertaking may proceed.
- (d) The Responsible Entity may also submit the complete documentation package to a local or regional archival repository or library, selected in consultation with the SHPO, in addition to, or in lieu of, review by NPS for inclusion in the HABS/HAER collection at the Library of Congress, if the SHPO agrees this alternative is acceptable. In such a case, the Undertaking may proceed following acceptance of the documentation by the SHPO and its receipt at the selected repository.

(2) **Digital Photographic Documentation**

- (a) The Responsible Entity shall be responsible for digitally photographing each historic property affected by an Undertaking or Undertakings conducted under this Agreement. Photography shall comply with the requirements of the NPS's *National Register Photograph Policy Factsheet* (<http://www.nps.gov/nr/publications/bulletins/photopolicy/index.htm>), or

the latest guidance from NPS, with regard to image size and format of digital files, photograph log, and permanence requirements for prints. The number and type of views shall be determined in consultation with the SHPO.

- (b) The Responsible Entity shall submit to the SHPO electronic media containing the digital images, and a photo log for review and approval. Within thirty (30) days of receipt, the SHPO shall advise the Responsible Entity if the submitted documentation is satisfactory or shall request specific revisions. If revisions are requested, the SHPO shall specify whether the revised documentation is to be submitted to SHPO for a second thirty (30)-day review. Upon acceptance of the documentation by the SHPO, the Undertaking may proceed.
- (c) The Responsible Entity shall also provide the complete documentation package to an appropriate archival repository or library, as determined in consultation with the SHPO.

**(3) National Register of Historic Places Nomination**

- (a) The Responsible Entity shall be responsible for developing a National Register of Historic Places nomination in keeping with the guidance provided in NPS's *National Register Bulletin #16A: How to Complete the National Register Nomination Form* and other applicable bulletins (<http://www.nps.gov/history/nr/publications>). The nomination shall include a historic context, architectural descriptions, photographs, and maps, as required to fully document the historic property or district.
- (b) The Responsible Entity shall submit one (1) electronic media file containing the completed nomination form and attachments for review and approval to the SHPO via the Electronic THC Review And Compliance System (eTRAC) (<http://www.thc.texas.gov/etrac-system>). Within sixty (60) days of receipt, the SHPO shall advise the Responsible Entity if the submitted nomination is satisfactory or shall request specific revisions. If revisions are requested, the SHPO shall specify whether the revised documentation is to be submitted to the SHPO for a second sixty (60)-day review. Upon acceptance of the nomination by the SHPO, the Undertaking may proceed.
- (c) The Responsible Entity shall not be responsible for carrying the nomination form forward for consideration by the State Board of Review and NPS, or for any subsequent revisions required by those bodies.

**(4) Historic Context Development**

- (a) The Responsible Entity shall develop a historic context related to the historic property affected and selected in consultation with the SHPO. All work shall be done in accordance with the guidance on developing historic contexts in the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* ([http://www.cr.nps.gov/local-law/arch\\_stnds\\_5.htm](http://www.cr.nps.gov/local-law/arch_stnds_5.htm)). The historic context shall include a methodology identifying archival

resources used and a bibliography for future research efforts.

- (b) The Responsible Entity shall submit one (1) electronic media file of the completed historic context for review and approval to the SHPO via the eTRAC system (<http://www.thc.texas.gov/etrac-system>). Within sixty (60) days of receipt, the SHPO shall advise the Responsible Entity if the submitted documentation is satisfactory or shall request specific revisions. If revisions are requested, the SHPO shall specify whether any revised documentation is to be submitted to the SHPO for a second sixty (60)-day review. Upon acceptance of the documentation by the SHPO, the Undertaking may proceed.
- (c) The Responsible Entity shall also provide the completed historic context to an appropriate archival repository or library, as determined in consultation with the SHPO.

(5) **Historic Property Inventory**

- (a) The Responsible Entity shall work with the SHPO to establish the appropriate level of effort to accomplish a historic property inventory. Efforts may be directed toward the resurvey of previously designated historic properties and/or districts which have undergone change or lack sufficient documentation, or the survey of new historic properties and/or districts that lack formal designation. Once the boundaries of the survey area have been agreed upon, the Responsible Entity shall continue to coordinate with the SHPO through the data collection process. The Responsible Entity shall use SHPO standards for the survey of historic properties and SHPO forms as appropriate.
- (b) The Responsible Entity shall prepare a draft inventory report, according to SHPO templates and guidelines. The Responsible Entity shall submit one (1) hard copy of the completed inventory and one (1) portable data storage device containing a digital file of the inventory to the SHPO for review and approval. Within sixty (60) days of receipt, the SHPO shall advise the Responsible Entity if the submitted documentation is satisfactory or shall request specific revisions, including whether any revised documentation is to be submitted to the SHPO for a second sixty (60)-day review. Upon acceptance of the documentation by the SHPO, the Undertaking may proceed.

- (6) **Public Interpretation.** Prior to implementation of the Undertaking, the Responsible Entity shall work with the SHPO to design an educational interpretive plan. The plan may include signs, displays, educational pamphlets, websites, workshops, and other similar mechanisms to educate the public on historic properties within the local community, state, or region. The Responsible Entity and SHPO shall continue to consult throughout implementation of the plan until all agreed upon actions have been completed.

**(7) Design Review for Infill Construction**

- (a) Prior to initiating the construction of a new building within a historic district or adjacent to historic properties, the Responsible Entity shall submit architectural and site plans for the proposed building to the SHPO for review and comment. For larger or complex new construction, the Responsible Entity shall establish a schedule for submittal of plans to the SHPO during plan development (e.g., 30%, 60%, and 90% construction documents) to allow for early and ongoing review. Within thirty (30) days of receipt of submitted architectural drawings, the SHPO shall provide recommendations to make the new construction compatible with the architectural character of nearby historic properties. The Responsible Entity shall consider any SHPO comments and make a reasonable and good faith effort to incorporate the SHPO's suggestions into the final architectural and site plans.
- (b) The Responsible Entity shall make reasonable attempts to use building setbacks, exterior materials, and overall building forms that are compatible with nearby historic properties.

**ARTICLE VI – ARCHEOLOGICAL REVIEW****(A) Identification and Evaluation of Historic Properties**

- (1) For Undertakings involving ground disturbance, the Responsible Entity shall coordinate with the SHPO to determine whether archeological investigations are warranted. Documentation to aid in this determination may be provided by the Responsible Entity as outlined in **ARTICLE V(A)(5)(a)-(c)**, above. Documentation shall include, at minimum: the address (including city and county); a U.S. Geological Survey 7.5 minute quadrangle map with the property location and boundary shown; documentation establishing whether the property is owned or controlled by a public agency; an Undertaking description noting impacts that will occur to the ground surface and the depth of the impact; and documentation of any extenuating circumstances that may be important for review, such as evidence of severe erosion or previous construction within the Undertaking area.
- (2) In determining whether archeological background research and/or field survey is warranted, all parties shall reference HUD's HP Factsheet 6 at: ([http://portal.hud.gov/hudportal/documents/huddoc?id=env\\_factsheet\\_6.pdf](http://portal.hud.gov/hudportal/documents/huddoc?id=env_factsheet_6.pdf)) and ACHP's Policy Statement on Affordable Housing and Historic Preservation, Implementation Principle VIII (<http://www.achp.gov/docs/fr7387.pdf>).
- (3) At the request of the SHPO, the Responsible Entity shall make a reasonable and good faith effort to identify archeological properties within the APE. Pursuant to 36 CFR § 800.4(b)(1), the steps to fulfill this requirement may include, but are not limited to, background research, including review of the THC's Texas Archeological Sites Atlas, consultation, oral history interviews, sample field investigations, and reconnaissance or intensive field survey. All investigators will conform to the THC's *Archeological Survey Standards of Texas* ([http://www.thc.texas.gov/public/upload/publications/THC\\_SurveyStandards\\_2014\\_0.pdf](http://www.thc.texas.gov/public/upload/publications/THC_SurveyStandards_2014_0.pdf)) and the Secretary of the Interior's

*Standards and Guidelines for Archeology and Historic Preservation.*

- (4) In accordance with Texas Natural Resources Code, Title 9, § 191.054, an Antiquities Permit may be issued by the THC to allow survey and discovery or excavation of archeological sites for Undertakings under any land within the jurisdiction of the State of Texas, such as property owned by a state agency or political subdivision of the state (cities, counties, river authorities, municipal utility districts, and school districts).
  - (5) A draft report of the investigations conducted per **ARTICLE VI(A)(3)**, above, should be produced in conformance with the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* and the Council of Texas Archeologists' *Guidelines for Cultural Resource Management Reports* (<http://www.thc.texas.gov/public/upload/CTAguidelines.pdf>), and submitted to the SHPO for review. The Responsible Entity shall receive a redacted version of the same archeological report for review and comment from qualified archeologists. Should the Responsible Entity employ a qualified archeologist, then unredacted versions may be submitted to the Responsible Entity. Comments received from the SHPO shall be addressed in the final reports. If no cultural resources are identified in the APE and the SHPO concurs, no further coordination with the SHPO will be required for the Undertaking.
  - (6) If cultural resources are identified within the APE, the Responsible Entity shall consult with the SHPO to develop a testing plan to determine eligibility for inclusion in the National Register, in accordance with the process described in 36 CFR § 800.4(c) and criteria established in 36 C.F.R. § 60.4. Alternatively, the Undertaking applicant may redesign the Undertaking to avoid completely all effects on the identified cultural resources. All draft reports of site testing shall be submitted to the SHPO for review and comment. Comments received from the SHPO shall be addressed in the final reports.
  - (7) If the Responsible Entity and the SHPO agree as to whether a property is eligible for inclusion in the National Register, such agreement is deemed conclusive for the purposes of this Agreement. Disputes regarding determinations of eligibility shall be referred by the Responsible Entity, through the GLO, to the Keeper of the National Register in accordance with 36 CFR § 800.4(c)(2). Cultural resources determined to be ineligible for the National Register shall require no further protection.
  - (8) During implementation of this Agreement, the Responsible Entity will protect information about historic properties, including location information or information provided by Indian tribes to assist in the identification of such properties, to the extent allowable under Section 304 of the National Historic Preservation Act, 54 U.S.C. § 306108, 36 CFR § 800.11(c), and in accordance with the Texas Natural Resources Code Title 9, § 191.021.
- (B) Assessment of Adverse Effect**

For archeological sites determined eligible for the National Register, the Responsible Entity

shall submit documentation to the SHPO of any proposed activities that do not fall within the exclusions of **Attachment A**. Documentation shall include an Undertaking description noting impacts that will occur to the ground surface and the depth of the impact. The Responsible Entity should assess whether the Undertaking would have an adverse effect on the historic property. If an adverse effect determination is made, the SHPO shall concur or disagree with the determination. If no determination is reached by the Responsible Entity, the SHPO shall determine whether the work meets the Criteria of Adverse Effect in 26 C.F.R. § 800.5. If the Responsible Entity and the SHPO concur that the Undertaking will have no adverse effect on historic properties, no further coordination with the SHPO shall be required for the Undertaking.

**(C) Resolution of Adverse Effect**

- (1) If the Responsible Entity and the SHPO determine that an Undertaking will have an adverse effect on a historic property, the Responsible Entity shall consult with the SHPO, tribes, consulting parties, and the public, as appropriate, to seek alternatives that would avoid, minimize, or mitigate the effect of the Undertaking per 36 CFR § 800.6.
- (2) The Responsible Entity shall prepare a data recovery plan (the “Plan”) that describes mitigation measures proposed to resolve the Undertaking’s adverse effects and provide the Plan for review and comment to all consulting parties. All parties shall have thirty (30) calendar days in which to provide a written response to the Responsible Entity. The Plan may include, as appropriate, a research design; excavation or recordation strategies; work and report schedules; site monitoring; and relocation, preservation, or reburial; and curation of artifacts and records. It shall take into account all research and previous work conducted and specify, at a minimum: a) the historic property where data recovery is to be conducted (this information shall be removed in the redacted version of the report); b) the excavation or recordation that will be performed under the approved Plan; c) the methods to be used, with an explanation of their relevance to the Undertaking research design; and d) the methods to be used in analysis, data management, and dissemination of data, including a schedule of work and report submission.
- (3) When adverse effects to historic properties cannot be avoided, the Responsible Entity, in consultation with the SHPO and any consulting parties, shall develop a plan to mitigate the adverse effects. If the SHPO approves the plan for mitigating the adverse effects, the Responsible Entity shall implement the plan. Upon completion of the approved mitigation methods, the adverse effect shall be considered resolved.
- (4) If the Responsible Entity and the SHPO fail to agree on an adverse effect resolution, consultation shall proceed in accordance with 36 C.F.R. § 800.7 and **ARTICLE XI**.

**ARTICLE VII – EMERGENCY SITUATIONS**

- (A)** When the Responsible Entity or other local government official determines that a historic property is an imminent threat to public health or safety as a result of a natural or man-made disaster or emergency declared by the President or Governor, the Responsible Entity shall

notify the SHPO of the determination as soon as possible under the circumstances and provide all pertinent historic property information and a proposed plan of action for SHPO review.

- (B) If the SHPO objects to the proposed emergency action within seven (7) days, the Responsible Entity shall comply with all applicable non-emergency terms of this Agreement.
- (C) This Article applies only to Undertakings that will be implemented within thirty (30) days after a federal or state disaster or emergency has been formally declared, as stipulated in 36 C.F.R. § 800.12(d), unless such disaster or emergency declaration is extended by written proclamation prior to expiration of the initial thirty (30)-day period.
- (D) Immediate rescue, repair, stabilization, and salvage operations conducted to preserve life or property are exempt from the provisions of this Agreement, with the exception that the Responsible Entity shall provide documentation of the action to the SHPO within thirty (30) days of the action. Where possible, emergency actions shall be undertaken in a manner that does not foreclose future preservation or restoration of affected historic properties.

