

Appendix A: Farmland Conversion Impact Rating

U.S. Department of Agriculture							
FARMLAND CONVERSION IMPACT RATING							
PART I (To be completed by Federal Agency)				Date Of Land Evaluation Request April 6, 2015			
Name of Project Javelina Supplemental Radar Unit				Federal Agency Involved Department of Homeland Security			
Proposed Land Use Developed				County and State Webb County, TX			
PART II (To be completed by NRCS)				Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)				YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %			Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System			Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)				Alternative Site Rating			
				Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly							
B. Total Acres To Be Converted Indirectly							
C. Total Acres In Site							
PART IV (To be completed by NRCS) Land Evaluation Information							
A. Total Acres Prime And Unique Farmland							
B. Total Acres Statewide Important or Local Important Farmland							
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted							
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value							
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)							
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)				Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use				(15)			
2. Perimeter In Non-urban Use				(10)			
3. Percent Of Site Being Farmed				(20)			
4. Protection Provided By State and Local Government				(20)			
5. Distance From Urban Built-up Area				(15)			
6. Distance To Urban Support Services				(15)			
7. Size Of Present Farm Unit Compared To Average				(10)			
8. Creation Of Non-farmable Farmland				(10)			
9. Availability Of Farm Support Services				(5)			
10. On-Farm Investments				(20)			
11. Effects Of Conversion On Farm Support Services				(10)			
12. Compatibility With Existing Agricultural Use				(10)			
TOTAL SITE ASSESSMENT POINTS				160	0	0	0
PART VII (To be completed by Federal Agency)							
Relative Value Of Farmland (From Part V)				100	0	0	0
Total Site Assessment (From Part VI above or local site assessment)				160	0	0	0
TOTAL POINTS (Total of above 2 lines)				260	0	0	0
Site Selected:		Date Of Selection		Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:							
Name of Federal agency representative completing this form:						Date:	

(See Instructions on reverse side)

Form AD-1006 (03-02)

Appendix B: Phase 1 Environmental Site Assessment

PROJECT MEMORANDUM

Date: May 8, 2015

To: Keith Dewey

From: Jennifer Oakley

Subject: Abbreviated Phase I Environmental Site Assessment – Javelina Supplemental Radar Unit Environmental Assessment (EA)

Purpose: The purpose of this memorandum is to evaluate whether current or historical activities on or near the subject property may have resulted in recognized environmental conditions (RECs). The American Society for Testing and Materials defines an REC in E1527-13 as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

1.0 Introduction

An abbreviated Phase I Environmental Site Assessment (ESA) was conducted by URS for the subject property including the 2 acre radar site and 8,016 feet of infrastructure connections (electricity, fiber optic, access road) on March 23, 2015. Prior to the site visit to the subject property, it was inadvertently brush cut by hydro-axing the vegetation. The subject property is located approximately 12 miles south of Mirando City in Webb County, TX. This assessment was accomplished by, and limited to, a reconnaissance of the site consisting of observations of the subject and adjoining properties, a drive-by survey of the site vicinity, and review of agency databases and other reasonably ascertainable information regarding past and current land use for indications of the manufacture, generation, use, storage or disposal of hazardous substances at the site.

URS scientists reviewed information gathered from several environmental databases to evaluate whether activities on or near the subject property have the potential to create a REC on the subject property. GeoSearch provided URS with Report #48708, dated April 10, 2015, for review and dissemination of the entire subject property. GeoSearch reviews databases compiled by federal, tribal, state, and local governmental agencies. The complete list of databases reviewed and GeoSearch Report #48708 is provided in **Attachment A**. The database information is reported as URS received it from GeoSearch, which, in turn, reports information as it is provided in various government databases. It is not reasonable for either URS or GeoSearch to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence.

The Phase I ESA Report of the subject property was conducted in general accordance with the American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Site Assessment Process E1527-13 and the U.S. Environmental Protection Agency's standards for All Appropriate Inquiries.

2.0 Site Description

The subject property consists of approximately 2 acres of ranchland and 8,016 feet of infrastructure connections for electricity, fiber optic communications, and roadway access, which is located generally south of Mirando City in southeastern Webb County, TX. The subject property and immediately surrounding properties are comprised largely of undeveloped ranchland, with the primary land use being livestock grazing, wildlife hunting, and oil and gas development. During the site assessment, one pipeline was observed along the northern boundary of the subject property and a saltwater disposal facility was observed immediately adjacent to the subject property.

3.0 Results

According to the regulatory agency database provided by GeoSearch, no known hazard or hazardous materials sites were found within a 1 mile search radius of the subject property.

To supplement the GeoSearch database review, a site visit was conducted on March 23, 2015. The site visit was limited to a visual assessment of conditions at the subject property on the day of the visit. URS scientists also made observations of land uses of surrounding properties within 1/2 mile of the subject property. Land use of adjacent properties consists of either open space, livestock grazing areas, and widely dispersed oil/gas wells. The site visit of surrounding properties was limited to those properties that were publicly accessible or could be observed visually, to the extent feasible. No known hazard or hazardous materials sites were observed at the subject property or within the 1/2 mile search radius during the site visit. Widely dispersed oil/gas wells are located within the 1/2 mile search radius, but they would not be disturbed by construction or operation of the Javelina Radar Facility.

4.0 Conclusions and Recommendations

Based on regulatory agency database and the site assessment, no RECs were identified for the subject property. However, due to presence of oil and gas operations on and surrounding the subject property, URS recommends NextEra Energy Resources, LLC. contact all pipeline and production company representatives operating flowlines, gathering lines, and pipelines across and immediately adjacent to the subject property prior to commencement of construction activities for the purpose of definitively identifying all surface and subsurface pipelines at the subject property.

Attachment A Begins on Next Page



On time. On target. In touch.™

Radius Report

[Satellite view](#)

Target Property:

Javelina Radar Project

Webb County, Texas

Prepared For:

AECOM - San Antonio

Order #: 48708

Job #: 106294

Date: 04/14/2015

Table of Contents

<i>Target Property Summary</i>	1
<i>Database Findings Summary</i>	2
<i>Locatable Database Findings</i>	6
<i>Radius Map 1</i>	10
<i>Radius Map 2</i>	11
<i>Ortho Map</i>	12
<i>Topographic Map</i>	13
<i>Unlocatable Summary</i>	13
<i>Environmental Records Definitions</i>	15
<i>Unlocatable Report</i>	See Attachment
<i>Zip Report</i>	See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquires Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Target Property Summary

Javelina Radar Project
Webb County, Texas

USGS Quadrangle: **Agua Azul Creek East, TX**
Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

(-99.054704, 27.278615), (-99.054451, 27.278273), (-99.052994, 27.276306), (-99.052083, 27.275293),
(-99.051217, 27.274098), (-99.050351, 27.272883), (-99.050374, 27.272802), (-99.049325, 27.271648),
(-99.049098, 27.271445), (-99.048733, 27.271425), (-99.047975, 27.271901), (-99.046522, 27.272194),
(-99.045315, 27.272397), (-99.043560, 27.272599), (-99.043121, 27.272691), (-99.043132, 27.273663),
(-99.043173, 27.273997), (-99.043606, 27.275597), (-99.043446, 27.275779), (-99.042329, 27.276002),
(-99.041783, 27.276164), (-99.041350, 27.276164), (-99.041258, 27.276083), (-99.041372, 27.276022),
(-99.041646, 27.276002), (-99.042027, 27.275941), (-99.043309, 27.275658), (-99.043423, 27.275536),
(-99.042990, 27.273977), (-99.042968, 27.272721), (-99.042802, 27.272731), (-99.042648, 27.271870),
(-99.043531, 27.271759), (-99.043651, 27.272478), (-99.045588, 27.272215), (-99.047110, 27.271931),
(-99.047776, 27.271810), (-99.048642, 27.271323), (-99.049120, 27.271263), (-99.050482, 27.272681),
(-99.050533, 27.272903), (-99.051855, 27.274706), (-99.053154, 27.276286), (-99.053957, 27.277349),
(-99.054276, 27.277795), (-99.054515, 27.278119), (-99.054823, 27.278524), (-99.054704, 27.278615)

County/Parish Covered:
Webb (TX) , Zapata (TX)

Zipcode(s) Covered:
Laredo TX: 78043
Hebbronville TX: 78361

State(s) Covered:
TX

***Target property is located in Radon Zone 3.**

Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L
(picocuries per liter).

This report may have unlocatable records. Please see the Unlocatables Report, attached to this file.

Database Findings Summary

FEDERAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSTX	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSTX	0	0	TP/AP
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR06	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR06	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR06	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
NO LONGER REGULATED RCRA GENERATOR FACILITIES	NLRRCRAG	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES	RCRAGR06	0	0	0.1250
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO FURTHER REMEDIAL ACTION PLANNED SITES	NFRAP	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
OPEN DUMP INVENTORY	ODI	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000

Database Findings Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		0	0	

Database Findings Summary

STATE (TX) LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
GROUNDWATER CONTAMINATION CASES	GWCC	0	0	TP/AP
HISTORIC GROUNDWATER CONTAMINATION CASES	HISTGWCC	0	0	TP/AP
TCEQ LIENS	LIENS	0	0	TP/AP
MUNICIPAL SETTING DESIGNATIONS	MSD	0	0	TP/AP
NOTICE OF VIOLATIONS	NOV	0	0	TP/AP
STATE INSTITUTIONAL/ENGINEERING CONTROL SITES	SIEC01	0	0	TP/AP
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER I I CHEMICAL REPORTING PROGRAM FACILITIES	TIERII	0	0	TP/AP
DRY CLEANER REGISTRATION DATABASE	DCR	0	0	0.2500
INDUSTRIAL AND HAZARDOUS WASTE SITES	IHW	0	0	0.2500
PERMITTED INDUSTRIAL HAZARDOUS WASTE SITES	PIHW	0	0	0.2500
PETROLEUM STORAGE TANKS	PST	0	0	0.2500
AFFECTED PROPERTY ASSESSMENT REPORTS	APAR	0	0	0.5000
BROWNFIELDS SITE ASSESSMENTS	BSA	0	0	0.5000
CLOSED & ABANDONED LANDFILL INVENTORY	CALF	0	0	0.5000
DRY CLEANER REMEDIATION PROGRAM SITES	DCRPS	0	0	0.5000
INNOCENT OWNER / OPERATOR DATABASE	IOP	0	0	0.5000
LEAKING PETROLEUM STORAGE TANKS	LPST	0	0	0.5000
MUNICIPAL SOLID WASTE LANDFILL SITES	MSWLF	0	0	0.5000
RAILROAD COMMISSION VCP AND BROWNFIELD SITES	RRCVCP	0	0	0.5000
RADIOACTIVE WASTE SITES	RWS	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
RECYCLING FACILITIES	WMRF	0	0	0.5000
INDUSTRIAL AND HAZARDOUS WASTE CORRECTIVE ACTION SITES	IHWCA	0	0	1.0000
STATE SUPERFUND SITES	SF	0	0	1.0000
SUB-TOTAL		0	0	

Database Findings Summary

TRIBAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR06	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR06	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		0	0	

Locatable Database Findings

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200		NS	NS	NS	NS	NS	0
BRS	0.0200		NS	NS	NS	NS	NS	0
CDL	0.0200		NS	NS	NS	NS	NS	0
DOCKETS	0.0200		NS	NS	NS	NS	NS	0
EC	0.0200		NS	NS	NS	NS	NS	0
ERNSTX	0.0200		NS	NS	NS	NS	NS	0
FRSTX	0.0200		NS	NS	NS	NS	NS	0
HMIRSR06	0.0200		NS	NS	NS	NS	NS	0
ICIS	0.0200		NS	NS	NS	NS	NS	0
ICISNPDES	0.0200		NS	NS	NS	NS	NS	0
LUCIS	0.0200		NS	NS	NS	NS	NS	0
MLTS	0.0200		NS	NS	NS	NS	NS	0
NPDES06	0.0200		NS	NS	NS	NS	NS	0
PADS	0.0200		NS	NS	NS	NS	NS	0
PCSR06	0.0200		NS	NS	NS	NS	NS	0
RCRASC	0.0200		NS	NS	NS	NS	NS	0
SFLIENS	0.0200		NS	NS	NS	NS	NS	0
SSTS	0.0200		NS	NS	NS	NS	NS	0
TRI	0.0200		NS	NS	NS	NS	NS	0
TSCA	0.0200		NS	NS	NS	NS	NS	0
NLRRCRAG	0.1250		0	NS	NS	NS	NS	0
RCRAGR06	0.1250		0	NS	NS	NS	NS	0
HISTPST	0.2500		0	0	NS	NS	NS	0
BF	0.5000		0	0	0	NS	NS	0
CERCLIS	0.5000		0	0	0	NS	NS	0
DNPL	0.5000		0	0	0	NS	NS	0
NFRAP	0.5000		0	0	0	NS	NS	0
NLRRCRAT	0.5000		0	0	0	NS	NS	0
ODI	0.5000		0	0	0	NS	NS	0
RCRAT	0.5000		0	0	0	NS	NS	0
DOD	1.0000		0	0	0	0	NS	0
FUDS	1.0000		0	0	0	0	NS	0
NLRRCRAC	1.0000		0	0	0	0	NS	0
NPL	1.0000		0	0	0	0	NS	0
PNPL	1.0000		0	0	0	0	NS	0
RCRAC	1.0000		0	0	0	0	NS	0

Locatable Database Findings

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
RCRASUBC	1.0000		0	0	0	0	NS	0
RODS	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0

Locatable Database Findings

STATE (TX) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
GWCC	0.0200		NS	NS	NS	NS	NS	0
HISTGWCC	0.0200		NS	NS	NS	NS	NS	0
LIENS	0.0200		NS	NS	NS	NS	NS	0
MSD	0.0200		NS	NS	NS	NS	NS	0
NOV	0.0200		NS	NS	NS	NS	NS	0
SIEC01	0.0200		NS	NS	NS	NS	NS	0
SPILLS	0.0200		NS	NS	NS	NS	NS	0
TIERII	0.0200		NS	NS	NS	NS	NS	0
DCR	0.2500		0	0	NS	NS	NS	0
IHW	0.2500		0	0	NS	NS	NS	0
PIHW	0.2500		0	0	NS	NS	NS	0
PST	0.2500		0	0	NS	NS	NS	0
APAR	0.5000		0	0	0	NS	NS	0
BSA	0.5000		0	0	0	NS	NS	0
CALF	0.5000		0	0	0	NS	NS	0
DCRPS	0.5000		0	0	0	NS	NS	0
IOP	0.5000		0	0	0	NS	NS	0
LPST	0.5000		0	0	0	NS	NS	0
MSWLF	0.5000		0	0	0	NS	NS	0
RRCVCP	0.5000		0	0	0	NS	NS	0
RWS	0.5000		0	0	0	NS	NS	0
VCP	0.5000		0	0	0	NS	NS	0
WMRF	0.5000		0	0	0	NS	NS	0
IHWCA	1.0000		0	0	0	0	NS	0
SF	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0

Locatable Database Findings

TRIBAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR06	0.2500		0	0	NS	NS	NS	0
LUSTR06	0.5000		0	0	0	NS	NS	0
ODINDIAN	0.5000		0	0	0	NS	NS	0
INDIANRES	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0

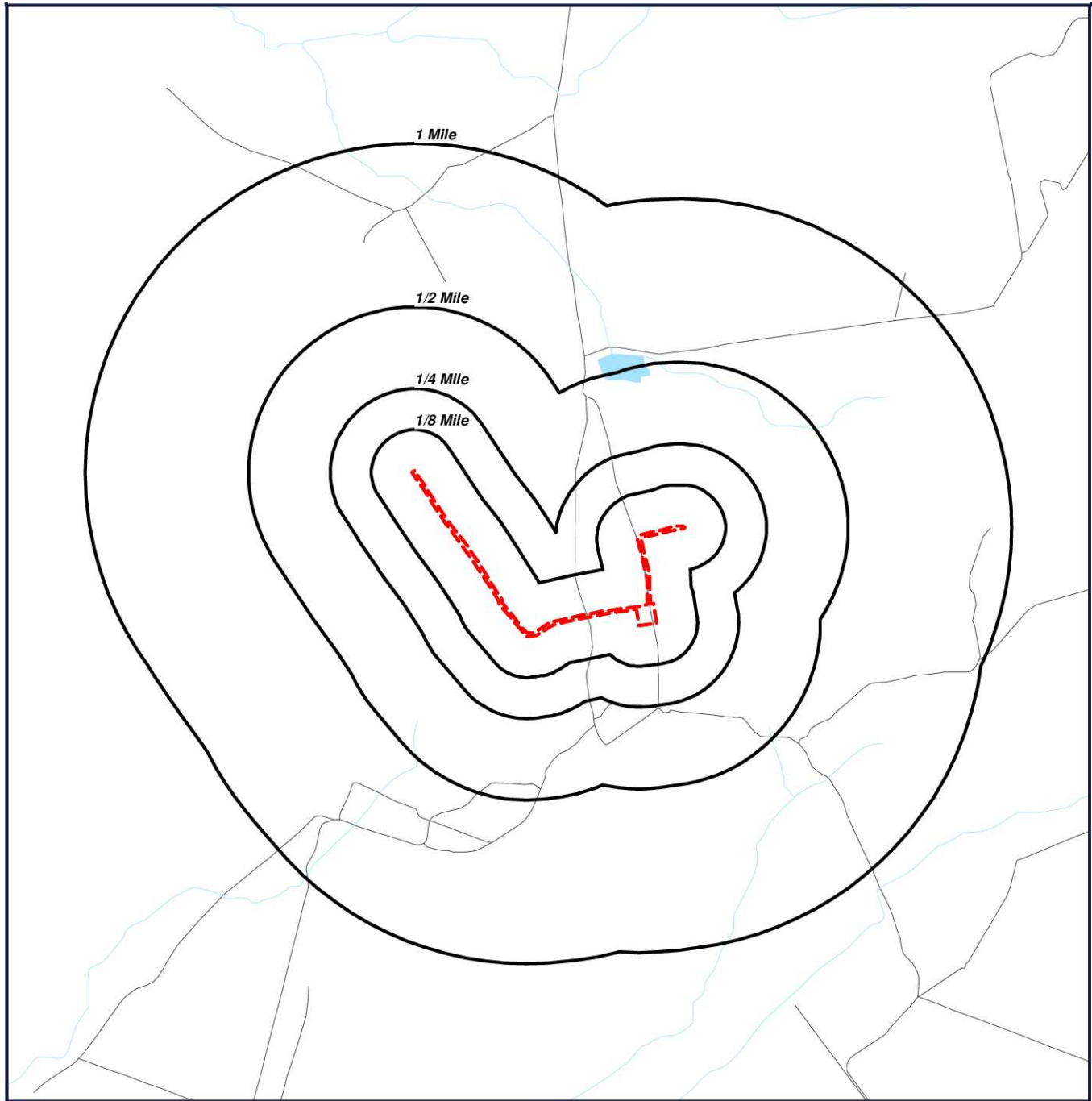
TOTAL		0	0	0	0	0	0	0
-------	--	---	---	---	---	---	---	---

NOTES:

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



 Target Property (TP)