#### **ARTICLE VIII—POST-REVIEW DISCOVERIES AND UNFORESEEN EFFECTS**

- (A) If, during the implementation of an Undertaking, a previously unidentified historic property is encountered, or a known historic property may be affected in an unanticipated manner, the Responsible Entity will assume its responsibilities under 36 CFR § 800.13(b), "Post-Review Discoveries: Discoveries without Prior Planning." The Responsible Entity will stop construction activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until the Responsible Entity concludes consultation with the SHPO.
- (B) The Responsible Entity will notify the SHPO of the discovery at the earliest possible time and consult to develop actions to take into account the effects of the Undertaking. The Responsible Entity will notify the SHPO of any time constraints, and all parties shall mutually agree upon timeframes for this consultation. The Undertaking Applicant may participate in this consultation. The Responsible Entity will provide the SHPO with complete documentation on the change in the Undertaking, potential effects, and written recommendations, to take into account the effects of the Undertaking.
- (C) When the discovery contains burial sites or human remains, the Responsible Entity shall follow the post-review discovery procedures of 36 C.F.R. § 800.13 and applicable requirements of the Texas Health and Safety Code, Title 1, Chapter 711, and treat said sites and/or remains in a manner consistent with the provisions of ACHP's *Policy Statement Regarding Treatment of Burial Sites, Human Remains, or Funerary Objects* (February 23, 2007). Work shall immediately cease within a fifty (50) foot radius of the area of discovery.
- (D) If the SHPO does not object to the Responsible Entity's recommendations within the agreed upon timeframe, as developed pursuant to Section (B) above, the Responsible Entity will modify the scope of work to implement the recommendations. If the SHPO objects to the recommendations, the Responsible Entity and the SHPO will consult further to resolve the objection through actions including, without limitation, identifying Undertaking alternatives that result in the Undertaking having no adverse effect on historic properties, or

proceeding in accordance with **ARTICLES IV** through **VI**.

#### **ARTICLE IX – MONITORING AND REPORTING**

The SHPO may monitor activities carried out pursuant to this Agreement and shall review activities if requested by any interested party or person. The Responsible Entity shall cooperate with the SHPO in carrying out these monitoring responsibilities.

The Responsible Entity shall provide the SHPO with an annual report on activities carried out each fiscal year under the terms of this Agreement. The reports shall be due on September 1 of each year the Agreement is in effect. Each report shall include:

- (A) A list of all Undertakings that were exempt from review under **ARTICLE I**, including the address of each property, brief description of the work performed, and the exemption type from **Attachment A**; and
- (B) The status of any mitigation prepared pursuant to **ARTICLE V(D)** or **ARTICLE VI(C)**.

#### **ARTICLE X – ANTICIPATORY DEMOLITION**

The GLO shall not issue a grant a loan, loan guarantee, or other financial assistance to a subrecipient that has intentionally allowed or failed to prevent, in instances which the subrecipient has the authority to prevent, an adverse effect to an historic property. However, the GLO may determine, after consultation with the ACHP, that circumstances justify granting such assistance despite the adverse effect created or permitted by the subrecipient and will complete consultation for the Undertaking pursuant to the terms of this Agreement.

#### **ARTICLE XI – DISPUTE RESOLUTION**

Should a Party to this Agreement or a consulting party, including a subrecipient, object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the GLO shall consult with the objecting party to resolve the objection. If the GLO determines within thirty (30) days of receipt of an objection that such objection cannot be resolved, the dispute will be addressed as follows:

- (A) The GLO will forward all documentation relevant to the dispute, including the GLO's proposed resolution, to the ACHP in accordance with 36 CFR § 800.2(b)(2).
- (B) The ACHP shall provide the GLO with its advice on the resolution of the objection within thirty (30) days of receipt of adequate documentation; whereupon, the GLO shall prepare a written final response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and consulting parties, and provide copies of this written response to the objecting party, the ACHP, signatories, and consulting parties.
- (C) If the ACHP does not provide its advice regarding the dispute within thirty (30) days of the receipt of the GLO's proposed resolution, the GLO may make a final decision regarding the dispute and proceed accordingly. The GLO shall prepare a written response that takes into

account any timely comments regarding the dispute from signatories and consulting parties and provide copies of this written response to the objecting party, the ACHP, signatories, and consulting parties.

The Parties' responsibilities to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remain unchanged.

#### **ARTICLE XII – AMENDMENTS**

Amendments to this Agreement shall be by written agreement between the GLO and the THC. Subrecipients will be notified of any amendment to this Agreement via a Technical Guidance Letter issued under a subrecipient agreement. A copy of the amendment will be filed with the ACHP.

#### **ARTICLE XIII – TERMINATION**

A Party may terminate the Agreement upon thirty (30) days' written notification to the other. In the event of termination, the GLO will follow the procedure outlined in 36 CFR Part 800, Subpart B, "The Section 106 Process," with respect to Undertakings that had been covered by this Agreement.

#### **ARTICLE XIV – TERM OF AGREEMENT**

This Agreement shall be effective as of the date executed by the last party and will terminate five (5) years after its effective date. At any time during the term of this Agreement, the GLO and THC may extend the Agreement in accordance with ARTICLE XII. Unless a Responsible Entity terminates the Agreement earlier in accordance with ARTICLE XIII, the termination under this Article shall be effective for all Parties.

#### **ARTICLE XV – ADDITIONAL PARTIES**

Governmental bodies that are eligible to be Responsible Entities are required to comply with the terms of this Agreement as a condition of their participation in the Program. Except for ARTICLES XI, XII, and XIV, Responsible Entities other than the GLO will assume all roles, responsibilities, and terms ascribed to the GLO hereunder.

No assistance or approval for Program activities will be made by a Responsible Entity until it has approved the outcome of consultation with the THC and other consulting parties, if any. If the Responsible Entity does not approve the outcome of consultation for a specific Undertaking, then additional information, performance of additional consultations, or direct consultation with the SHPO and other parties may be required to complete the Section 106 Review process.

**SIGNATURE PAGE FOLLOWS**

**SIGNATURE PAGE FOR GLO CONTRACT NO. 19-127-000-B465**

Execution and implementation of this Agreement is evidence that the GLO has afforded the ACHP an opportunity to comment on these programs and that the GLO has taken into account the effects of the programs on historic properties.

**GENERAL LAND OFFICE**

DocuSigned by:



Mark A. Havens, Chief Clerk/  
Deputy Land Commissioner

Date of execution: 10/9/2018

OGC <sup>DS</sup> gm

DD <sup>DS</sup> [Signature]

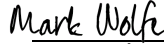
SDD <sup>DS</sup> PP

DGC <sup>DS</sup> MB

GC <sup>DS</sup> JG

**TEXAS HISTORICAL COMMISSION**

DocuSigned by:



By: Mark Wolfe  
Title: Executive Director

Date of execution: 10/8/2018

**ATTACHMENTS TO THIS AGREEMENT:**

**ATTACHMENT A – LIST OF EXEMPT ACTIVITIES**

**ATTACHMENT FOLLOWS**

## LIST OF EXEMPT ACTIVITIES

The GLO, in consultation with the THC, has determined that the following activities do not meet the definition of an Undertaking since they either: (1) do not have the potential to cause effects on historic properties per 36 CFR § 800.4(d)(1); or (2) have limited potential to affect historic properties per 36 CFR § 800.5 and will have no adverse effect if carried out as described. The activities in this list require no further review under the terms of this Agreement. The GLO and Responsible Entities shall maintain a list of Undertakings completed per these exemptions and shall make the list available upon the request of the THC and include the updated list in the annual report.

### GENERAL ACTIVITIES (Categorically Excluded under 24 CFR § 58.34)

- A. Environmental and other studies, resource identification, and the development of plans and strategies. (Implementation of such plans with federal funds may require consultation. If historic properties may be affected, SHPO recommends early consultation during planning stages.)
- B. Information and financial services.
- C. Administrative and management activities.
- D. Public services that will not have a physical impact or result in any physical changes to buildings, structures, sites, or objects, including but not limited to services concerned with employment, crime prevention, child care, health, drug abuse, education, counseling, energy conservation, and welfare or recreational needs.
- E. Inspections and testing of properties for hazards or defects. (Action taken pursuant to such inspections with federal funds will require consultation.)
- F. Purchase of insurance (e.g. homeowners or flood insurance; does not include HUD mortgage insurance).
- G. Purchase of tools.
- H. Engineering or design costs. (Construction activities undertaken with federal funds will require consultation. If historic properties may be affected, SHPO recommends early consultation during design.)
- I. Technical assistance and training.
- J. Assistance for temporary or permanent improvements that do not alter environmental conditions and are limited to protection, repair, or restoration activities necessary only to control or arrest the effects from disasters or imminent threats to public safety including those resulting from physical deterioration.
- K. Payment of principal and interest on loans made or obligations guaranteed by HUD;
- L. Any categorical exclusion listed in 24 C.F.R. § 58.35(a) provided that there are no circumstances which require compliance with any other Federal laws and authorities cited in 24 C.F.R. § 58.5.

### REHABILITATION OF BUILDINGS

#### Interior Rehabilitation:

Undertakings limited to interior spaces of single- or multifamily residential buildings to be retained

in the same use where the work will not be visible from the exterior of the building; no structural alterations are made; no demolition of walls, ceilings, or floors occurs; no drop ceilings are added; and no walls are leveled with furring or moved.

The following list of activities that do not need consultation with the SHPO provides further clarity for residential work and establishes standards for civic, commercial, and other property types.

A. Disaster recovery measures:

1. Temporary repair to single-family residential buildings to ensure safe shelter with access to essential electrical supply, HVAC, hot water, natural gas and potable water, and protection from elements such as weatherproofing and securing broken doors and windows.
2. Interior repairs to pre-disaster condition of single- or multifamily residential buildings, excluding structural repairs (e.g. foundation, framing), or other elements requiring architectural or engineering services.

B. Heating, ventilation, and air conditioning (HVAC):

1. Installing mechanical equipment in residential buildings in a manner that does not affect the exterior of the building.
2. Installing mechanical equipment in other building types within existing mechanical closets, chases, and unfinished attics or basements when ducts are not visible within occupied spaces of the building and access to the ducts does not require demolition of walls or ceilings in occupied spaces of the building.
3. Routine maintenance or retrofits to existing mechanical equipment, provided there is no physical impact on the building.
4. Replacement of existing mechanical equipment or installation of supplemental equipment, provided that exterior equipment is installed within the same footprint on the same pad, and interior equipment is installed within an existing mechanical closet or unoccupied attic or basement.
5. Upgrading existing facility and infrastructure-related pumps and motors, including those for HVAC systems, to variable-speed or premium efficiency standards.
6. Sealing, restoring, or insulating HVAC ducts, provided that the ducts are not visible in occupied spaces of the building and access to the ducts does not require demolition of walls or ceilings in occupied spaces of the building.
7. Adding or replacing existing building controls systems including HVAC control systems and the replacement of building-wide pneumatic controls with digital controls, thermostats, dampers, and other individual sensors like smoke detectors or carbon monoxide detectors (wired or non-wired).

C. Lighting and appliances:

1. Installation of fire, smoke, or carbon monoxide detectors.
2. Installation of compact fluorescent or LED bulbs in existing fixtures.
3. Replacement of fluorescent bulbs, ballasts, and/or wiring in existing fixtures.

4. Replacement of existing fluorescent fixtures with new fixtures, provided that the fixtures are not original to the building.
5. Installation of motion/occupancy sensors for lighting control.
6. Replacement of existing lighting in street lighting fixtures with high efficiency lighting.
7. Replacement of existing appliances.

D. Insulation:

1. Attic insulation with proper ventilation, provided that insulation is fiberglass batt or loose fill only (not spray foam).
2. Under-floor insulation in basements or crawl spaces, provided that insulation is fiberglass batt or loose fill only (not spray foam), and ventilation of crawl spaces.
3. Exterior blown-in wall insulation (not spray foam) where holes are not drilled through exterior wall material or decorative plasterwork on the interior and result in no permanent visible alteration to the structure.
4. Water heater tank and pipe insulation.
5. Radiant barriers in unoccupied attic spaces.

E. Plumbing:

1. Repairing plumbing systems in a manner that does not affect the interior or exterior of the building.
2. Water heater repair or replacement that does not require a visible new supply or venting.
3. Restroom improvements for handicapped access, provided the work is contained within the existing restroom.
4. Water conservation measures, such as installation of low-flow faucets, toilets, showerheads, urinals, or distribution device controls, in residential properties; and water conservation measures in other building types, provided that plumbing fixtures to be replaced are not original to the building.
5. Upgrading existing facility and infrastructure-related pumps and motors, including those for water/wastewater facilities, to variable-speed or premium efficiency standards.

F. Electrical:

Repairing or upgrading electrical systems in a manner that does not affect the interior or exterior of the building.

**Exterior Rehabilitation:**

A. Roofing:

1. In-kind replacement of existing roofing material.
2. Replacement of existing gutters and downspouts.
3. Installation of continuous ridge vents covered with ridge shingles or boards, or roof jacks/vents, bath and kitchen fan vents, gable vents, soffit and frieze board vents, and

combustion appliance flues, if not located on a primary roof elevation or visible from the public right-of-way.