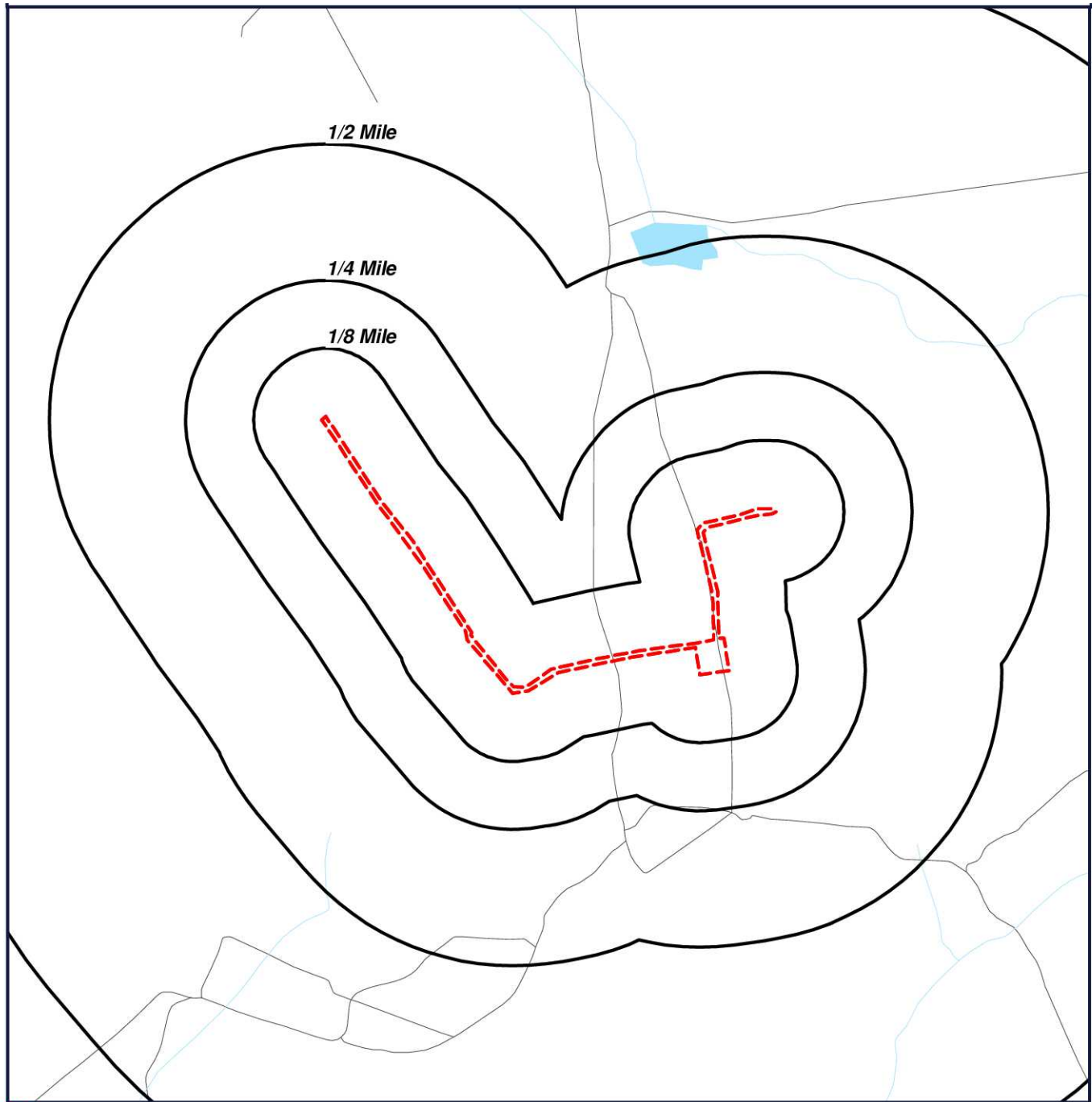
**Javelina Radar Project
Webb County, Texas**



0' 1250' 2500' 3750'
SCALE: 1" = 2500'

[Click here to access Satellite view](#)

Radius Map 2



 Target Property (TP)

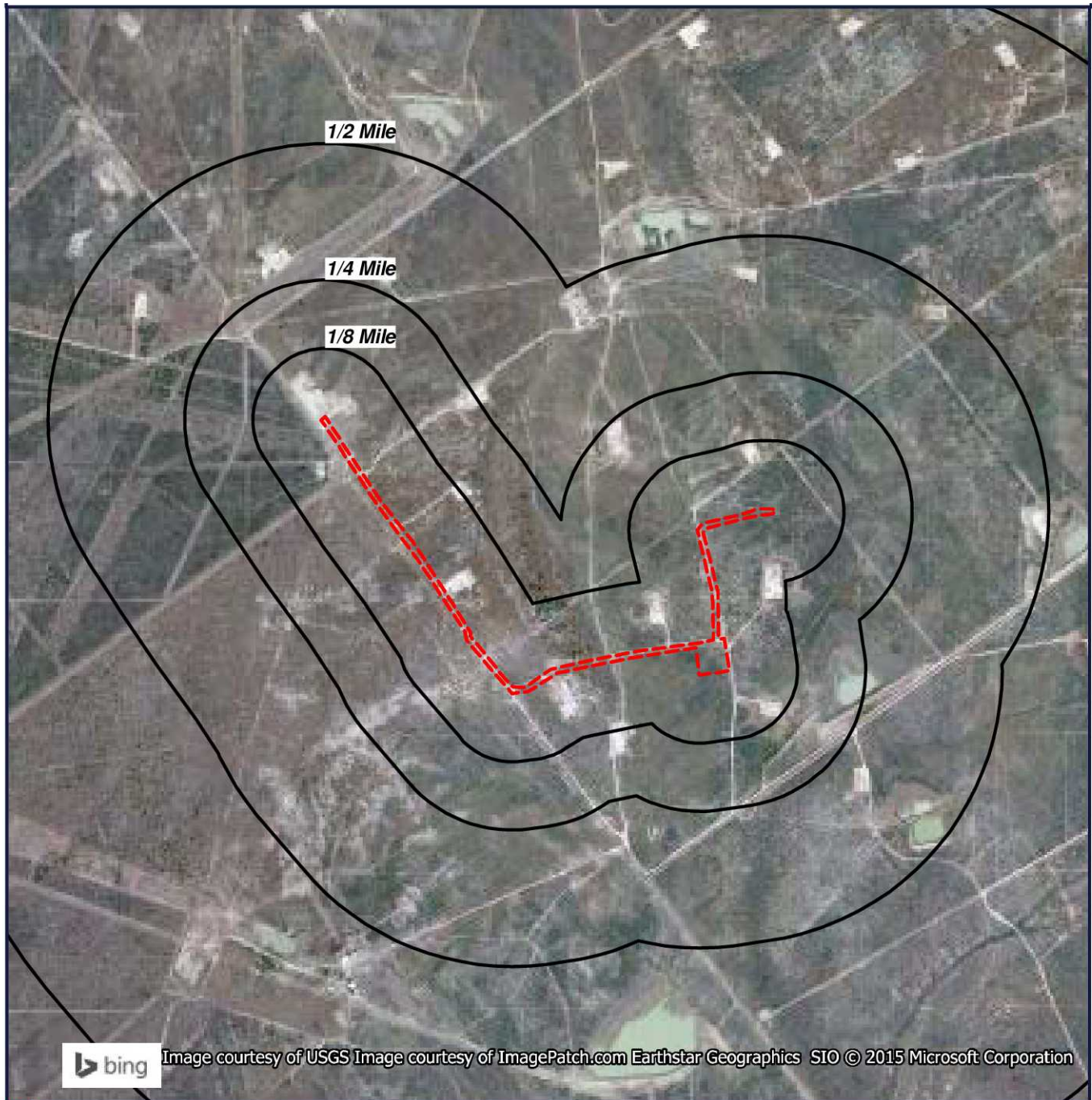
**Javelina Radar Project
Webb County, Texas**




0' 750' 1500' 2250'
SCALE: 1" = 1500'

[Click here to access Satellite view](#)

Ortho Map



 Target Property (TP)

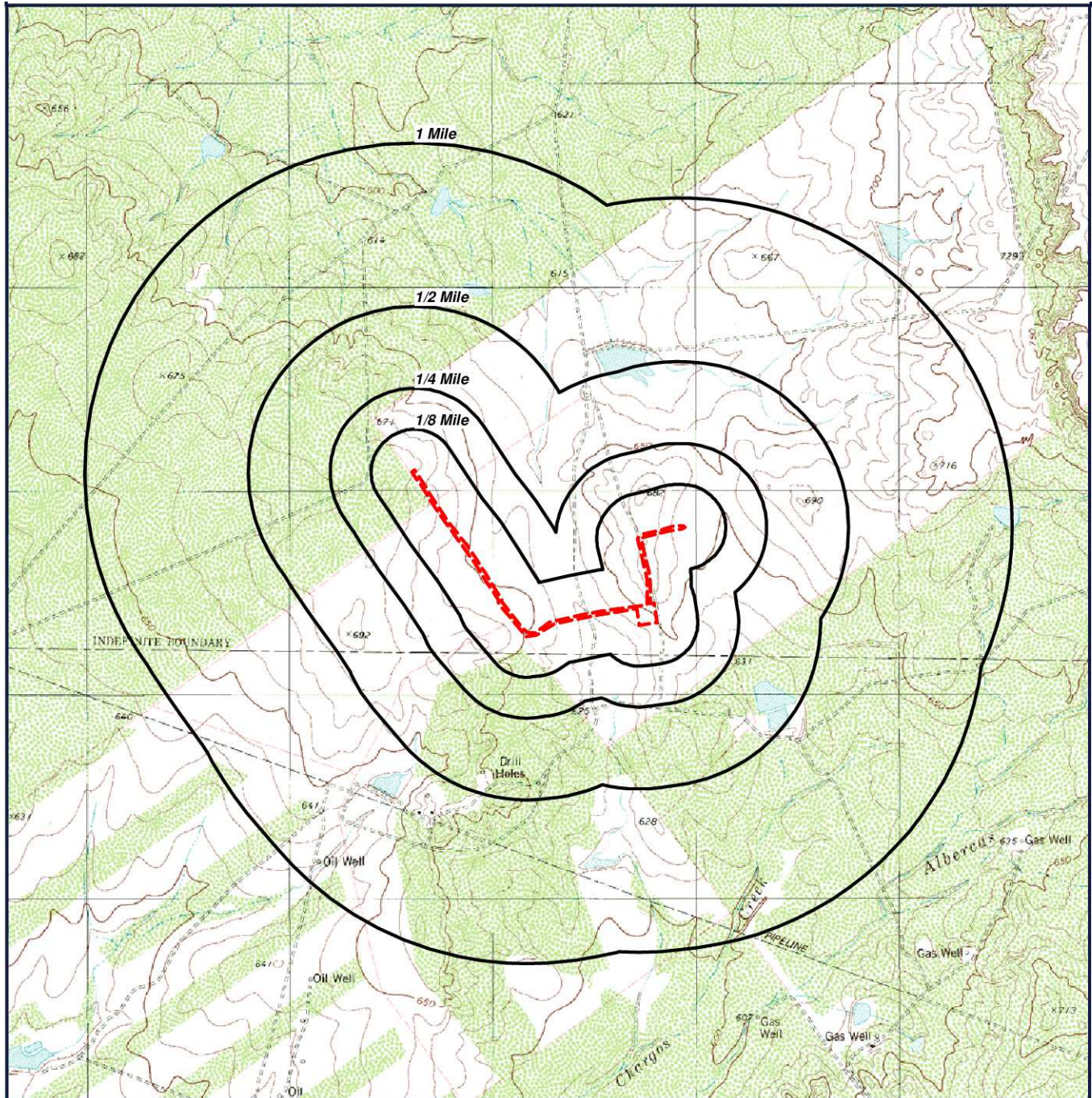
**Quadrangle(s): Agua Azul Creek
East
Javelina Radar Project
Webb County, Texas**




0' 750' 1500' 2250'
SCALE: 1" = 1500'

[Click here to access Satellite view](#)

Topographic Map



 Target Property (TP)

**Quadrangle(s): Agua Azul Creek
East**

**Source: USGS, 1980
Javelina Radar Project
Webb County, Texas**



0' 1250' 2500' 3750'
SCALE: 1" = 2500'

[Click here to access Satellite view](#)

Unlocatable Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

Environmental Records Definitions - FEDERAL

AIRSAFS

Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS

Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL

Clandestine Drug Laboratory Locations

VERSION DATE: 03/03/15

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS

EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC

Federal Engineering Institutional Control Sites

VERSION DATE: 01/14/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part

Environmental Records Definitions - FEDERAL

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ERNSTX

Emergency Response Notification System

VERSION DATE: 02/22/15

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSTX

Facility Registry System

VERSION DATE: 09/30/14

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR06

Hazardous Materials Incident Reporting System

VERSION DATE: 10/28/14

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ICIS

Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 10/20/14

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

Environmental Records Definitions - FEDERAL

ICISNPDES

Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 10/20/14

In 2006, the Integrated Compliance Information System (ICIS) - National Pollutant Discharge Elimination System (NPDES) became the NPDES national system of record for select states, tribes and territories. ICIS-NPDES is an information management system maintained by the United States Environmental Protection Agency's Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. ICIS-NPDES is designed to support the NPDES program at the state, regional, and national levels.

LUCIS

Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS

Material Licensing Tracking System

VERSION DATE: 04/14/14

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDES06

National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Information in this database is extracted from the Water Permit Compliance System (PCS) database which is used by United States Environmental Protection Agency to track surface water permits issued under the Clean Water Act. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data.

PADS

PCB Activity Database System

VERSION DATE: 07/01/14

The PCB Activity Database System (PADS) is used by the United States Environmental Protection Agency to monitor the activities of polychlorinated biphenyls (PCB) handlers.

PCSR06

Permit Compliance System

VERSION DATE: 08/01/12

Environmental Records Definitions - FEDERAL

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

RCRASC RCRA Sites with Controls

VERSION DATE: 05/23/14

This list of Resource Conservation and Recovery Act sites with institutional controls in place is provided by the U.S. Environmental Protection Agency.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

SSTS Section Seven Tracking System

VERSION DATE: 12/08/14

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/13

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

Environmental Records Definitions - FEDERAL

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/06

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

NLRRCRAG No Longer Regulated RCRA Generator Facilities

VERSION DATE: 02/12/15

This database includes RCRA Generator facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly generated hazardous waste.

Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

RCRAGR06 Resource Conservation & Recovery Act - Generator Facilities

VERSION DATE: 02/12/15

This database includes sites listed as generators of hazardous waste (large, small, and exempt) in the RCRAInfo

Environmental Records Definitions - FEDERAL

system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). This database includes sites located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

BF Brownfields Management System

VERSION DATE: 02/06/15

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

Environmental Records Definitions - FEDERAL

CERCLIS

Comprehensive Environmental Response, Compensation & Liability Information System

VERSION DATE: 10/25/13

CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This United States Environmental Protection Agency database contains an extract of sites that have been investigated or are in the process of being investigated for potential environmental risk.

DNPL

Delisted National Priorities List

VERSION DATE: 10/25/13

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NFRAP

No Further Remedial Action Planned Sites

VERSION DATE: 10/25/13

This database includes sites which have been determined by the United States Environmental Protection Agency, following preliminary assessment, to no longer pose a significant risk or require further activity under CERCLA. After initial investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Federal Superfund action or NPL consideration.

NLRRCRAT

No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 02/12/15

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI

Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT

Resource Conservation & Recovery Act - Treatment, Storage & Disposal Facilities

VERSION DATE: 02/12/15

Environmental Records Definitions - FEDERAL

This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

DOD Department of Defense Sites

VERSION DATE: 06/21/10

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 06/01/14

The 2012 Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. **DISCLAIMER:** This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 02/12/15

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NPL National Priorities List

VERSION DATE: 10/25/13

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

Environmental Records Definitions - FEDERAL

PNPL Proposed National Priorities List

VERSION DATE: 10/25/13

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 02/12/15

This database includes all hazardous waste sites with ongoing corrective action activity and where corrective action is statutorily required to be address but have not had corrective action imposed in the RCRAInfo system. The Corrective Action Program requires owners or operators of RCRA facilities (or treatment, storage, and disposal facilities) to investigate and cleanup contamination in order to protect human health and the environment. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 02/12/15

This database includes hazardous waste sites which are potentially subject to corrective action regardless of whether they have correction action underway, plus any sites showing a corrective action event of FRI or beyond in the RCRAInfo system. Sites conducting corrective action under analogous state authorities are also included. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RODS Record of Decision System

VERSION DATE: 07/01/13

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

Environmental Records Definitions - STATE (TX)

GWCC Groundwater Contamination Cases

VERSION DATE: 12/31/13

This report contains a listing of groundwater contamination cases which were documented for the 2013 calendar year. Texas Water Code, Section 26.406 requires the annual report to describe the current status of groundwater monitoring activities conducted or required by each agency at regulated facilities or associated with regulated activities. The agencies reporting these contamination cases include the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

HISTGWCC Historic Groundwater Contamination Cases

VERSION DATE: 12/31/12

This historic report contains all agency groundwater contamination cases documented from 1994 to 2012. The agencies that reported these contamination cases included the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

LIENS TCEQ Liens

VERSION DATE: 02/09/15

Liens filed upon State and/or Federal Superfund Sites by the Texas Commission on Environmental Quality.

MSD Municipal Setting Designations

VERSION DATE: 10/31/14

The Texas Commission on Environmental Quality defines an MSD as an official state designation given to property within a municipality or its extraterritorial jurisdiction that certifies that designated groundwater at the property is not used as potable water, and is prohibited from future use as potable water because that groundwater is contaminated in excess of the applicable potable-water protective concentration level. The prohibition must be in the form of a city ordinance, or a restrictive covenant that is enforceable by the city and filed in the property records. The MSD property can be a single property, multi-property, or a portion of property.

NOV Notice of Violations

VERSION DATE: 01/22/15

This database containing Notice of Violations (NOV) is maintained by the Texas Commission on Environmental Quality. An NOV is a written notification that documents and communicates violations observed during an inspection to the business or individual inspected.

Environmental Records Definitions - STATE (TX)

SIEC01 State Institutional/Engineering Control Sites

VERSION DATE: 02/09/15

The Texas Risk Reduction Program (TRRP) requires the placement of institutional controls (e.g., deed notices or restrictive covenants) on affected property in different circumstances as part of completing a response action. In its simplest form, an institutional control (IC) is a legal document that is recorded in the county deed records. In certain circumstances, local zoning or ordinances can serve as an IC. This listing may also include locations where Engineering Controls are in effect, such as a cap, barrier, or other engineering device to prevent access, exposure, or continued migration of contamination. The sites included on this list are regulated by various programs of the Texas Commission on Environmental Quality (TCEQ).

SPILLS Spills Listing

VERSION DATE: 01/22/15

This Texas Commission on Environmental Quality database includes releases of hazardous or potentially hazardous materials into the environment.

TIERII Tier II Chemical Reporting Program Facilities

VERSION DATE: 12/31/12

The Texas Tier II Chemical Reporting Program in the Department of State Health Services (DSHS) is the state repository for EPCRA-required Emergency Planning Letters (EPLs), which are one-time notifications to the state from facilities that have certain extremely hazardous chemicals in specified amounts. The Program is also the state repository for EPCRA/state-required hazardous chemical inventory reports called Texas Tier Two Reports. This data contains those facility reports for the 2005 through the 2012 calendar years.

DCR Dry Cleaner Registration Database

VERSION DATE: 01/01/15

The database includes dry cleaning drop stations and facilities registered with the Texas Commission on Environmental Quality.

IHW Industrial and Hazardous Waste Sites

VERSION DATE: 01/01/15

Owner and facility information is included in this database of permitted and non-permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. The IHW database is maintained by the Texas Commission on Environmental Quality.

Environmental Records Definitions - STATE (TX)

PIHW Permitted Industrial Hazardous Waste Sites

VERSION DATE: 01/01/15

Owner and facility information is included in this database of all permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. Permitted IHW facilities are regulated under 30 Texas Administrative Code Chapter 335 in addition to federal regulations. The IHW database is maintained by the Texas Commission on Environmental Quality.

PST Petroleum Storage Tanks

VERSION DATE: 04/06/15

The Petroleum Storage Tank database is administered by the Texas Commission on Environmental Quality (TCEQ). Both Underground storage tanks (USTs) and Aboveground storage tanks (ASTs) are included in this report. Petroleum Storage Tank registration has been a requirement with the TCEQ since 1986.

APAR Affected Property Assessment Reports

VERSION DATE: 02/12/15

As regulated by the Texas Commission on Environmental Quality, an Affected Property Assessment Report is required when a person is addressing a release of chemical of concern (COC) under 30 TAC Chapter 350, the Texas Risk Reduction Program (TRRP). The purpose of the APAR is to document all relevant affected property information to identify all release sources and COCs, determine the extent of all COCs, identify all transport/exposure pathways, and to determine if any response actions are necessary. The Texas Administrative Code Title 30 §350.4(a)(1) defines affected property as the entire area (i.e. on-site and off-site; including all environmental media) which contains releases of chemicals of concern at concentrations equal to or greater than the assessment level applicable for residential land use and groundwater classification.