4. Installation of reflective roof coatings, with materials that closely match the historic materials and form, or with materials that restore the original feature based on historic evidence, and in a manner that does not alter the roofline.
5. Installation of new roofing or reflective roof coatings on a flat-roofed building with a parapet, such that the roofing material is not visible from any public right-of-way.
6. Replacement of asbestos tile roofing with composition shingle/asphalt shingle roofing matching the shape and pattern of the asbestos tile.

B. Siding, soffits, fascia, and masonry:

1. Repair or limited, in-kind replacement of existing siding, soffits, and fascia. Limited replacement shall not exceed 25% of the overall exterior area, and new material shall match existing in material, profile, and other characteristics.
2. Limited repair of masonry, including chimneys, where mortar matches the existing in color, texture, strength, joint width, and joint profile and methods are consistent with the preservation techniques in *Preservation Brief #2; Repointing Mortar Joints in Historic Masonry Buildings*. Limited repair shall not exceed 10% of the overall exterior wall area.

C. Painting:

1. Painting previously painted exterior surfaces, provided destructive surface preparation treatments, including but not limited to water-blasting, sandblasting and chemical removal, are not used.
2. Conducting lead-based paint abatement or interim controls pursuant to 24 CFR § 35.115(a)(13), if carried out by a qualified contractor using current best practices and methods that are consistent with the preservation techniques in *Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing*. (Any removal of historic building materials or encapsulation with vinyl siding or other materials is not included in this exemption.)

D. Windows and doors:

1. Weatherstripping around windows and doors, installing thresholds, and other air infiltration control measures that do not harm or obscure historic windows, doors, or trim.
2. Caulking around windows and doors, provided that the color of the sealant matches adjacent materials.
3. Installing interior storm windows or doors, or exterior storm or wood screen doors, on residential buildings, in a manner that does not harm or obscure historic windows or trim.
4. Repair or repainting of existing storm windows.
5. Installing removable film on windows (if the film is transparent), solar screens, or window louvers, on residential buildings, in a manner that does not harm or obscure historic windows or trim.
6. Repair or replacement of missing or damaged window glass.
7. Repair of windows using in-kind materials.

8. Replacement of non-historic exterior doors with compatible wood panel doors.

E. Porches:

1. Repair (not replacement) of porch ceilings, steps, floors, or railings.
2. Repair of existing wheelchair ramps.
3. Installing a new wheelchair ramp on the side or rear entrance of a home, when not visible from any public right-of-way.
4. Installing a new wheelchair ramp on the front of a home, or other entrance visible from a public right-of-way, in a manner that does not remove, compromise, or damage existing historic materials or features and would be completely reversible without damage to historic fabric.

F. Ground-disturbing activity and site work:

1. Repairing or replacing in-kind existing driveways, parking areas, and walkways with materials of similar appearance in a manner that does not disturb historic landscape materials or features.
2. Excavating to gain access to existing underground utilities to repair or replace them, in a manner that does not disturb historic exterior building or landscape materials or features, and where all construction occurs within existing trenches.
3. Repair or replacement of metal utilitarian structures (e.g. pump houses, storage buildings) less than 45 years old, when performed in previously disturbed soils.
4. Ground disturbance that is minimal and occurs in documented, previously disturbed soil.

G. Elevation: Elevation of pier-and-beam, wood frame structures four feet or less if the front entrance stair configuration is unaltered. Foundation skirting and piers shall be extended or replaced with in-kind materials; brick or stucco piers with lattice or board and batten skirting is preferred in instances where historic materials are no longer present. This exemption does not apply to buildings with other structural systems, such as masonry construction or slab-on-grade foundations.

H. Generators: Installation of generators at existing facilities, where:

1. Ground-level equipment is located to the rear or side of the building or is otherwise screened from view from any public right-of-way, and any new equipment slabs and trenching occurs within previously disturbed soils.
2. Roof-mounted equipment is not visible from the ground level.

## **INFRASTRUCTURE**

The following projects may be exempt from review when they occur 25 feet or greater from the fence line or boundary of a cemetery, or where no work will occur within 15 feet of a cemetery. Projects which involve work within 15 feet of a cemetery must be submitted in accordance with **ARTICLE VI, ARCHEOLOGICAL REVIEW**, and will require archeological studies to verify whether or not there are any unmarked graves beyond the marked cemetery boundary. These studies may include scrapings or informant interviews with the manager of the cemetery association, local

historians, funeral home directors, or other informed individuals.

- A. Routine road maintenance and resurfacing where work is confined to the existing right-of-way and previously maintained surfaces, ditches, culverts, and cut and fill slopes where there are no known historic properties, or historic properties would not be affected because the proposed work is clearly within a disturbed context. This exemption shall not apply in areas with brick streets or with tile curb markers or other decorative street features.
- B. Point repair to an existing water or wastewater line where construction occurs in the original trench
- C. Replacement of existing water or wastewater lines where all construction occurs within the original trench.
- D. Replacement of existing water or wastewater lines in a new trench paralleling the existing line if the following conditions are met:
  1. Replacement occurs beneath city streets or adjacent drainage rights-of-way (as in item A);
  2. Replacement does not occur within a National Register historic district or locally designated historic district;
  3. Replacement does not occur within the historic towns of Goliad, San Augustine, Jefferson, Nacogdoches, Bastrop, Castroville, San Ygnacio, Roma, Refugio, Ysleta, San Elizario, and Presidio;
  4. Replacement does not occur beneath brick-paved streets; and
  5. Replacement does not occur adjacent to roads in rural areas of the county (where abandoned cemeteries or unrecorded archeological sites might be impacted by a new trench).
- E. Minor alterations or additions to existing water or wastewater treatment plants or other facilities that are less than 45 years old. (Excavation of new treatment ponds or enlargement of existing ponds are not considered minor alterations and are subject to review).
- F. Installation of generators at existing water/wastewater or shelter facilities, where:
  1. Ground-level equipment is located to the rear or side of the building or is otherwise screened from view from any public right-of-way, and any new equipment slabs and trenching occurs within previously disturbed soils.
  2. Roof-mounted equipment is not visible from the ground level.
- G. Addition or replacement of equipment within the same location and footprint (Examples include but not limited to; Computer monitoring equipment, bar screens, clarifiers, chlorination equipment, SCADA equipment etc.).
- H. Repair of bridges less than 45 years old.

**Attachment J –  
Tribal Consultation Correspondence**



CITY OF CORPUS CHRISTI  
OFFICE OF THE MAYOR  
PAULETTE M. GUAJARDO

February 16, 2026

Amber Silverhorn-Wolfe, President  
Wichita and Affiliated Tribes  
P.O. Box 729  
Anadarko, OK 73005

Re: Oso WWTP Flood Emergency Generator, 501 Nile Drive, Corpus Christi, TX 78412  
HUD CDBG-MIT Grant Number 24-065-091-E767

Dear President Silverhorn-Wolfe,

The City of Corpus Christi is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the City of Corpus Christi has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, buildings and structures with significant tribal association.

The City of Corpus Christi will conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

The City of Corpus Christi is proposing to install emergency generators and associated instrumentation and electrical control systems at the existing Oso Wastewater Treatment Plant to allow the plant to maintain integrity of the treatment process during extreme weather events. The State Historic Preservation Officer (SHPO), the Texas Historical Commission (THC), was not consulted because a programmatic agreement exists between THC and the HUD program administrator, the Texas General Land Office (GLO). The programmatic agreement states that activities, such as installation of generators at existing facilities, do not meet the definition of an undertaking and are therefore exempt and do not require further review.

To meet project timeframes, if you would like to be a consulting party on this project, please let us know of your interest within 30 days. If you have any initial concerns with impacts of the project on religious or cultural properties, please note them in your response.

Enclosed is a map that shows the project area. The project will occur at the existing Oso Wastewater Treatment Plant and consists of installation of emergency generators with full power capacity, installation of instrumentation and an electrical control system to allow for automatic switching between grid electrical power and emergency generators, and miscellaneous improvements related to the emergency generators.

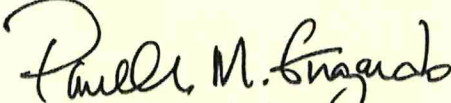
More information on the Section 106 review process is available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/>.

HUD's process for tribal consultation under Section 106 is described in a Notice available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/tribal-consultation/>.

If you do not wish to consult on this project, please inform us. If you do wish to consult, please include in your reply the name and contact information for the tribe's principal representative in the consultation.

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this project.

Sincerely,



Paulette M. Guajardo, Mayor  
City of Corpus Christi



CITY OF CORPUS CHRISTI  
OFFICE OF THE MAYOR  
PAULETTE M. GUAJARDO

February 16, 2026

Forrest Tahdooahnippah, Chairman  
Comanche Nation, Oklahoma  
584 NW Bingo Road  
Lawton, OK 73507

Re: Oso WWTP Flood Emergency Generator, 501 Nile Drive, Corpus Christi, TX 78412  
HUD CDBG-MIT Grant Number 24-065-091-E767

Dear Chairman Tahdooahnippah,

The City of Corpus Christi is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the City of Corpus Christi has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, buildings and structures with significant tribal association.

The City of Corpus Christi will conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

The City of Corpus Christi is proposing to install emergency generators and associated instrumentation and electrical control systems at the existing Oso Wastewater Treatment Plant to allow the plant to maintain integrity of the treatment process during extreme weather events. The State Historic Preservation Officer (SHPO), the Texas Historical Commission (THC), was not consulted because a programmatic agreement exists between THC and the HUD program administrator, the Texas General Land Office (GLO). The programmatic agreement states that activities, such as installation of generators at existing facilities, do not meet the definition of an undertaking and are therefore exempt and do not require further review.

To meet project timeframes, if you would like to be a consulting party on this project, please let us know of your interest within 30 days. If you have any initial concerns with impacts of the project on religious or cultural properties, please note them in your response.

Enclosed is a map that shows the project area. The project will occur at the existing Oso Wastewater Treatment Plant and consists of installation of emergency generators with full power capacity, installation of instrumentation and an electrical control system to allow for automatic switching between grid electrical power and emergency generators, and miscellaneous improvements related to the emergency generators.

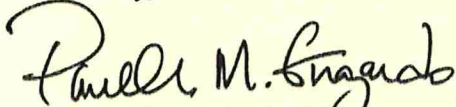
More information on the Section 106 review process is available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/>.

HUD's process for tribal consultation under Section 106 is described in a Notice available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/tribal-consultation/>.

If you do not wish to consult on this project, please inform us. If you do wish to consult, please include in your reply the name and contact information for the tribe's principal representative in the consultation.

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this project.

Sincerely,

A handwritten signature in black ink, reading "Paulette M. Guajardo". The signature is written in a cursive style with a large initial "P".

Paulette M. Guajardo, Mayor  
City of Corpus Christi



CITY OF CORPUS CHRISTI  
OFFICE OF THE MAYOR  
PAULETTE M. GUAJARDO

February 16, 2026

Russell Martin, President  
Tonkawa Tribe of Oklahoma  
1 Rush Buffalo Road  
Tonkawa, OK 74653

Re: Oso WWTP Flood Emergency Generator, 501 Nile Drive, Corpus Christi, TX 78412  
HUD CDBG-MIT Grant Number 24-065-091-E767

Dear President Martin,

The City of Corpus Christi is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the City of Corpus Christi has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, buildings and structures with significant tribal association.

The City of Corpus Christi will conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

The City of Corpus Christi is proposing to install emergency generators and associated instrumentation and electrical control systems at the existing Oso Wastewater Treatment Plant to allow the plant to maintain integrity of the treatment process during extreme weather events. The State Historic Preservation Officer (SHPO), the Texas Historical Commission (THC), was not consulted because a programmatic agreement exists between THC and the HUD program administrator, the Texas General Land Office (GLO). The programmatic agreement states that activities, such as installation of generators at existing facilities, do not meet the definition of an undertaking and are therefore exempt and do not require further review.

To meet project timeframes, if you would like to be a consulting party on this project, please let us know of your interest within 30 days. If you have any initial concerns with impacts of the project on religious or cultural properties, please note them in your response.

Enclosed is a map that shows the project area. The project will occur at the existing Oso Wastewater Treatment Plant and consists of installation of emergency generators with full power capacity, installation of instrumentation and an electrical control system to allow for automatic switching between grid electrical power and emergency generators, and miscellaneous improvements related to the emergency generators.

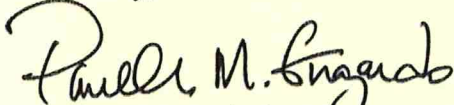
More information on the Section 106 review process is available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/>.

HUD's process for tribal consultation under Section 106 is described in a Notice available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/tribal-consultation/>.

If you do not wish to consult on this project, please inform us. If you do wish to consult, please include in your reply the name and contact information for the tribe's principal representative in the consultation.

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Paulette M. Guajardo". The signature is written in a cursive style with a large initial "P".

Paulette M. Guajardo, Mayor  
City of Corpus Christi



CITY OF CORPUS CHRISTI  
OFFICE OF THE MAYOR  
PAULETTE M. GUAJARDO

February 16, 2026

Durell Cooper, Chairman  
Apache Tribe of Oklahoma  
511 East Colorado Drive  
Anadarko, OK 73005

Re: Oso WWTP Flood Emergency Generator, 501 Nile Drive, Corpus Christi, TX 78412  
HUD CDBG-MIT Grant Number 24-065-091-E767

Dear Chairman Cooper,

The City of Corpus Christi is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the City of Corpus Christi has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, buildings and structures with significant tribal association.