BSA Brownfields Site Assessments

VERSION DATE: 02/09/15

The Brownfields Site Assessments database is maintained by the Texas Commission on Environmental Quality (TCEQ). The TCEQ, in close partnership with the U.S. Environmental Protection Agency (EPA) and other federal, state, and local redevelopment agencies, and stakeholders, is facilitating cleanup, transferability, and revitalization of brownfields through the development of regulatory, tax, and technical assistance tools.

CALF Closed & Abandoned Landfill Inventory

VERSION DATE: 11/01/05

The Texas Commission on Environmental Quality, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments (COGs) in the State, has located over 4,000 closed

Environmental Records Definitions - STATE (TX)

and abandoned municipal solid waste landfills throughout Texas. This listing contains "unauthorized sites". Unauthorized sites have no permit and are considered abandoned. The information available for each site varies in detail and this historical information is not updated. Please refer to the specific regional COG for the most current information.

DCRPS Dry Cleaner Remediation Program Sites

VERSION DATE: 09/01/14

This list of DCRP sites is provided by the Texas Commission on Environmental Quality (TCEQ). According to the TCEQ, the Dry Cleaner Remediation Program (DCRP) establishes a prioritization list of dry cleaner sites and administers the Dry Cleaning Remediation fund to assist with remediation of contamination caused by dry cleaning solvents.

IOP Innocent Owner / Operator Database

VERSION DATE: 02/09/15

Texas Innocent Owner / Operator (IOP), created by House Bill 2776 of the 75th Legislature, provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants from a source or sources not located on the property, and they did not cause or contribute to the source or sources of contamination. The IOP database is maintained by the Texas Commission on Environmental Quality.

LPST Leaking Petroleum Storage Tanks

VERSION DATE: 04/01/15

The Leaking Petroleum Storage Tank listing is derived from the Petroleum Storage Tank (PST) database and is maintained by the Texas Commission on Environmental Quality. This listing includes aboveground and underground storage tank facilities with reported leaks.

MSWLF Municipal Solid Waste Landfill Sites

VERSION DATE: 02/06/15

The municipal solid waste landfill database is provided by the Texas Commission on Environmental Quality. This database includes active landfills and inactive landfills, where solid waste is treated or stored.

RRCVCP Railroad Commission VCP and Brownfield Sites

VERSION DATE: 01/27/15

According to the Railroad Commission of Texas, their Voluntary Cleanup Program (RRC-VCP) provides an incentive to remediate Oil & Gas related pollution by participants as long as they did not cause or contribute to the contamination. Applicants to the program receive a release of liability to the state in exchange for a successful cleanup.

Environmental Records Definitions - STATE (TX)

RWS Radioactive Waste Sites

VERSION DATE: 07/11/06

This Texas Commission on Environmental Quality database contains all sites in the State of Texas that have been designated as Radioactive Waste sites.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 02/09/15

The Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since all non-responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for completing real estate transactions at those sites are eliminated. As a result, many unused or underused properties may be restored to economically productive or community beneficial uses. The VCP database is maintained by the Texas Commission on Environmental Quality.

WMRF Recycling Facilities

VERSION DATE: 11/01/12

This listing of recycling facilities is provided by the Texas Commission on Environmental Quality's Recycle Texas Online service. The company information provided in this database is self-reported. Since recyclers post their own information, a facility or company appearing on the list does not imply that it is in compliance with TCEQ regulations or other applicable laws. This database is no longer maintained and includes the last compilation of the program participants before the Recycle Texas Online program was closed.

IHWCA Industrial and Hazardous Waste Corrective Action Sites

VERSION DATE: 11/18/14

This database is provided by the Texas Commission on Environmental Quality (TCEQ). According to the TCEQ, the mission of the industrial and hazardous waste corrective action program is to oversee the cleanup of sites contaminated from industrial and municipal hazardous and industrial nonhazardous wastes. The goals of this program are to: Ensure that sites are assessed and remediated to levels that protect human health and the environment; Verify that waste management units or facilities are taken out of service and closed properly; and to Facilitate revitalization of contaminated properties.

SF State Superfund Sites

VERSION DATE: 12/11/14

The state Superfund program mission is to remediate abandoned or inactive sites within the state that pose an unacceptable risk to public health and safety or the environment, but which do not qualify for action under the federal Superfund program (NPL - National Priority Listing). As required by the Texas Solid Waste Disposal Act, Texas Health and Safety Code, Chapter 361, the Texas Commission on Environmental Quality identifies and

Environmental Records Definitions - STATE (TX)

evaluates these facilities for inclusion on the state Superfund registry. This registry includes any recent developments and the anticipated action for these sites.

Environmental Records Definitions - TRIBAL

USTR06 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/30/13

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

LUSTR06 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/30/13

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

Appendix C: Biology Resources Study

PROJECT MEMORANDUM

Date: May 8, 2015

To: Keith Dewey

From: Jennifer Oakley

Subject: Biological Resources Information – Javelina Supplemental Radar Unit Environmental Assessment (EA)

Purpose: The purpose of this memorandum is to provide site-specific biological resources information for the Proposed Action to construct and operate a supplemental radar unit on the Javelina site.

1.0 Regional Context

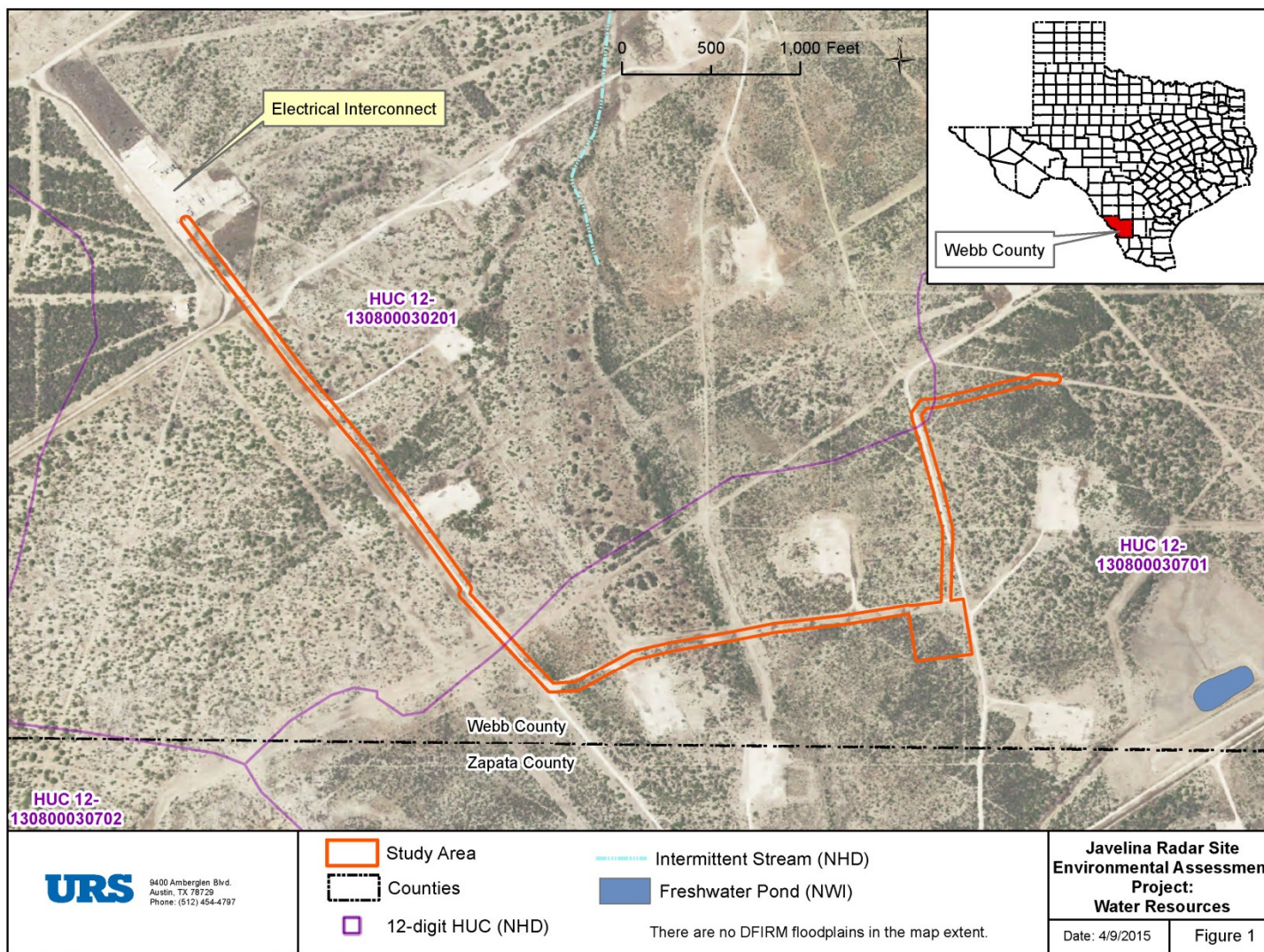
1.1 Hydrology

1.1.1 Surface Water/Floodplains

The study area is within the Rio Grande River Basin (Texas Water Development Board [TWDB], 2014). The Rio Grande River Basin covers the largest area in Texas of any major river basin encompassing approximately 49,387 square miles in Texas. This basin has an extremely low average annual water-shed yield (TWDB, 2014). The study area is located within the hydrologic unit code (HUC) 130800030201 associated with the Upper Agua Azul Creek and HUC 130800030701 associated with Chargos Creek (see **Figure 1**). These HUCs encompasses approximately 37 and 48 square miles, respectively (U.S. Geological Survey [USGS], 2014).

USGS National Hydrography Data (NHD) was reviewed for information on streams in and surrounding the study area. According to the NHD, the closest stream to the study area is an intermittent stream located 1,260 linear feet north of the study area. A review of the Federal Emergency Management Administration (FEMA) digital Flood Insurance Rate Maps (dFIRM) and floodplain panel 48479C1650C, the closest floodplain boundary is 3,005 linear feet north of the study area (FEMA, 2008).

Regionally, surface waters and floodplains have been altered by land use practices associated with livestock grazing, and to a lesser degree, oil and gas and wind energy development. Due to the limited nature of water sources in the region, ranchers have created numerous impoundments along the drainages in the region in order to retain water on their properties. Oil and gas and wind developments have created numerous roads in the region, which restrict drainages into culverts, which may limit or alter flow regimes.



1.1.2 Wetlands

National Wetland Inventory (NWI) maps, published by the U.S. Fish and Wildlife Service (USFWS), were reviewed for information on possible wetlands and other water features in and surrounding the study area. These maps were prepared by the USFWS using stereoscopic analysis of high-altitude photographs. During map creation, features were identified based on vegetation, visible hydrology, and geography in accordance with *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, Carter, Golet, & LaRoe, 1979). According to NWI mapping, the closest feature to the study area is a freshwater pond approximately 1,133 linear feet east of the study area (see **Figure 1**).

1.2 Vegetation

The study area falls within the Texas-Tamaulipan Thornscrub Level IV Ecoregion of the Southern Texas Plains Level III Ecoregion of Texas (Griffith, et al., 2004). The thorn woodland and thorn shrubland vegetation is distinctive, and these Rio Grande Plains are commonly called the “brush country.” Three centuries of grazing, suppression of fire, and droughts have contributed to the spread of brush and the decrease of native grasses. The vegetation is dominated by drought-tolerant, mostly small-leaved, and often thorn-laden small trees and shrubs, especially legumes. The most important woody species is honey mesquite (*prosopis glandulosa*). Where conditions are suitable, there is a dense understory of smaller trees and shrubs such as brasil (*condalia hookeri*), colima or lime pricklyash (*zanthoxylum fagara*), Texas persimmon (*diospyros texana*), lotebush (*ziziphus obtusifolia*), granjeno (*celtis pallida*), kidneywood (*eysenhardtia texana*), coyotillo (*karwinskia humboldtiana*), Texas paloverde (*parkinsonia texanum*), anacahuita (*cordia boissieri*), and various species of cacti. Xerophytic brush species, such as blackbrush (*acacia rigidula*), guajillo (*acacia berlandieri*), and cenizo (*leucophyllum frutescens*) are typical on the rocky, gravelly ridges and uplands. Mid and short grasses are common, including cane bluestem (*bothriochloa barbinodis*), silver bluestem (*schizachyrium scoparium*), multiflowered false rhodesgrass (*trichloris pluriflora*), sideoats grama (*bouteloua curtipendula*), pink pappusgrass (*pappophorum bicolor*), bristlegrasses (*setaria macrostachya*), lovegrasses (*eragrostis* spp.), and tobosa (*hilaria mutica*) (Griffith, et al., 2004).

1.3 Birds

The USFWS has legislative authority to prohibit, unless permitted by regulations, the kill, capture, collection, possession, buying, selling, trading, or transport of any migratory bird, nest, young, feather, or egg in part or in whole. The Migratory Bird Treaty Act of 1918 (MBTA) and its subsequent amendments (16 United States Code [USC] 703-712) give the federal legislative authority for protection of migratory bird species. Regulations supporting this Act are codified and regularly updated in Title 50 Code of Federal Regulations (CFR) Part 10 and 21.

There are numerous avian species with potential to occur in Webb County. URS Corporation (URS) qualified biologists have conducted bird surveys in the region since September, 2012. Avian species with the greatest likelihood of occurring within the study area are listed in **Section 2.3** of this memorandum.

Avian species in the region are subject to impacts from livestock grazing activities, oil and gas development, and wind energy development. Livestock grazing practices often include clearing of large

areas of thornscrub and replanting with non-native species, these practices can result in direct take of birds and nests during the breeding season and loss of habitat for some species. Oil and gas activities and wind energy development in the region have impacted migratory bird species through habitat alteration and direct take due to oiling, entrapment, and striking turbine blades.

1.4 Threatened and Endangered Species

The USFWS has legislative authority to list and monitor the status of species whose populations are considered to be imperiled. This federal legislative authority for the protection of threatened and endangered species issues from the Endangered Species Act (ESA) of 1973, and its subsequent amendments. Regulations supporting this Act are codified and regularly updated in Title 50 CFR Sections 17.11 and 17.12. The federal process stratifies potential candidates based upon the species biological vulnerability. Species listed as endangered or threatened by the federal government are provided full protection under the law. This protection not only prohibits the direct possession (take) of a protected species, but also includes a prohibition of indirect take such as destruction of designated critical habitat. Listed plant species are not protected from take, although it is illegal to collect or maliciously harm them on federal land. The ESA and accompanying regulations provide the necessary authority and incentive for individual states to establish their own regulatory vehicle for the management and protection of threatened and endangered species.

Endangered species legislation was passed in Texas in 1973. Subsequently, revisions to the Texas Parks and Wildlife Department (TPWD) code in 1975, 1981, and 1985 established a regulatory vehicle for the management and protection of state-listed threatened and endangered species. Chapters 67 and 68 (1975 revisions) of the code authorize the TPWD to formulate lists of threatened and endangered fish and wildlife species, and to regulate the taking or possession of those species. A 1981 revision (and 1985 amendment) to the code provides authority for the TPWD to designate plant species as threatened or endangered and to prohibit commercial collection or sale of these species without permits. The Texas Natural Diversity Database (TXNDD) catalogs, monitors, and provides information on rare species and communities of concern.

The ensuing TPWD regulations are Sections 65.171-177 and 69.1-9 of the Texas Administrative Code (TAC) (Chapters 67, 68, and 88 of the TPWD Code). These sections regulate the taking, possessing, transporting, exporting, processing, selling/offering for sale, or shipping of endangered or threatened species of fish, wildlife, and plants. Neither specific criteria for the listing of plant and animal species nor protection from indirect take (i.e., destruction of habitat or unfavorable management practices) is found in either of the above-mentioned statutes or regulations. Based on this information, unlike the federally listed species, there is no protection of habitat afforded to species that are only listed by the state.

There are 24 species listed as federal and/or state threatened, endangered, or candidate that have the potential to or have historically occurred within Webb County. These species are listed in **Table 1** below. No critical habitat designated by USFWS is located in or adjacent to the study area (USFWS, 2013).

Table 1: Listed Species with Potential to Occur within Webb County

Common Name	Scientific Name	USFWS	TPWD	Potential for Occurrence in the Study Area ¹
Birds				
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	DL	T	No
Common Black-Hawk	<i>Buteogallus anthracinus</i>	-	T	No
Interior Least Tern	<i>Sterna antillarum athalassos</i>	LE	E	No
Peregrine Falcon	<i>Falco peregrinus</i>	DL	T	No
Sprague's Pipit	<i>Anthus spragueii</i>	C	-	No
Wood Stork	<i>Mycteria americana</i>	N/A	T	No
Fishes				
Blue Sucker	<i>Cycleptus elongatus</i>	-	T	No
Rio Grande Darter	<i>Etheostoma grahami</i>	-	T	No
Rio Grande Silvery Minnow	<i>Hybognathus amarus</i>	LE	E	No
Mammals				
Black Bear	<i>Ursus americanus</i>	T/SA:NL	T	Yes
Gray Wolf	<i>Canis lupus</i>	LE	E	No
Jaguarundi	<i>Herpailurus yaguarondi</i>	LE	E	Yes
Ocelot	<i>Leopardus pardalis</i>	LE	E	Yes
White-nosed Coati	<i>Nasua narica</i>	-	T	Yes
Mollusks				
False Spike Mussel	<i>Quadrula mitchelli</i>	-	T	No
Mexican Fawnsfoot Mussel	<i>Truncilla cognate</i>	-	T	No
Salina Mucket	<i>Potamilus metnecktayi</i>	-	T	No
Texas Hornshell	<i>Popenaias poleii</i>	C	T	No
Reptiles				
Reticulate Collared Lizard	<i>Crotaphytus reticulatus</i>	-	T	Yes
Texas Horned Lizard	<i>Phrynosoma coruntum</i>	-	T	Yes
Texas Indigo Snake	<i>Drymarchon melanurus erebennus</i>	-	T	Yes
Texas Tortoise	<i>Gopherus berlandieri</i>	-	T	Yes
Plants				
Ashy Dogwood	<i>Thymophylla tephroleuca</i>	LE	E	Yes
Johnston's Frankenia	<i>Frankenia johnstonii</i>	LE-PDL	E	Yes
Sources: TPWD, 2015b; USFWS, 2013				
Notes:				
1 Potential for occurrence in the study area determinations made for each species using either USFWS recovery plans or 5-year reviews, if available, or one of the following sources: Dixon, 2013; Lockwood & Freemann, 2014; Schmidly, 2004; Thomas, Bonner, & Whiteside, 2007; Howells, Neck, & Murray, 1996.				
“-“ indicates a species that is not recognized as a candidate, threatened or endangered species.				
E – Endangered, in danger of extinction C – Candidate for federal listing				
T – Threatened, severely depleted or impacted by man LT – Listed Threatened				
PT – Proposed threatened LE – Listed Endangered				
DL – Federally delisted PDL – Proposed for Delisting				
T/SA – Threatened by similarity of appearance				

Endangered species in the region are subject to impacts from livestock grazing activities, oil and gas development, and wind energy development. Livestock grazing practices often include clearing of large areas of thornscrub and replanting with non-native species, these practices can result in loss of habitat for some species. Oil and gas activities and wind energy development in the region have impacted migratory bird species through habitat alteration and fragmentation.

2.0 Site Specific Existing Conditions

A reconnaissance-level visit of the study area, including the radar site and the external connections for electricity, fiber optic communications, and access road was conducted on March 23, 2015 to identify wetland and stream features as well as conduct a vegetation survey for the ashy dogweed and Johnston's frankenia. These two federally-listed species are known to exist throughout the study area. Prior to the reconnaissance visit to the study area, it was inadvertently brush cut by hydro-axing the vegetation (see **Exhibit 1** and **Exhibit 2**). The site-specific existing conditions described below reflect the vegetation clearing.