The City of Corpus Christi will conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

The City of Corpus Christi is proposing to install emergency generators and associated instrumentation and electrical control systems at the existing Oso Wastewater Treatment Plant to allow the plant to maintain integrity of the treatment process during extreme weather events. The State Historic Preservation Officer (SHPO), the Texas Historical Commission (THC), was not consulted because a programmatic agreement exists between THC and the HUD program administrator, the Texas General Land Office (GLO). The programmatic agreement states that activities, such as installation of generators at existing facilities, do not meet the definition of an undertaking and are therefore exempt and do not require further review.

To meet project timeframes, if you would like to be a consulting party on this project, please let us know of your interest within 30 days. If you have any initial concerns with impacts of the project on religious or cultural properties, please note them in your response.

Enclosed is a map that shows the project area. The project will occur at the existing Oso Wastewater Treatment Plant and consists of installation of emergency generators with full power capacity, installation of instrumentation and an electrical control system to allow for automatic switching between grid electrical power and emergency generators, and miscellaneous improvements related to the emergency generators.

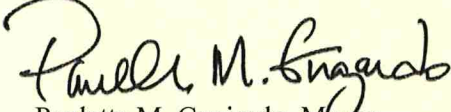
More information on the Section 106 review process is available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/>.

HUD's process for tribal consultation under Section 106 is described in a Notice available at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/tribal-consultation/>.

If you do not wish to consult on this project, please inform us. If you do wish to consult, please include in your reply the name and contact information for the tribe's principal representative in the consultation.

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this project.

Sincerely,



Paulette M. Guajardo, Mayor  
City of Corpus Christi



Google Earth

Note: Property Boundaries Shown are Approximate.

Drawn By:	TLD	Scale:	As Shown
Project Number:	24L0174A_08	Date:	2/11/26



**Site Map**  
 Oso WWTP  
 501 Nile Drive, Corpus Christi,  
 Nueces County, Texas

9589 0710 5270 2837 5433 60

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

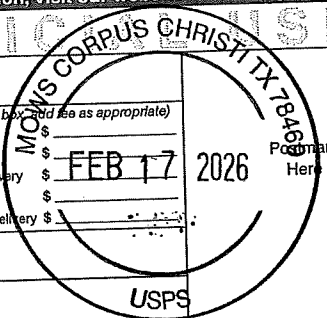
Total Postage and Fees \$

Sent To *Russell Martin, President*

Street and Apt. No., or PO Box No. *1 Kush Buffalo Road*

City, State, ZIP+4® *Tonkawa, OK 74453* *020*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions



9589 0710 5270 2837 5433 75

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

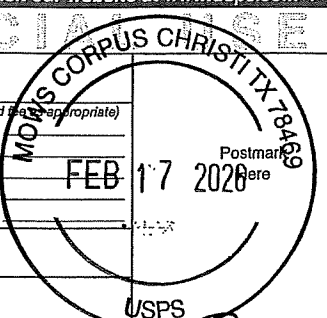
Total Postage and Fees \$

Sent To *Amber Silverhorn-Wolfe, President*

Street and Apt. No., or PO Box No. *PO Box 729*

City, State, ZIP+4® *Anadarko, OK 73005* *020*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instruction



9589 0710 5270 2837 5434 24

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

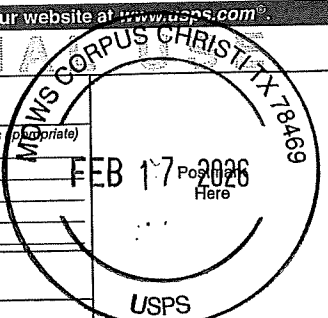
Total Postage and Fees \$

Sent To *Dwelle Cooper, Chairman*

Street and Apt. No., or PO Box No. *311 East Colorado Drive*

City, State, ZIP+4® *Anadarko, OK 73005* *020*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions



9589 0710 5270 2837 5434 12

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

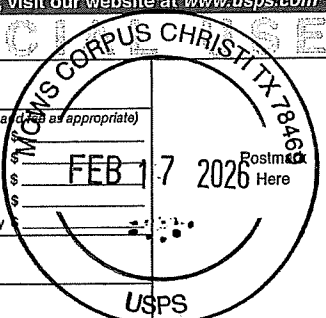
Total Postage and Fees \$

Sent To *Foreest Tahdoahippah, Chairman*

Street and Apt. No., or PO Box No. *384 NW Tango Road*

City, State, ZIP+4® *Lawton, OK 73507* *020*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instruction



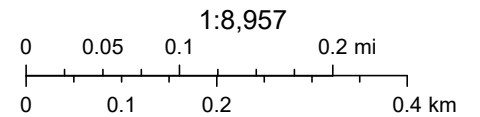
**Attachment K –  
THC Map and Detail Sheet**

# THC Map - Oso WWTP



2/12/2026

● Historical Marker



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

## Details for Karankawa Indians

Historical Marker — Atlas Number 5355002899

### Data

<b>Marker Number</b>	2899
<b>Atlas Number</b>	5355002899
<b>Marker Title</b>	Karankawa Indians
<b>Index Entry</b>	Karankawa Indians
<b>Address</b>	909 Ennis Joslin Rd.
<b>City</b>	Corpus Christi
<b>County</b>	Nueces
<b>UTM Zone</b>	14
<b>UTM Easting</b>	663872
<b>UTM Northing</b>	3066047
<b>Subject Codes</b>	Native Americans
<b>Marker Year</b>	1976
<b>Recorded Texas Historic Landmark</b>	No
<b>Marker Location</b>	Hans & Pat Suter Wildlife Refuge, on trail about 100 feet NE of intersection of Ennis Joslin Rd. and Nile Dr.
<b>Private Property</b>	No
<b>Marker Condition</b>	In Situ
<b>Marker Size</b>	27" x 42"
<b>Marker Text</b>	<p>Among the first Indians encountered in Texas by 16th and 17th century European explorers were the nomadic Karankawas, who lived along the coast from Galveston Bay to the Corpus Christi area. A primitive tribe, the Karankawas fished and gathered roots and cactus fruit for food. The men were usually tall and wore their hair long or braided with colorful bits of flannel and rattlesnake rattles. The women were shorter and stouter. The Indians often smeared their bodies with alligator grease and dirt to repel mosquitoes. At first friendly to Europeans, they later gained a reputation for savagery. Persistent reports that the Karankawas were cannibals may be traced to occasional ritualistic practices. Attempts by Spanish Franciscans to found missions for this coastal tribe were not successful. Never large in numbers, the Karankawa population dwindled as a result of diseases contracted from Europeans. During the 19th century, many of the Indians were killed in warfare with Jean Lafitte's pirates and with Anglo-American colonists. Remaining members of the tribe fled to Mexico about 1843. Annihilation of that remnant about 1858 marked the disappearance of the Karankawa Indians. (1976)</p>

ATLAS\_NUM=5355002899

## Location Map



1511 Colorado St.  
Austin, TX, 78701

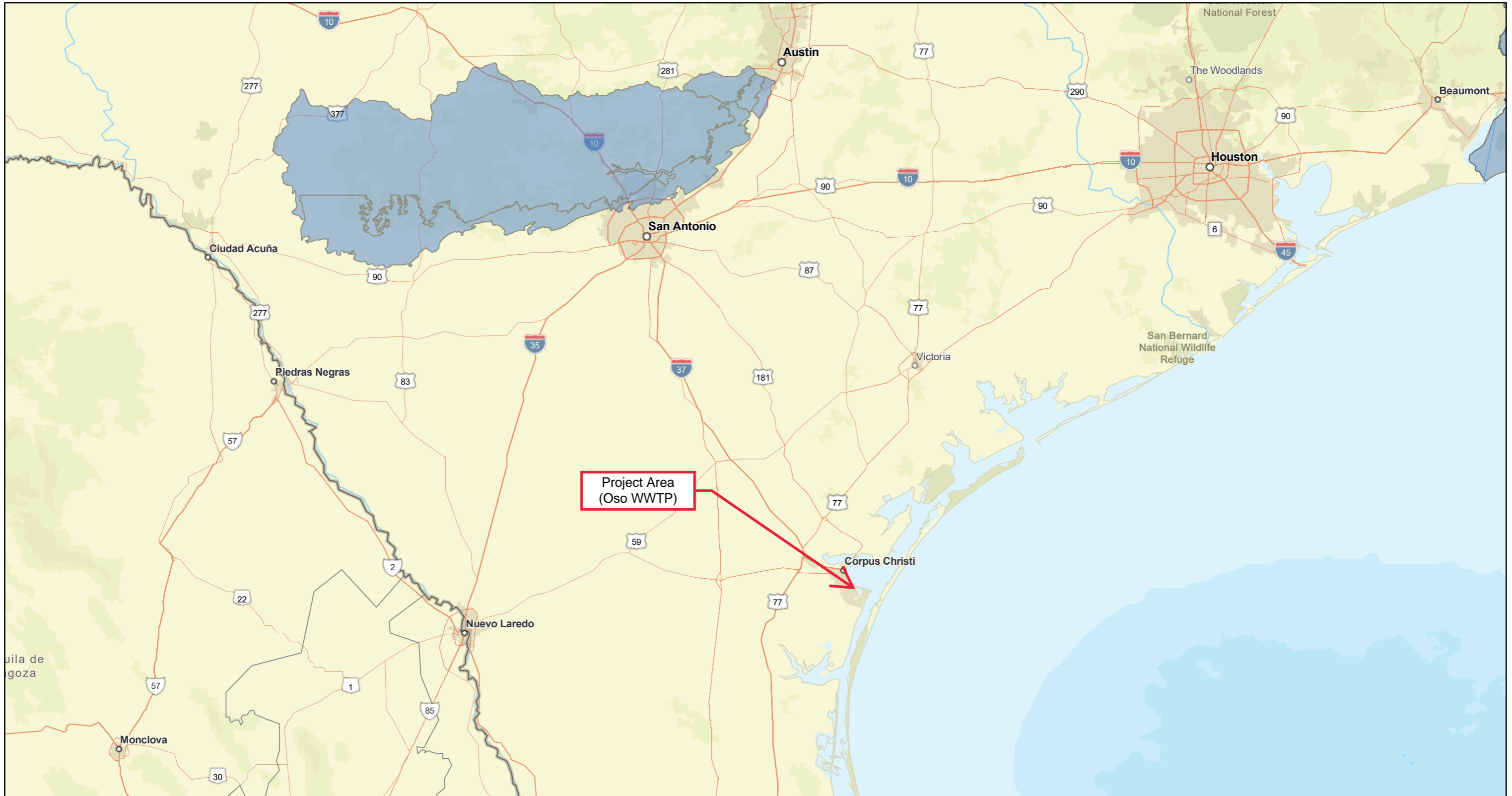
- [Texas Homeland Security](#)
- [Texas Veterans Portal](#)
- [Texas Records and Information Locator \(TRAIL\) Search](#)
- [Texas.gov](#)

- [Site Map](#)
- [Policies](#)
- [Archeological Log In](#)


© 2026 Texas Historical Commission.