Exhibit 1: Brush Cut Project Site Looking North



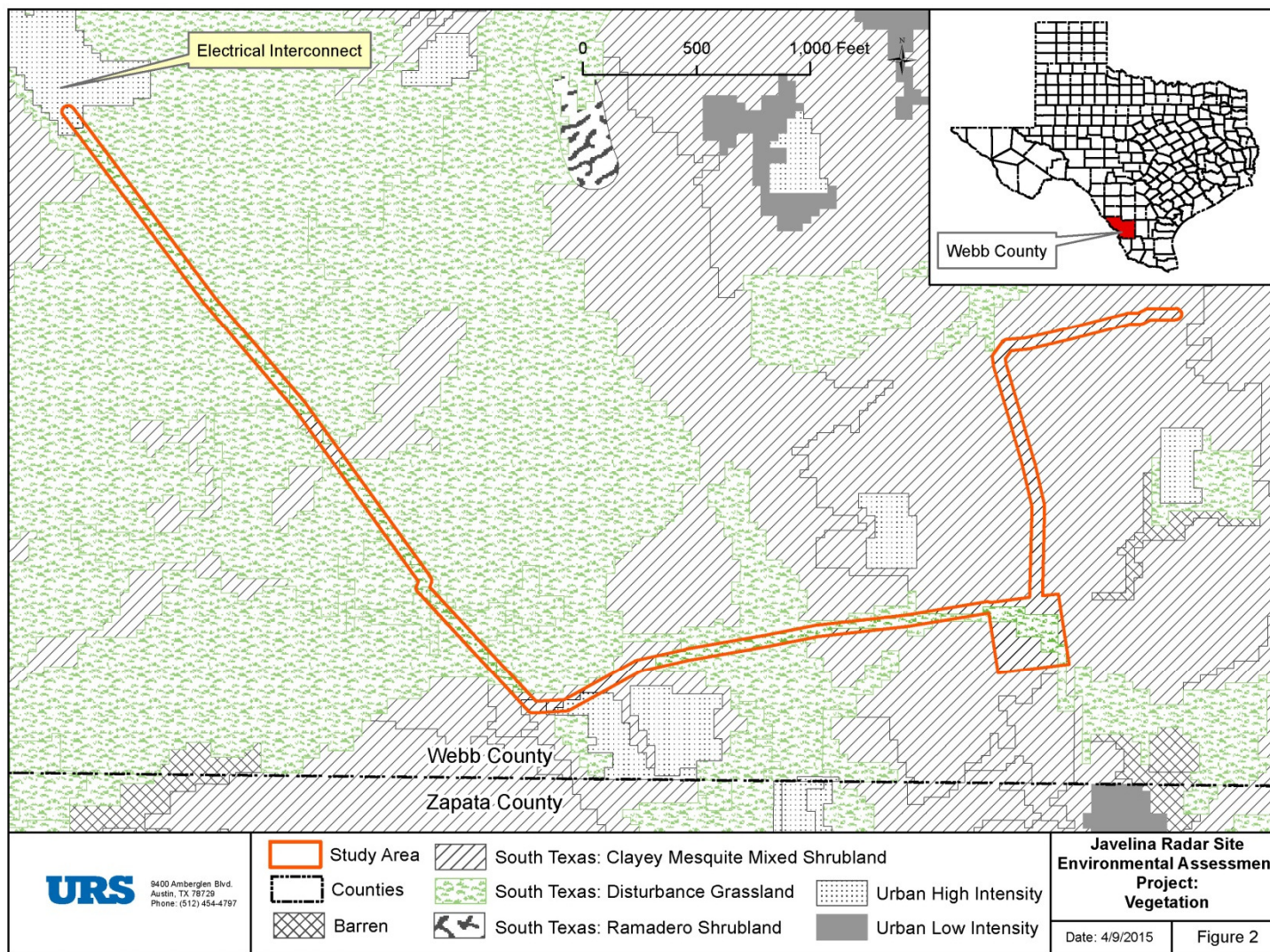
Exhibit 2: Brush Cut Project Site Looking South

2.1 Hydrology

According to the NHD and NWI mapping, no water features were mapped within the study area. Additionally, according to the FEMA dFIRM maps and floodplain panel 48479C1650C, the study area is not located within the 100-year floodplain (see **Figure 1**). Based on the reconnaissance-level visit, no wetland or stream features were identified within the study area.

2.2 Vegetation

According to the Ecological Mapping Systems of Texas (EMST), the study area contains three vegetation types (Elliott, et al., 2014) (see **Figure 2**). Approximately 65 percent of the study area is comprised of South Texas: Clayey Mesquite Mixed Shrubland, approximately 30 percent is comprised of South Texas: Disturbance Grassland, and the remaining 5 percent is comprised of Urban High Intensity.



The South Texas: Clayey Mesquite Mixed Shrubland vegetation type consists of a discontinuous canopy of shrubs and small trees with species such as mesquite, blackbrush, huisache (*vachellia farnesiana*), granjeno, sugar hackberry (*celtis laevigata*), brasil, guajillo, lotebush, prickly pear (*opuntia engelmannii*), and whitebrush (*alloysia gratissima*). Buffelgrass (*pennisetum ciliare*) is a common herbaceous species. The soils within this type range from clayey to loamy (Elliott, et al., 2014). See **Exhibit 3**.



Exhibit 3: Clayey Mesquite Mixed Shrubland Vegetation

The South Texas: Disturbance Grassland vegetation type consists of various heavily grazed grasslands with species such as buffelgrass, King Ranch bluestem (*bothriochloa ischaemum*), pink pappusgrass, threeawn species (*aristida* spp.), red grama (*bouteloua trifida*), bermudagrass (*cynodon dactylon*), and Kleberg bluestem (*dichanthium annulatum*). The shrub and small trees component includes species such as mesquite, huisache, blackbrush, lotebush, huisachillo (*vachellia tortuosa*), and granjeno (Elliott, et al., 2014).

The Urban High Intensity vegetation type includes areas built-up with impervious material associated with an existing electrical substation (Elliott, et al., 2014).

The vegetation within the study area was brush cut prior to the March 23, 2015 reconnaissance-level visit. Therefore, the dominant vegetation community type within the study area was assumed to be the South Texas: Clayey Mesquite Mixed Shrubland vegetation type based on surrounding vegetation.

2.3 Birds

Based on the bird surveys conducted by URS qualified biologists in the region, **Table 2** lists the birds with the greatest likelihood of occurring in the study area.

Table 2: Birds Likely to Occur in the Study Area

Common Name	Scientific Name
American Crow	<i>Corvus brachyrhynchos</i>
American Kestrel	<i>Falco sparverius</i>
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Audobon's Oriole	<i>Icterus graduacauda</i>
Baltimore Oriole	<i>Icterus galbula</i>
Bank Swallow	<i>Riparia riparia</i>
Barn Swallow	<i>Hirundo rustica</i>
Barred Owl	<i>Strix varia</i>
Belted Kingfisher	<i>Megaceryle alcyon</i>
Bewick's Wren	<i>Thryomanes bewickii</i>
Black Phoebe	<i>Sayornis nigricans</i>
Black Vulture	<i>Coragyps atratus</i>
Black-bellied Whistling Duck	<i>Dendrocygna autumnalis</i>
Black-crested Titmouse	<i>Baeolophus atricristatus</i>
Black-tailed Gnatcatcher	<i>Polioptila melanura</i>
Black-throated Sparrow	<i>Amphispiza bilineata</i>
Blue Grosbeak	<i>Passerina caerulea</i>
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>
Blue-winged Teal	<i>Anas discors</i>
Bronzed Cowbird	<i>Molothrus aeneus</i>
Brown-crested Flycatcher	<i>Myiarchus tyrannulus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bullock's Oriole	<i>Icterus bullockii</i>
Cactus Wren	<i>Campylorhynchus brunneicapillus</i>
Cassin's Sparrow	<i>Peucaea cassinii</i>
Cave Swallow	<i>Petrochelidon fulva</i>
Chihuahuan Raven	<i>Corvus cryptoleucus</i>
Chimney Swift	<i>Chaetura pelagica</i>

Common Name	Scientific Name
Chipping Sparrow	<i>Spizella passerina</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Common Grackle	<i>Quiscalus quiscula</i>
Common Ground-dove	<i>Columbina passerina</i>
Common Nighthawk	<i>Chordeiles minor</i>
Common Pauraque	<i>Nyctidromus albicollis</i>
Common Poorwill	<i>Phalaenoptilus nuttallii</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Crested Caracara	<i>Caracara cheriway</i>
Curve-billed Thrasher	<i>Toxostoma curvirostre</i>
Eastern Meadowlark	<i>Sturnella magna</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Eurasian Collared-dove	<i>Streptopelia decaocto</i>
European Starling	<i>Sturnus vulgaris</i>
Field Sparrow	<i>Spizella pusilla</i>
Golden-fronted Woodpecker	<i>Melanerpe aurifrons</i>
Grasshopper Sparrow	<i>Ammodramus savannarum</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Great Blue Heron	<i>Ardia herodias</i>
Great Horned Owl	<i>Bubo virginianus</i>
Great Kiskadee	<i>Pitangus sulphuratus</i>
Greater Roadrunner	<i>Geococcyx californianus</i>
Great-tailed Grackle	<i>Quiscalus mexicanus</i>
Green Heron	<i>Butorides virescens</i>
Green Jay	<i>Cyanocorax yncas</i>
Green-winged Teal	<i>Anas carolinensis</i>
Harris' Hawk	<i>Parabuteo unicinctus</i>
Hooded Oriole	<i>Icterus cucullatus</i>
House Sparrow	<i>Passer domesticus</i>
Hummingbird sp.	<i>Archilochus sp.</i>
Inca Dove	<i>Columbina inca</i>
Killdeer	<i>Charadrius vociferus</i>
Ladder-backed Woodpecker	<i>Dryobates scalaris</i>
Lark Bunting	<i>Calamospiza melanocorys</i>
Lark Sparrow	<i>Chodnestes grammacus</i>
Least Flycatcher	<i>Empidonax minimus</i>
Lesser Nighthawk	<i>Chordeiles acutipennis</i>
Lesser Yellowlegs	<i>Tringa flavipes</i>