**Attachment L –  
Sole Source Aquifers Map**

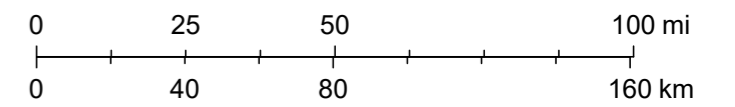
# Sole Source Aquifer Map



11/5/2025, 8:32:07 AM

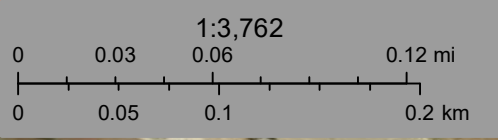
 Sole\_Source\_Aquifers

1:2,320,803



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

**Attachment M –  
NWI Map**



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands\_team@fws.gov

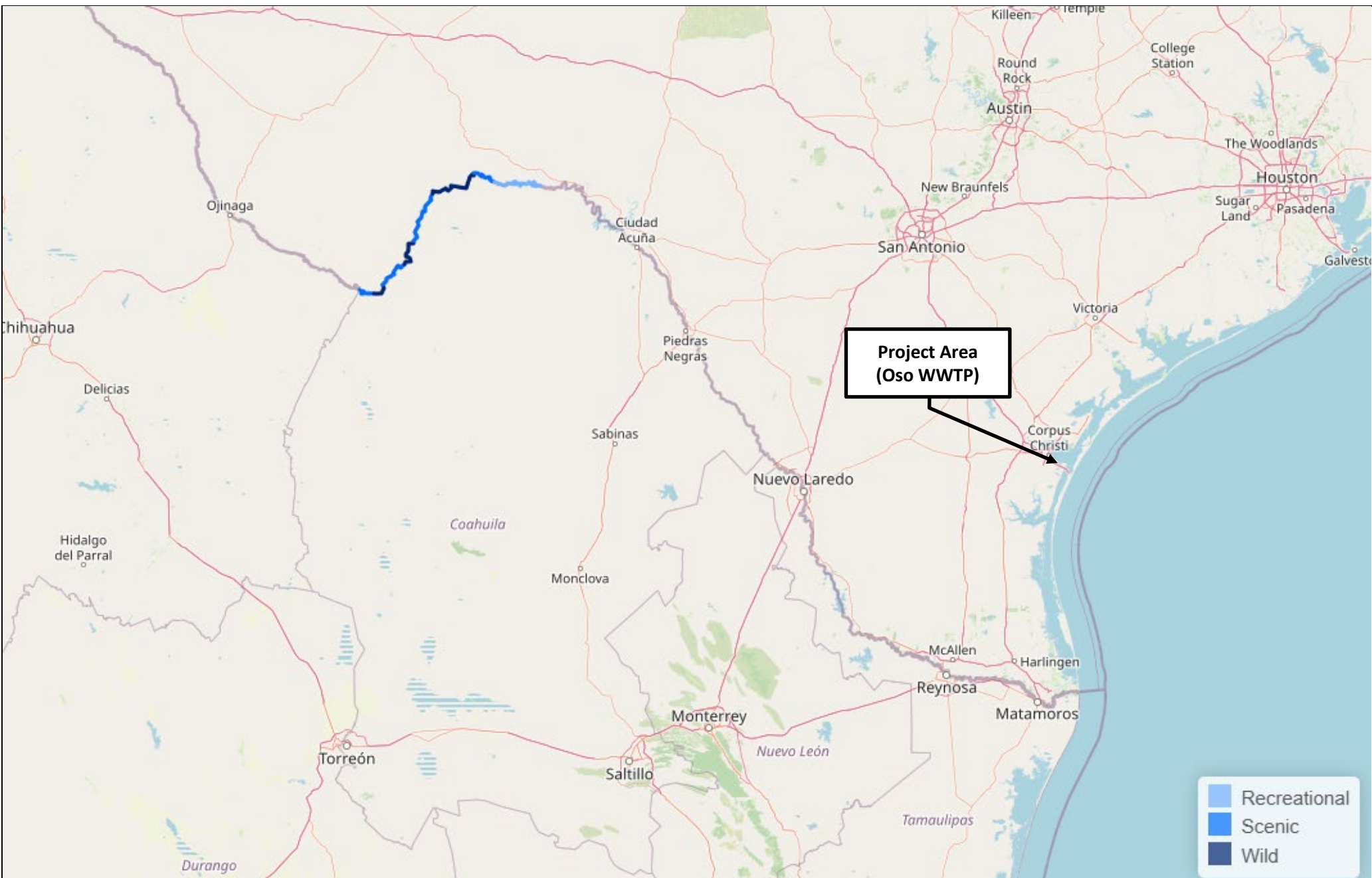
December 15, 2025

**Wetlands**

- |                                |                                   |          |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland       | Lake     |
| Estuarine and Marine Wetland   | Freshwater Forested/Shrub Wetland | Other    |
|                                | Freshwater Pond                   | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

**Attachment N –  
NWSRS Map**



Note: Property location shown is approximate.

Drawn By:	TLD	Scale:	As Shown
Project Number:	24L0174A_08	Date:	11/5/25

**Wild and Scenic Rivers Map**  
 Oso Wastewater Treatment Plant  
 501 Nile Drive, Corpus Christi, Nueces County, Texas

**Attachment O –  
Zoning Information from Unified Development Code  
City of Corpus Christi Zoning Map**

## § 4.3 Single-Family Residential Districts

### 4.3.1. Purpose Statements

#### A. Farm-Rural District Regulations

The Farm-Rural zoning district includes lands that are relatively underdeveloped and agricultural in nature. The zoning district is intended to permit the continued use of the land for agricultural purposes. It is the default zoning district for land newly-annexed to the City, but not yet placed in a zoning classification appropriate for final use.

#### B. Residential Estate District Regulations

The Residential Estate zoning district provides for single-family residential development of a spacious character together with related recreational facilities normally required to provide an orderly, attractive and spacious residential living environment. The lots are a minimum of 1 acre in area and are not intended to be served by City water, wastewater or storm water services. The zoning district is intended to retain a rural character.

#### C. Single-Family 15, 10, and 6 Districts

The Single-Family 15, 10 and 6 zoning districts provide for orderly suburban residential development and redevelopment. A limited number of public and civic uses are allowed, subject to the restrictions necessary to preserve and protect the single-family character of the neighborhood.

#### D. Single-Family 4.5 District

The Single-Family 4.5 zoning district provides for residential development and redevelopment at a higher density than the other residential zoning districts. A limited number of public and civic uses are allowed, subject to the restrictions necessary to preserve and protect the single-family character of the neighborhood.

### 4.3.2. Permitted Uses

The following principal uses are permitted by right, permitted subject to limitations, or require a special use exception or special permit in the single-family residential zoning districts. Uses may be subject to additional limitations specified in Section 6.5 when located inside a Navy Air Installation Compatible use Zone (AICUZ) (including Clear and Accident Potential Zones 1 2).

Table 4.3.2 Permitted Uses (Single-family districts)								
SINGLE-FAMILY DISTRICTS								
P = Permitted Use; SP = Special Permit; L = Subject to Limitations; [blank cell] = Not Permitted; SUE = Special Use Exception	FR	RE	RS- 22	RS- 15	RS -	RS-6	RS-4.5	Standards
<b>Residential Uses</b>								
Single-family detached house except:	P	P	P	P	P	P	P	
---Industrialized / Modular Housing	L	L	L	L	L	L	L	4.3.7
--Manufactured Housing								6.1.1
Traditional house			L	L	L	L	L	4.3.5
Semi-attached house					L	L		4.3.5
Group home [6 or fewer residents]	P	P	P	P	P	P	P	
Community Home	P	P	P	P	P	P	P	5.2.26
<b>Public and Civic Uses</b>								
Community Service Uses [5.1.3.A]	L	L	L	L	L	L	L	5.2.3
Day care center	L							5.2.4.B
Day care home [6 or fewer children]	L	L	L	L	L	L	L	5.2.4.C
Educational Facility Uses [5.1.3.C]	P	P	P	P	P	P	P	

Table 4.3.2 Permitted Uses (Single-family districts)								
SINGLE-FAMILY DISTRICTS								
P = Permitted Use; SP = Special Permit; L = Subject to Limitations; [blank cell] = Not Permitted; SUE = Special Use Exception	FR	RE	RS- 22	RS- 15	RS -	RS-6	RS-4.5	Standards
Parks and Open Area Uses [5.1.3.F] except for:	P	P	P	P	P	P	P	
---Cemetery, columbaria, mausoleum, memorial park		SP for existing facilities expanding on same or adjacent property only						
---Crematorium (human or animal)								
Golf course	P	P	L	L	L	L	L	5.2.5
Place of Worship Uses	P	P	P	P	P	P	P	
Utilities, major [5.1.3.I] except for:	L	L	L	L	L	L	L	5.2.6
---Wind energy units	L	L	L	L	L	L	L	5.6.4
Utilities, minor [5.1.3.I]	P	P	P	P	P	P	P	
Wireless telecommunication facility		See Section 5.5						
<b>Commercial Uses</b>								
Bed and breakfast home	SP	SP	SP	SP	SP	SP		5.2.8
Farmers market	L							5.2.9
Veterinarian or animal hospital with outdoor runs and kennels.	P							
<b>Industrial Uses</b>								
Storage of explosives or other hazardous materials.	SUE	SUE						
Above ground fuel tanks	SUE							
<b>Other Uses</b>								
Agriculture Uses [5.1.6.A] except for:	P							
---Kennel or animal shelter, indoor and outdoor	L							5.2.18
---Stable, public or private	L	L						5.2.19
Resource Extraction Uses [5.1.6.B]	P							

(Ordinance 029929, 08/27/2013; Ordinance 030769, 02/16/2016; Ordinance 030832, 05/02/2016; (Ordinance 031205, 08/08/2017; Ordinance 032357, 02/23/2021))

**4.3.3. Residential Development Standards**

Table 4.3.3 Residential Development (single-family districts)							
SINGLE-FAMILY DISTRICTS	FR	RE	RS-22	RS-15	RS-10	RS-6	RS-4.5
Min Lot Area	5 ac.	1 ac.	22,000	15,000	10,000	6,000	4,500
Min. Lot Width (Ft.)	150	100	75	50	50	50	45
Min. Yards (ft.)			25			25	20
Street	50	25		25	25		
Street (corner)	25	25	See 4.2.10				
Side (single)	25	15 <sup>1</sup>	10	5	5	5	5
Side (total)	50	30 <sup>1</sup>	20	10	10	10	10
Rear	25	15	10	5	5	5	5
Min. Open Space			30%	30%	30%	30%	30%

**Table 4.3.3 Residential Development (single-family districts)**

<b>SINGLE-FAMILY DISTRICTS</b>	<b>FR</b>	<b>RE</b>	<b>RS-22</b>	<b>RS-15</b>	<b>RS-10</b>	<b>RS-6</b>	<b>RS-4.5</b>
Max. Height (ft.)	45	35	35	35	35	35	35

(Ordinance 029376, 02/21/2012) (Ordinance 029929, 08/27/2013) (Ordinance 030769, 02/16/2016) (Ordinance [032357](#), 02/23/2021)

<sup>1</sup> Reduced side yard setback to 5-feet for detached non-habitable structures without residential use only.

All development shall be required to comply with this Section and all other requirements of this Code. In the event of a conflict between those requirements and this Section, the requirements of this Section shall prevail.

### Minimum lot sizes and widths

Minimum lot sizes and widths shall be the same as prescribed for single family homes in the zoning district in which development is proposed.

#### 1. Dwelling Unit Setback

##### a. Front Yard Setback

All structures shall be set back from the front property line the minimum distance required for the front yard by the zoning district regulations applicable to the zoning district in which the proposed development is located.

##### b. Rear Yard Setback

All structures shall be setback from the rear property line the minimum distance required for the rear yard by the zoning district regulations applicable to the zoning district in which the proposed development is located. Accessory pools, sheds, and other permitted accessory buildings shall only be permitted to encroach within the required rear yard up to 5 feet from any property line, but not in any easement.

##### c. Street Corner Setback

The minimum street corner setback shall be the same as the zoning district in which the development is proposed.

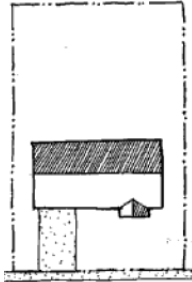
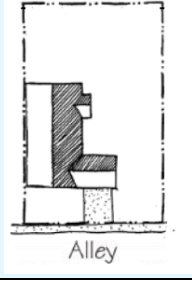
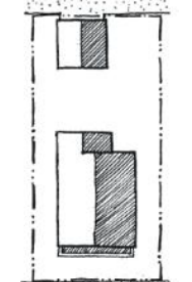
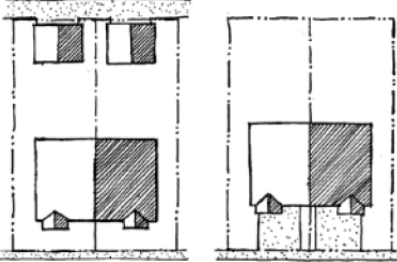
#### 2. Accessory Buildings and Structures

Accessory Uses and Structures shall comply with Section 5.3

(Ordinance [032357](#), 02/23/2021)

### 4.3.4. Housing Types

The following single-family housing types are established to provide a common terminology for housing in the City. All drawings in this Section are for illustrative purposes only.

Table 4.3.4 Housing Types	
DESCRIPTION	ILLUSTRATION
<p><b>Single-Family Detached House</b>            A dwelling unit located on a single lot with private yards on all four sides. (Industrialized/Modular Housing is considered a single-family detached house. See Subsection 4.3.7) (Ordinance 030769, 02/16/2016)</p>	
<p><b>Zero Lot Line House</b>            A dwelling unit located on a single lot with private yards on three sides. The unit has only a single side yard comprising the equivalent of two side yards of a single-family detached house.</p>	
<p><b>Traditional House</b>            A dwelling unit with alley access located on a single lot with private yards on all four sides. However, the house shall be set much closer to the street than a single-family detached house.</p>	
<p><b>Attached House</b>            Two attached single-family units located on two separately owned lots that share a common wall along the lot line, providing for fee-simple ownership.</p>	

4.3.5 Reserved

4.3.6. Traditional House

An alley shall be provided to the rear of all traditional houses. All vehicular access shall take place from the alley.

4.3.7. Industrialized Housing

4.3.7.A Definition

1. Industrialized housing is a residential structure that is:
  - a. Designed for the occupancy of one or more families;
  - b. Constructed in one or more modules or constructed using one or more modular components built at a location other than the permanent site; and
  - c. Designed to be used as a permanent residential structure when the module or the modular component is transported to the permanent site and erected or installed on a permanent foundation system.
2. Industrialized housing includes the structure’s plumbing, heating, air conditioning, and electrical system.
3. Industrialized housing does not include:

- a. Housing constructed of a sectional or panelized system that does not use a modular component; or
- b. A ready-built home constructed in a manner in which the entire living area is contained in a single unit or section at a temporary location for the purpose of selling and moving the home to another location.

(Ordinance [031878](#), 09/24/2019)

#### **4.3.7.B Construction or Installation of Industrialized Housing**

1. In relation to the on-site construction or installation of industrialized housing, the [Building Official](#) shall:
  - a. Require and review, for compliance with mandatory [building](#) codes, a complete set of designs, plans, and specifications;
  - b. Require that all applicable local permits and licenses that are applicable to single and two-family [dwellings](#) be obtained before construction begins on a building site;
  - c. Require that all modules or modular components bear an approved decal or insignia indicating inspection by the Texas Department of Licensing and Regulation; and
  - d. Establish procedures for the inspection of:
    - i. The erection and installation of industrialized housing or buildings to be located in the municipality, to ensure compliance with mandatory building codes and commission rules; and
    - ii. All foundation and other on-site construction to ensure compliance and approved designs, plans, and specifications.
2. Procedures described by subparagraph [4.3.7.B.1.d](#) above shall require:
  - a. Before occupancy, a final inspection or test in accordance with mandatory building codes; and
  - b. Correction of any deficiency identified by the test or discovered in the final inspection.

#### **4.3.7.C Single-and Two-Family Industrialized Housing Design Standards**

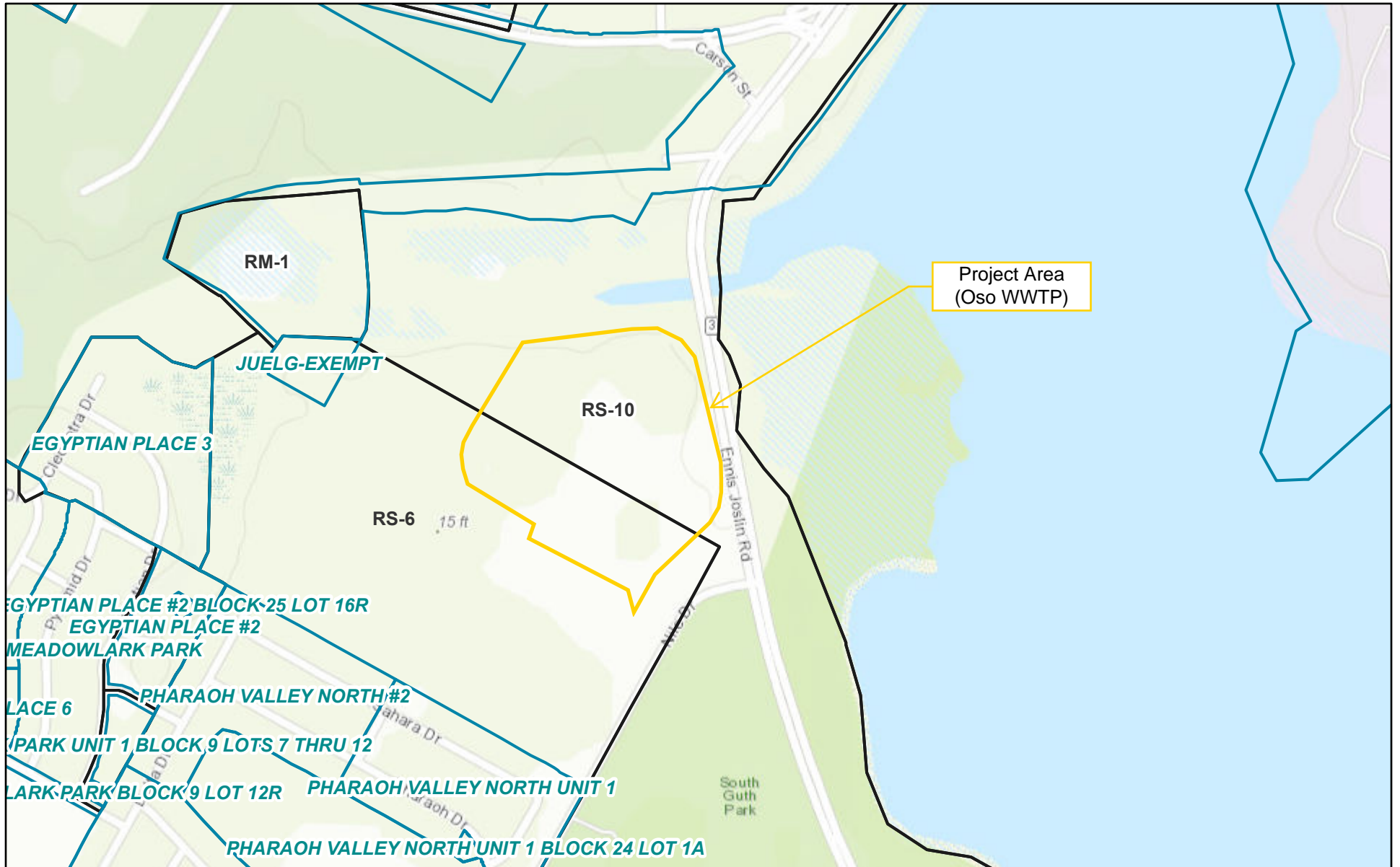
1. For purposes of this subsection, single-or two-family industrialized housing is real property.
2. Single-or two-family industrialized housing shall:
  - a. Have a value equal to or greater than the median taxable value for each single-or two-family [dwelling](#) located within 500 feet of the [lot](#) on which the industrialized house is proposed to be located, as determined after installation of the house by the most recent certified tax appraisal roll for each county in which the properties are located;
  - b. Have exterior siding, roofing, roof pitch, foundation, fascia, and fenestration compatible with the single-or two-family [dwellings](#) located within 500 feet of the [lot](#) on which the industrialized housing is proposed to be located.
  - c. Comply with all standards in this Unified Development Code applicable to single-or two-family dwellings; and
  - d. Be securely fixed to a [permanent foundation](#).

### 5.1.3.I. Utility

Public and Civic Use - Utility		
Characteristics: Public or private infrastructure serving a limited area with generally no on-site personnel (Minor Utility) or the community at-large and possibly having on-site personnel (Major Utility).		
Principal Uses	Accessory Uses	Uses Not Included
<p><b>Minor Utilities:</b></p> <ul style="list-style-type: none"> <li>Storm water retention and detention facility</li> <li>Telephone exchange</li> </ul> <p><b>Major Utilities:</b></p> <ul style="list-style-type: none"> <li>Artesian well</li> <li>Cell antennae</li> <li>Electrical substation</li> <li>Filter bed</li> <li>Railroad switching yard, roundhouse, or repair shop</li> <li>Stealth cell antennae</li> <li>Television and radio broadcasting antenna</li> <li>Waste treatment plant</li> <li>Water and wastewater pump station</li> <li>Water towers, tanks, or standpipe</li> <li>Wind energy conversion system or wind-driven generator</li> <li>Wireless telecommunication facility</li> </ul> <p><b>Exempt Utilities:</b></p> <ul style="list-style-type: none"> <li>Public/Semi-Public Infrastructure (ie. water, wastewater, storm water, gas, electrical, fiber optics)</li> </ul>	<ul style="list-style-type: none"> <li>Control, monitoring, data or transmission equipment</li> <li>Off-street parking</li> <li>Satellite dish antenna under 3.2 feet*</li> <li>Stealth cell antennae Storage</li> </ul>	<ul style="list-style-type: none"> <li>Landfill (see Waste-Related Service)</li> <li>Reservoir (see Parks and Open Areas)</li> <li>TV and radio studio (see Office)</li> <li>Utility office (see Office)</li> <li>Vehicle and equipment maintenance facility (see Light Industrial Service)</li> </ul>
*See additional standards in Subsection <a href="#">5.3.2</a>		

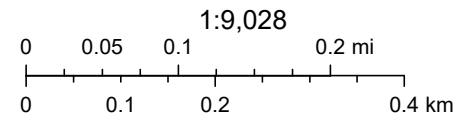
(Ordinance [032357](#), 02/23/2021)

# Corpus Christi Zoning Map



11/5/2025, 11:17:23 AM

- City Limits
- Zoning
- Subdivisions



Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

ArcGIS Web AppBuilder

**Attachment P –  
NRCS Soil Report**



United States  
Department of  
Agriculture

NRCS

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Nueces County, Texas



# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

---

<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Nueces County, Texas.....	13
Gv—Gullied land, saline.....	13
VcA—Victoria clay 0 to 1 percent slopes.....	13
VcB—Victoria clay, 1 to 3 percent slopes.....	15
<b>References</b> .....	17

# How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

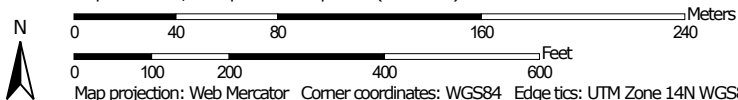
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map




Soil Map may not be valid at this scale.

Map Scale: 1:2,970 if printed on A portrait (8.5" x 11") sheet.



### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Nueces County, Texas  
 Survey Area Data: Version 24, Sep 5, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 18, 2023—Oct 20, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Gv	Gullied land, saline	3.7	14.9%
VcA	Victoria clay 0 to 1 percent slopes	4.2	16.5%
VcB	Victoria clay, 1 to 3 percent slopes	17.3	68.7%
<b>Totals for Area of Interest</b>		<b>25.2</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

## Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Nueces County, Texas

### Gv—Gullied land, saline

#### Map Unit Setting

*National map unit symbol:* dg39  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 28 to 30 inches  
*Mean annual air temperature:* 72 to 73 degrees F  
*Frost-free period:* 300 to 320 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Gullied land:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Gullied Land

##### Typical profile

*H1 - 0 to 80 inches:* clay

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### VcA—Victoria clay 0 to 1 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tj1f  
*Elevation:* 20 to 100 feet  
*Mean annual precipitation:* 29 to 37 inches  
*Mean annual air temperature:* 71 to 73 degrees F  
*Frost-free period:* 301 to 365 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Victoria and similar soils:* 97 percent  
*Minor components:* 3 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Victoria

##### Setting

*Landform:* Flats  
*Landform position (three-dimensional):* Talf  
*Microfeatures of landform position:* Gilgai  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear

## Custom Soil Resource Report

*Parent material:* Clayey fluviomarine deposits derived from igneous, metamorphic and sedimentary rock

### Typical profile

*Ap - 0 to 6 inches:* clay  
*Bss - 6 to 37 inches:* clay  
*Bnss - 37 to 50 inches:* clay  
*Bkny - 50 to 80 inches:* clay

### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 19 percent  
*Gypsum, maximum content:* 7 percent  
*Maximum salinity:* Nonsaline to moderately saline (0.5 to 14.5 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 29.0  
*Available water supply, 0 to 60 inches:* Moderate (about 9.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2s  
*Land capability classification (nonirrigated):* 2s  
*Hydrologic Soil Group:* C  
*Ecological site:* R150AY526TX - Southern Blackland  
*Hydric soil rating:* No

### Minor Components

#### Cranell

*Percent of map unit:* 2 percent  
*Landform:* Flats  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R150AY526TX - Southern Blackland  
*Hydric soil rating:* No

#### Edroy

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Ecological site:* R150AY641TX - Lakebed  
*Hydric soil rating:* Yes

## **VcB—Victoria clay, 1 to 3 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2v39n  
*Elevation:* 20 to 100 feet  
*Mean annual precipitation:* 29 to 37 inches  
*Mean annual air temperature:* 71 to 73 degrees F  
*Frost-free period:* 301 to 365 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Victoria and similar soils:* 97 percent  
*Minor components:* 3 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Victoria**

#### **Setting**

*Landform:* Flats  
*Landform position (three-dimensional):* Rise  
*Microfeatures of landform position:* Gilgai  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Clayey fluviomarine deposits derived from igneous, metamorphic and sedimentary rock

#### **Typical profile**

*Ap - 0 to 6 inches:* clay  
*Bss - 6 to 37 inches:* clay  
*Bnss - 37 to 50 inches:* clay  
*Bkny - 50 to 80 inches:* clay

#### **Properties and qualities**

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 19 percent  
*Gypsum, maximum content:* 7 percent  
*Maximum salinity:* Nonsaline to moderately saline (0.5 to 14.5 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 29.0  
*Available water supply, 0 to 60 inches:* Moderate (about 9.0 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 2s

Custom Soil Resource Report

*Land capability classification (nonirrigated): 2s*  
*Hydrologic Soil Group: C*  
*Ecological site: R150AY526TX - Southern Blackland*  
*Hydric soil rating: No*

**Minor Components**

**Cranell**

*Percent of map unit: 2 percent*  
*Landform: Flats*  
*Landform position (three-dimensional): Talf*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Ecological site: R150AY526TX - Southern Blackland*  
*Hydric soil rating: No*

**Edroy**

*Percent of map unit: 1 percent*  
*Landform: Depressions*  
*Landform position (three-dimensional): Dip*  
*Down-slope shape: Concave*  
*Across-slope shape: Concave*  
*Ecological site: R150AY641TX - Lakebed*  
*Hydric soil rating: Yes*

# References

---

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

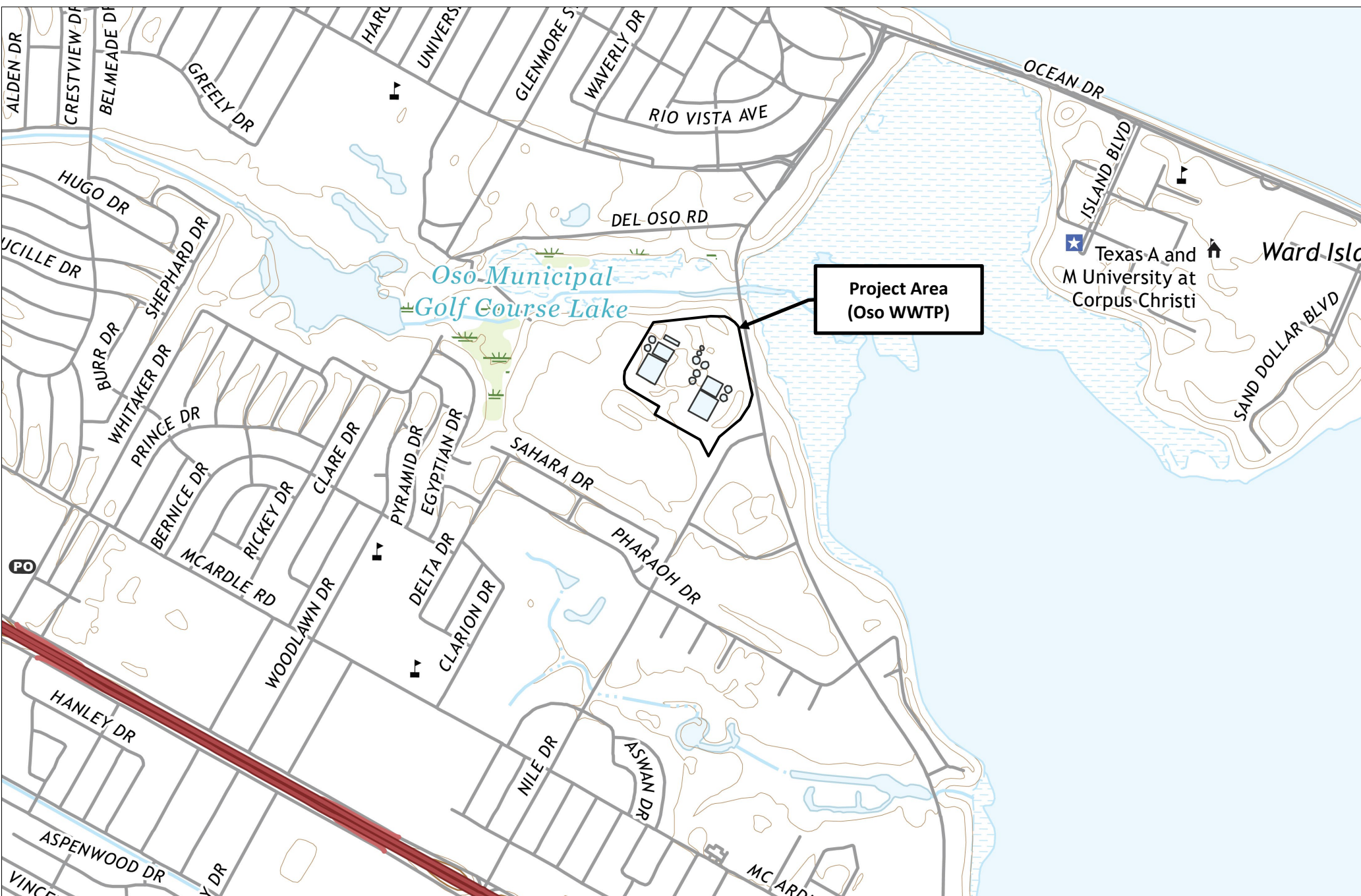
## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

**Attachment Q –  
USGS Topographic Map**



Note: Property location shown is approximate.



Drawn By:	TLD	Scale:	As Shown
Project Number:	24L0174A_08	Date:	11/5/25

**Topographic Map**  
 Oso Wastewater Treatment Plant  
 501 Nile Drive, Corpus Christi, Nueces County, Texas

**Attachment R –  
City of Corpus Christi Noise Ordinance**

## Chapter 31 - NOISE

*Footnotes:**--- (1) ---*

**Editor's note**— Ord. No. 027440, § 1, adopted Oct. 9, 2007, repealed the former Chapter 31, §§ 31-1—31-7, and enacted a new Chapter 31 as set out herein. The former Chapter 31 pertained to similar subject matter and derived from Code 1958, §§ 22-1—22-7.

**Cross reference**— *Drilling oil and gas wells, Ch. 35; as to use of railroad engine whistles, see § 47-10.*

## Sec. 31-1. - Definitions and standards.

*A-weighted sound level* means the sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The level so read is designated dB(A) or dBA.

*Entertainment district* means the downtown, bayfront, and port areas delineated in the entertainment district map, a copy of which is incorporated by reference and is on file with the city secretary's office.

*Noise nuisance* means any loud, irritating, vexing or disturbing sound originating from a nearby property under separate ownership which causes injury, discomfort, or distress of a person of reasonable nervous sensibilities, or any sound that exceeds the maximum permitted sound levels specified in [section 31-3](#).

*Nonresidential property* shall mean any real property that is not included in the definition of residential property as defined in this section. Without limitation, the term includes properties that have been developed other than as residential properties, properties that are undeveloped, and properties that are devoted to public purposes, such as public streets and parks.

*Residential property* shall mean any real property developed and used for human habitation that contains living facilities, including provisions for sleeping, eating, cooking, and sanitation, unless such premises are actually occupied and used primarily for purposes other than human habitation.

*Sound level* means the weighted sound pressure level obtained by the use of a sound level meter and frequency weighting network as specified in American National Standards Institute specifications for sound level meters. If the frequency weighting employed is not indicated, the A-weighting shall apply.

*Sound level meter* means an instrument which is used to measure sound pressure levels.

(Ord. No. 027440, § 1, 10-9-2007)

## Sec. 31-2. - Noise nuisance enumeration.

- (a) The following acts, among others not hereinafter enumerated, are declared to be "noise nuisances," and are unlawful and in violation of the provisions of this chapter when such acts are done or accomplished or carried on in such a manner, or with such volume, intensity, or with

continued duration, so as to annoy, to distress, or to disturb the quiet, comfort, or repose of a person of reasonable nervous sensibilities, within the vicinity or hearing thereof, or so as to endanger or injure the safety or health of humans or animals, or so as to interfere with the physical well being of humans or animals, or so as to endanger or injure personal or real property:

- (1) The playing or permitting or causing the playing of any radio, television, drum, juke box, musical instrument, sound amplifier or similar device which produces, reproduces, or amplifies sound.
- (2) The keeping of any animal, fowl, or bird, which makes frequent or long, continued noise.
- (3) The continued or frequent sounding of any horn or other signal device on any automobile or vehicle, motorcycle, bus or other vehicle, except as a danger signal.
- (4) The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, automobile, motorcycle, or other motor vehicle or boat, except through a properly installed muffler or other device which prevents loud or explosive noises therefrom.
- (5) The crying, calling, or shouting, in person or by a mechanical device, or the use of any whistle, rattle, bell, gong, clapper, hammer, drum, horn, loudspeaker or phonograph with or without an amplifier, hand organ, or other devices or instruments, musical or otherwise.
- (6) The raucous shouting, whistling, yelling, singing, hooting, or crying of peddlers, hawkers, vendors or any other persons.
- (7) The creation of any unreasonably loud, disturbing, and unnecessary noise on any street or sidewalk adjacent to any school, hospital, or court which is in session.

(Ord. No. 027440, § 1, 10-9-2007)

Sec. 31-3. - Noise violation decibel readings.

- (a) It shall be unlawful for any person to conduct, permit, allow, or produce a sound that is discernable beyond the property lines of the property on which the sound is being produced that, when measured with a sound level meter using the standardized frequency weighting as specified by the American National Standards Institute, exceeds the applicable dB(A) level listed below for the property on which the sound is received:
  - (1) Seventy (70) dB(A) between the hours of 8:01 a.m. and 11:00 p.m. Sunday through Thursday and between the hours of 7:01 a.m. and 12:00 midnight on Friday and Saturday.
  - (2) Sixty (60) dB(A) between the hours of 11:01 p.m. and 8:00 a.m. Sunday through Thursday and between the hours of 12:01 a.m. and 7:00 a.m. on Friday and Saturday and between the hours of 12:01 a.m. and 8:00 a.m. on Sunday.
  - (3) Eighty-five (85) dB(A) for sound that both originates from and is received on property within the Entertainment District, at all times.

- (b) The dB(A) levels set forth in this section apply to the property where the sound is being received. Any sound that when measured at the property where the sound is being received exceeds the dB(A) level set forth in this section is a violation of this chapter.
- (c) Any sound originating from Cole Park shall not exceed seventy (70) dB(A) when measured from any private property.

(Ord. No. 027440, § 1, 10-9-2007)

#### Sec. 31-4. - Vibration.

It shall be unlawful for any person to create, maintain or cause any ground or airborne vibration which is perceptible without instruments by a person at any point on any affected property adjoining the property in which the vibration source is located unless such activity is otherwise regulated under state or federal law.

(Ord. No. 027440, § 1, 10-9-2007)

#### Sec. 31-5. - Vehicular mounted sound amplification systems.

It shall be unlawful for any person operating or controlling a motor vehicle in either a public or private place within the city to operate any sound amplifier which is part of, or connected to, any radio, stereo receiver, compact disc player, cassette player, or other similar device in the motor vehicle, in such a manner that, when operated, is audible at a distance of thirty (30) or more feet from the source or, when operated causes a person to be aware of the vibration accompanying the sound in any location outside the confines of the vehicle emitting the sound, noise, or vibration.

(Ord. No. 027440, § 1, 10-9-2007)

#### Sec. 31-6. - Exceptions.

The provisions of this chapter shall not apply to:

- (a) The emission of sound for the purpose of alerting persons to an emergency; or
- (b) Sound produced by emergency vehicles; or
- (c) Sound produced by a vehicle motor with a properly installed muffler while the vehicle is moving on a public right-of-way, public waterway, airport runway, or railway; or
- (d) Sound produced by any governmental body in the performance of a governmental function; or
- (e) Sound generated at a scheduled stadium event; by parade spectators and participants on the parade route during a permitted parade; by outdoor celebration participants sponsored or co-sponsored by the city for the general welfare of the public, except for the limitation in subsection 31-3(c); by patrons and participants using cannons and gunfire during historical battle

reenactments for which a pyrotechnic permit has been obtained and the explosives have been inspected and approved by the fire marshal; by pyrotechnic displays that are inspected and approved by the city fire marshal; or

- (f) Sound generated from normal activities conducted on public playgrounds and public or private school grounds, included but not limited to, school athletic and school entertainment events; or
- (g) Sound generated by any activity in which the regulation thereof has been preempted by state or federal law, including, but not limited to, sound produced by aircraft in flight; or
- (h) Sound generated by the normal maintenance of property, such as lawn mowing, provided the activities take place from 7:00 a.m. to 8:00 p.m.; or
- (i) Sound produced by the operation of any air-conditioning unit, heat pump, HVAC system, or swimming pool machinery which does not produce a sound exceeding seventy (70) dBA on residential property or seventy (75) dBA on nonresidential property, when measured at the nearest exterior wall of a residential or commercial building under separate ownership; or
- (j) Sound produced by construction operations including demolition, repair, drilling, excavation, and alteration during the hours of 7:00 a.m. and 8:00 p.m., unless the work is of urgent necessity in the interest of public health and safety.

(Ord. No. 027440, § 1, 10-9-2007)

#### Sec. 31-7. - Method of noise measurement.

Whenever portions of this chapter prohibit noise over a certain decibel limit, measurement of said noise shall be made with a decibel meter meeting the standards prescribed by the American National Standards Institute. Traffic, aircraft and other transportation noise sources and other background noises shall not be considered in taking measurements except where such background noise interferes with the primary noise being measured.

(Ord. No. 027440, § 1, 10-9-2007)

#### Sec. 31-8. - Enforcement and penalties.

- (a) Any person, firm, or corporation who violates any provision of this chapter is guilty of a misdemeanor and upon conviction is punishable by a fine as provided in section 1-6 of the Code of Ordinances of the City of Corpus Christi. Each act of violation and each day of violation is considered a separate violation.
- (b) Any person, firm, or corporation who obstructs, impedes, or interferes with a representative of the city, with a representative of a city department, with monitoring equipment, or with a person who has been ordered to abate a situation pursuant to this chapter and who is lawfully engaged

in such abatement is guilty of a misdemeanor and upon conviction is punishable by a fine as provided in section 1-6 of the Code of Ordinances of the City of Corpus Christi. Each act of violation and each day of violation is considered a separate violation.

- (c) In addition to proceeding under authority of subsections (a) and (b) of this section, the city is entitled to pursue all other criminal and civil remedies to which it is entitled under authority of statutes or other ordinances against a person, firm, or corporation that remains in violation of this chapter.

(Ord. No. 027440, § 1, 10-9-2007)

Sec. 31-9. - Identification of violator.

The persons responsible for violations of this chapter are identified as follows:

- (a) *At residential property.* Any resident present at the time of the offense, and any guest or trespasser with the ability to control the level of noise at the time of the offense when no resident is present at the time of the offense.
- (b) *At nonresidential property.* Any business owner, operator, manager, employee in charge, and all persons in control or in possession of the noise nuisance generating instrument or property at the time of the offense.
- (c) *At any location with an unattended noise nuisance producing machine, device, instrument, animal or combination of same.* Any person who leaves unattended any machine, instrument, device, animal, or any combination of same, which thereafter commences producing noise in violation of this chapter.

(Ord. No. 027440, § 1, 10-9-2007)

**Attachment S –  
Photo Log of Field Inspection**

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



1. Photo taken near the Nile Drive entrance on east side of subject property facing southwest. A sign for the Oso Water Reclamation Plant, a wastewater treatment plant (WWTP) can be seen.



2. Photo taken near the Nile Drive entrance on east side of subject property facing northeast. A fence around the WWTP and electric distribution lines can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



3. Photo taken near the Nile Drive entrance on east side of subject property facing south. Nile Drive, Texas A & M University – Corpus Christi (TAMUCC) housing, and sports fields can be seen.



4. Photo taken between clarifiers and electro contaminant removal system (ECR) on east side of subject property facing northeast. A portable emergency generator can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



5. Labels on the generator from the previous photo are visible. Labels show that the generator holds 550 gallons of ultra low sulfur diesel fuel when gauge reads full.



6. Photo taken between a chlorine contact chamber and effluent pump station on east side of subject property facing north. A Detroit Diesel emergency generator can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



7. A plaque on the emergency generator from the previous photo shown. The plaque identifies the generator as having secondary containment. The tank capacity is shown as 760 gallons.



8. Photo taken between a chlorine contact chamber and effluent pump station on east side of subject property facing east. Two pad-mounted transformers can be seen. No markings were observed to indicate the units are PCB-free.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



9. Photo taken near chlorine contact chambers on east side of WWTP facing north. A building labelled “East Chlorine House” and a dumpster can be seen.



10. Photo taken near chlorine contact chambers on east side of WWTP facing east. Cable tray supports and the sodium bisulfite facility can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



11. Photo taken near the Ennis Joslin entrance on the east side of the WWTP facing northeast. An emergency generator can be seen.



12. The base of the south portion of the emergency generator from Photo #11 is shown. Oil staining is visible on the concrete base.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



13. The base of the south portion of the emergency generator from Photo #11 is shown. Labels identifying the generator as containing diesel and oil staining on the concrete base are visible.



14. The base of the north portion of the emergency generator from Photo #11 is shown. Faded labels on the generator are visible.



Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



17. Photo taken between ECRs near Ennis Joslin Road on the east side of the subject property facing southeast. An emergency generator can be seen beneath the supports and an ECR can be seen to the right.



18. Photo taken near headworks on east side of the subject property facing southwest. A building labelled “Blower House #4” can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



19. Photo taken south of Blower House #4 facing south. A Detroit Diesel emergency generator can be seen.



20. A plaque on the emergency generator from the previous photo shown. The plaque identifies the generator as having secondary containment. The tank capacity is shown as 760 gallons.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



21. Photo taken south of Blower House #4 facing southeast. Two pad-mounted transformers can be seen. No markings were observed to indicate the units are PCB-free.



22. Photo taken on north side of the headworks facility on the east side of the subject property facing southwest. A dumpster for collecting large objects and solids from the wastewater influent can be seen. A floor drain that drains back to the wastewater system is visible.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



23. Photo taken on north side of the headworks facility on the east side of the subject property facing southwest. A concrete bay being used for chemical storage can be seen. A floor drain that drains back to the wastewater system is visible.



24. Photo taken on north side of the headworks facility on the east side of the subject property facing southwest. A dumpster for collecting large objects and solids from the wastewater influent can be seen. A floor drain that drains back to the wastewater system is visible.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



25. Photo taken north of the headworks facility on the east side of the subject property facing north. Dumpsters of materials collected in the headworks facility can be seen. The material are disposed of at a landfill.



26. Photo taken to west of headworks facility on the east side of the subject property facing southwest. An odor control unit can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



27. Photo taken to west of headworks facility on the east side of the subject property facing north. An odor control unit can be seen.



28. Photo taken west of the odor control unit on the east side of the subject property facing southwest. Elevated facility piping, two abandoned blower house buildings, and an out of service aerated sludge holding tank can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



29. Photo taken west of the odor control unit on the east side of the subject property facing north. Portable construction offices and a construction laydown area can be seen on the north portion of the subject property.



30. Photo taken west of the odor control unit on the east side of the subject property facing northwest. A diesel aboveground storage tank with secondary containment and storage containers can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



31. Labels on the diesel tank from the previous photo are shown. The tank appears to contain dyed diesel fuel. One label identifies the tank as being double-walled.



32. Photo taken in north portion of subject property facing southwest. The interior of a storage container is shown. Equipment for the construction occurring at the subject property can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



33. Photo taken in north portion of subject property facing southwest. The interior of a storage container is shown. Equipment for the construction occurring at the subject property can be seen.



34. Photo taken in north portion of subject property facing southwest. The interior of a storage container is shown. Equipment for the construction occurring at the subject property can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



35. Photo taken in north portion of subject property facing southwest. The interior of a storage container is shown. Equipment for the construction occurring at the subject property can be seen.



36. Photo taken in north portion of subject property facing southwest. Equipment for the construction occurring at the subject property can be seen on the ground.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



37. Photo taken in northwest portion of the subject property facing southwest. The north end of the Solids Dewatering Facility can be seen.



38. Photo taken near Solid Dewatering Facility in northwest portion of the subject property. A container of Clarifloc CE-1323 can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



39. Photo taken near Solid Dewatering Facility in northwest portion of the subject property. Storage containers and pallets can be seen.



40. Photo taken near Solid Dewatering Facility in northwest portion of the subject property. An emergency generator can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



41. Labels on the generator from the previous photo are visible. Labels show that the generator holds 550 gallons of ultra low sulfur diesel fuel when gauge reads full.



42. Photo taken near Solid Dewatering Facility in northwest portion of the subject property. Storage containers and equipment for the dewatering facility can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



43. Photo taken near Solid Dewatering Facility in northwest portion of the subject property. Equipment in the dewatering facility can be seen.



44. Photo taken in northwest portion of subject property facing south. A chlorine contact chamber on the west side of the subject property can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



45. Photo taken in northwest portion of subject property facing southeast. An aerated sludge holding tank on the west side of the subject property can be seen.



46. Photo taken in northwest portion of WWTP facing south. Reaeration tanks on the west side of the subject property can be seen. In the distance, a large crane onsite for construction can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



47. Photo taken from west side of the subject property facing southwest. Construction equipment and partially constructed treatment units can be seen.



48. Photo taken from west side of subject property facing south. Sodium hydroxide and sodium hypochlorite facilities can be seen on the west side of the subject property.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



49. Photo taken from west side of subject property. A drum of concrete curing compound can be seen.



50. Photo taken on west side of subject property facing southwest. A spare pump can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



51. Photo taken on west side of subject property facing southeast. Equipment for the construction occurring at the subject property can be seen.



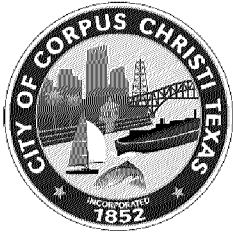
52. Photo taken from southwest portion of the subject property facing east. The office/control building for the WWTP can be seen.

Photo Log of Site Visit – Oso Water Reclamation Plant –  
501 Nile Drive, Corpus Christi, Nueces County, Texas



53. Photo taken from southwest portion of the subject property facing southeast. The entrance road from Nile Drive can be seen.

**Attachment T –  
Copy of Public Notices Posted on the City of Corpus  
Christi’s Website**



**Civil Rights Public Notice**  
**Public Service Announcement**

POSTED  
8/14/2025 1:47:20 PM  
Rebecca Huerta  
City Secretary

**Citizen Participation and Civil Rights Notices Regarding CDBG-MIT Grant to City of Corpus Christi for Greenwood and Oso Wastewater Treatment Plant Improvements**

The City of Corpus Christi has received a Community Development Block Grant - Mitigation (CDBG-MIT) grant through the Texas General Land Office in the amount of \$15,092,700.00 to be used to improve operational resiliency at the Greenwood and Oso Wastewater Treatment Plants (WWTPs). This project consists of three components: Greenwood WWTP Flooding Mitigation, Greenwood WWTP Emergency Backup Generator, and Oso WWTP Emergency Backup Generator. The anticipated construction completion date is December 2027. For information regarding these projects, please contact Senior Project Manager, Emily Fauver, at 361-826-4669.

The grant requires compliance with all federal rules and regulations governing citizen participation and civil rights protections in use of these funds. Civil rights protections identified in the grant include the following: Equal Opportunity/Non-discrimination; Section 3 Economic Opportunity Policy; Excessive Force Policy; Participation by HUB's, Minority, Small Business, and Women-Owned Businesses; Section 504 of the Rehabilitation Act which prohibits discrimination based on disability; Affirmatively Furthering Fair Housing; and Limited English Proficiency Standards. The City of Corpus Christi has established policies, procedures, resolutions and ordinances to comply with these requirements as applicable.

A citizen who has a comment, complaint or grievance with respect to these CDBG-MIT grant-funded projects is encouraged to submit such comment, complaint or grievance, in writing to the Director of Water Utilities, 2726 Holly Road, Corpus Christi, Texas 78415 or may call 361-826-4669 during regular business hours. The City of Corpus Christi will make every effort to respond fully to such complaints within 14 working days where practicable.



City of Corpus Christi

# City Awarded \$15.1 Million for Wastewater Infrastructure Improvements

*Funding Supports Flood Mitigation and Emergency Preparedness at Greenwood and Oso Wastewater Treatment Plants*

By City of Corpus Christi [\(/news/authors/city-of-corpus-christi/\)](/news/authors/city-of-corpus-christi/) - Aug 28, 2025

- City News [\(/news/city-news/\)](/news/city-news/)
- Communications [\(/news/communications/\)](/news/communications/)
- Corpus Christi Water [\(/news/corpus-christi-water/\)](/news/corpus-christi-water/)

CORPUS CHRISTI, TX – Texas Land Commissioner Dawn Buckingham, M.D., presented a ceremonial check for \$15,092,700 to the City of Corpus Christi during a special presentation. The funding comes from the Texas General Land Office’s (GLO) Community Development Block Grant Mitigation (CDBG-MIT) Regional Mitigation Program and will support improvements to the City’s wastewater treatment infrastructure.

“Accepting this funding marks an important milestone for the City of Corpus Christi,” Mayor Paulette Guajardo said. “Improving our wastewater treatment facilities is essential to protecting public health, supporting responsible growth, and safeguarding our natural environment. As Mayor, I remain committed to making smart, forward-looking investments that ensure a stronger, more sustainable future for every resident of Corpus Christi.”

“The GLO is proud to work with Texas communities to strengthen and build infrastructure to protect and improve lives for local residents,” Commissioner Buckingham said. “Many of these communities were recently impacted by Hurricane Beryl’s devastating winds and flood waters. Getting and using federal grant funds can be very complicated, but the GLO works side by side with local leaders to push past the federal paperwork and get funds moving forward. Every day, the GLO works on behalf of our fellow Texans to make communities more resilient against future disasters.”

The \$15.1 million grant will fund improvements at two of the City’s wastewater treatment plants:

- Flood mitigation measures at the Greenwood Wastewater Treatment Plant
- Installation of emergency generators at both Greenwood and Oso facilities

Today’s presentation celebrates the City’s award alongside 13 additional projects in the Coastal Bend Council of Governments region, representing more than \$135 million in total regional funding.

Questions can be directed to Strategic Business Manager Ashley Marion at 361-546-2222 or email [ashleym6@cctexas.com](mailto:ashleym6@cctexas.com) [\(/mailto:ashleym6@cctexas.com\)](mailto:ashleym6@cctexas.com).



**Let's Chat**

## Every Drop Counts, Conserve Corpus Christi.



[Back to News Search \(/news/\)](#)



### Contact

Call Center Representatives can assist you Monday through Friday from 8 a.m. to 5 p.m.

Call 3-1-1 [\\_\(tel:311\)](tel:311)

3-1-1 Website [\\_\(https://311.cctexas.com/\)](https://311.cctexas.com/)

Directions to City Hall [\\_\(/living-in-our-community/directions-to-city-hall/\)](/living-in-our-community/directions-to-city-hall/)

### Subscribe & Connect

Subscribe to receive the latest information from the City of Corpus Christi.

Subscribe [\\_\(https://cctx.info/3P7jYbb\)](https://cctx.info/3P7jYbb)

Landline Callers:

361-826-CITY (2489) [\\_\(tel:361-826-2489\)](tel:361-826-2489)

### Discover More

Careers [\\_\(https://css-corporuschristi-prd.inforcloudsuite.com/hcm/Jobs/page/JobHomePage?menu=Home&csk.JobBoard=EXTERNAL&csk.HROrganization=1\)](https://css-corporuschristi-prd.inforcloudsuite.com/hcm/Jobs/page/JobHomePage?menu=Home&csk.JobBoard=EXTERNAL&csk.HROrganization=1)

About Corpus Christi [\\_\(/living-in-our-community/about-corpus-christi/\)](https://www.corpuschristitx.gov/living-in-our-community/about-corpus-christi/)

Employee Resources [\\_\(/department-directory/human-resources/employee-resources/\)](https://www.corpuschristitx.gov/department-directory/human-resources/employee-resources/)

Financial Transparency [\\_\(/department-directory/finance-procurement/financial-transparency-reports/\)](https://www.corpuschristitx.gov/department-directory/finance-procurement/financial-transparency-reports/)

Local Tax Rate [\\_\(/department-directory/finance-procurement/local-taxes/\)](https://www.corpuschristitx.gov/department-directory/finance-procurement/local-taxes/)

## Get Social

<https://www.facebook.com/citygov/> [\\_\(https://www.facebook.com/citygov/\)](https://www.facebook.com/citygov/) Spanish Facebook Page

[\\_\(https://www.facebook.com/CCTXgovESP\)](https://www.facebook.com/CCTXgovESP/) <https://www.instagram.com/cityofcc/>

[\\_\(https://www.instagram.com/cityofcc/\)](https://www.instagram.com/cityofcc/) <https://twitter.com/cityofcc> [\\_\(https://twitter.com/cityofcc\)](https://twitter.com/cityofcc/)

<https://www.linkedin.com/company/city-of-corpus-christi/> [\\_\(https://www.linkedin.com/company/city-of-corpus-christi/\)](https://www.linkedin.com/company/city-of-corpus-christi/)

<https://www.youtube.com/user/CCTVCorpusChristi>

[\\_\(https://www.youtube.com/user/CCTVCorpusChristi/\)](https://www.youtube.com/user/CCTVCorpusChristi/)

© 2026 City of Corpus Christi Privacy Policy [\\_\(/privacy-policy/\)](https://www.corpuschristitx.gov/department-directory/communications/engage-with-your-city/website-accessibility/) Website Accessibility [\\_\(/department-directory/communications/engage-with-your-city/website-accessibility/\)](https://www.corpuschristitx.gov/department-directory/communications/engage-with-your-city/website-accessibility/)

Sitemap [\\_\(/sitemap/\)](https://www.corpuschristitx.gov/sitemap/) Made with

Govstack [\\_\(https://www.govstack.com/\)](https://www.govstack.com/)