Common Name	Scientific Name
Loggerhead Shrike	<i>Lanius ludovicianus</i>
Long-billed Thrasher	<i>Toxostoma longirostre</i>
Louisiana Waterthrush	<i>Parkesia motacilla</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Bobwhite	<i>Colinus virginianus</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Northern Harrier	<i>Circus cuaneus</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Olive Sparrow	<i>Arremonops rufivirgatus</i>
Orange-crowned Warbler	<i>Oreothlypis celata</i>
Orchard Oriole	<i>Icterus spurius</i>
Painted Bunting	<i>Passerina ciris</i>
Prairie Falcon	<i>Falco mexicanus</i>
Purple Martin	<i>Progne subis</i>
Pyrrhuloxia	<i>Cardinalis sinuatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
Sandhill Crane	<i>Grus canadensis</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Say's Phoebe	<i>Sayornis saya</i>
Scaled Quail	<i>Callipepla squamata</i>
Scissor-tailed Flycatcher	<i>Tyrannus forficatus</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>
Snow Goose	<i>Chen caerulescens</i>
Swainson's Hawk	<i>Buteo swainsoni</i>
Turkey Vulture	<i>Cathartes aura</i>
Verdin	<i>Auriparus flaviceps</i>
Vermillion Flycatcher	<i>Pyrocephalus rubinus</i>
Vesper Sparrow	<i>Pooecetes gramineus</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Western Meadowlark	<i>Sturnella neglecta</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
White-eyed Vireo	<i>Vireo griseus</i>
White-tailed Hawk	<i>Geranoaetus albicaudatus</i>
White-tipped Dove	<i>Leptotila verreauxi</i>
White-winged Dove	<i>Zenaida asiatica</i>
Wild Turkey	<i>Meleagris gallopavo</i>

Common Name	Scientific Name
Wilson's Snipe	<i>Gallinago delicata</i>
Yellow Warbler	<i>Setophaga petechia</i>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Yellow-rumped Warbler	<i>Setophaga coronata</i>

None of the species observed in the study area are considered candidate, threatened, or endangered species by the USFWS. Of the 108 species that have been observed in the region, one species, the White-tailed Hawk, is considered threatened by the TPWD (TPWD, 2015a).

2.4 Threatened and Endangered Species

TPWD's TXNDD was reviewed on March 12, 2015 to assess the potential for listed endangered and threatened species to occur in the study area. Based on the findings, no elements of occurrence (EOO) for federal or state-listed species were present within the immediate study area (TPWD, 2015b). These results, based on the stated limitations of the TXNDD, do not mean that there is an absence of endangered, threatened or rare species and should not be used for presence/absence determinations. Species with the potential to occur in the study are listed in **Table 1**, and are addressed below.

2.4.1 Black Bear

The black bear is listed as threatened by TPWD. USFWS has listed the Louisiana black bear (*ursus americanus luteolus*) as a threatened species and other black bears in Texas as threatened by their similarity of appearance with the Louisiana black bear. The black bear is primarily restricted to mountainous areas of the Trans-Pecos region (Schmidly, 2004), which are in far west Texas and is considered to be limited to the area west of the Pecos River. However, there have been new sightings in south Texas, and a confirmed road kill in Webb County on August 27, 2012 of a black bear thought to be a transient from Mexico (TPWD, 2012). The historic range of the Louisiana black bear includes east Texas and does not include Webb County (USFWS, 1995). Based on TXNDD, there are no EOOs within 5 miles of the study area (TPWD, 2015b). However, based on the previous occurrence of the species in Webb County, there is potential for the species to occur in the study area.

2.4.2 Jaguarundi and Ocelot

The jaguarundi and ocelot are listed as threatened by USFWS and TPWD. The jaguarundi occurs in thick brushlands and favors areas near water. Optimal habitat of the jaguarundi is thought to be similar to the ocelot, and the most recent occurrences of this species in the U.S. are believed to be in Cameron and Willacy Counties, the same counties as the ocelot (Campbell, 1995), which are approximately 83 and 97 miles from the study area, respectively. Furthermore, the last documented report of a jaguarundi in Texas was in 1986 near Brownsville in Cameron County (Korn, 2013). Research on ocelots in Texas has been much more extensive than for jaguarundis. Therefore, the following discussion on ocelots would also apply for jaguarundis.

The 1990 Recovery Plan for the ocelot identified the study area occurring within the historical range of the species, but not within an area designated as "occupied habitat" which was defined as the area within a 10 mile buffer surrounding all recorded occurrences (USFWS, 1990). That said, the TXNDD did not report an occurrence of the ocelot within 5 miles of the study area (TPWD, 2015b). URS qualified

biologists conducted a habitat assessment of the study area based on recommendations made by USFWS and TPWD for these species in September 2013. Preliminary Geographical Information System (GIS) analysis was run on 42,500 acres. It was determined that some isolated potential habitat may exist in the vicinity of the study area. However, the size of potential habitat, as well as their lack of connectivity to potential source populations of ocelots, makes the likelihood for use extremely low. Currently, there are only two known populations to occur in Texas: one in Willacy County approximately 83 miles to the southeast and one in Cameron Counties approximately 97 miles also to the southeast. Given the lack of occurrence data, the distance from small, isolated patches of potential habitat to source populations and lack of connectivity, the absence of identified areas of conservation concern within and surrounding the study area, it is unlikely that these species would occur in the study area.

2.4.3 White-Nosed Coati

The white-nosed coati is listed as threatened by TPWD. It is found in a variety of woodland habitats and riparian areas often with oaks and sycamores (Feldhamer, G., 2003). Most individuals in Texas are probably transients from Mexico. Based on TXNDD, there are no EOOs within 5 miles of the study area (TPWD, 2015b). Based on the presence of habitat in the vicinity of the study area, the potential exists for this state-listed species to occur in the study area. However, this highly mobile species is diurnal (moves during the day) and is expected to avoid construction and operation activities.

2.4.4 Reticulate Collared Lizard

The reticulate collared lizard is listed as threatened by TPWD. It is known to occur in the lower Rio Grande Valley of southern Texas and northern Mexico, which includes the study area. Based on TXNDD, there are no EOOs within 5 miles of the study area (TPWD, 2015b). However, one individual was observed by URS qualified biologists in the region in 2011. This lizard inhabits thorn-scrub vegetation and often occurs on scattered flat rocks below escarpments or isolated rock outcrops among scattered clumps of prickly-pear and mesquite (Hammerson, Lavin, & Mendoza, 2007). In Webb County, soils composed of at least 10 percent rock outcrops include Zapata-Rock outcrop complex (ZAC), Nido Variant-Rock outcrop complex (NOC), Nido-Rock outcrop complex (NDF), and are considered to have a high percentage of rock outcrops (Natural Resources Conservation Service [NRCS], 1985). Soils containing scattered areas of rock outcrops include Jimenez-Quemado complex (JQD) and Cuevitas-Randado complex (CRB) and are considered to have a medium percentage of rock outcrops. Based on the presence of habitat within and surrounding the study area and an observation within the region, the potential exists for the reticulate collared lizard to occur in the study area.

2.4.5 Texas Horned Lizard

The Texas horned lizard is a state-listed threatened species that is found on many soil types, but it prefers sandy loam and loamy sand soils to allow for bedding, nesting, and hibernation. This species is known to be less abundant in areas of predominantly clay soils. Associated vegetation is typically sparse with patches of grass, cacti, and scattered brush or scrubby trees. The habitat for the Texas horned lizard must include harvester ants (*pogonomyrmex* spp.), as they comprise a large portion of the lizard's diet. The lizard breeds from March through September and is most active from April to July. Populations have declined due to illegal collections, a decline in prey abundance due to pesticide use, and habitat conversion to agricultural or urban uses (Henke & Fair, 1998). Based on TXNDD, there are no EOOs within 5 miles of the study area (TPWD, 2015b). However, URS qualified biologists did observe one individual within the vicinity of the study area. Based on the presence of habitat within and surrounding

the study area and an observation within the vicinity of the study area, the potential exists for this state-listed species to occur throughout the study area.

2.4.6 Texas Indigo Snake

The Texas indigo snake is listed as threatened by TPWD and occurs within semiarid mesquite grassland savannah only where there is adequate moisture, such as near streams, ponds, or windmill seeps (Werler & Dixon, 2000). There are no water features present within the study area. However, the potential exists for the indigo snake to occur in search of such water features. The peak time of activity for this species is during the spring and summer months. Based on TXNDD, there are no EOOs within 5 miles of the study area (TPWD, 2015b). However, several indigo snakes have been observed in the vicinity of the study area. Based on the presence of habitat within and surrounding the study area and observations within the vicinity of the study area, the potential exists for this state-listed species to occur throughout the study area.

2.4.7 Texas Tortoise

The Texas tortoise is listed by TPWD as threatened mostly due to heavy exploitation by the pet trade. This species subsists on range grasses and the fruits, pads, and flowers of the prickly pear cactus found abundantly throughout the study area. Habitat for this species consists of contiguous areas of thorn-scrub savannah and woodland. Additionally, the Texas tortoise prefers a loose substrate in order to facilitate occasional burrowing. The peak time of activity for this species is during the hottest months of the year (Conant & Collins, 1998). Based on TXNDD, there are no EOOs within 5 miles of the study area (TPWD, 2015b). However, URS qualified biologists have observed this species in the vicinity of the study area. Based on the presence of habitat within and surrounding the study area and an observation within the vicinity of the study area, the potential exists for this state-listed species to occur throughout the study area.

2.4.8 Ashy Dogwood and Johnston's Frankenia

Two endangered plants are listed as occurring within Webb County. Ashy dogweed and Johnston's frankenia occur in the same general region, but occupy different habitats. Soil is considered the most important attribute for characterizing habitat for rare plant species. Ashy dogweed occurs in grasslands with scattered shrubs, with most known sites located on sands or sandy loams on level or very gently rolling topography over Eocene strata of the Laredo formation (Poole, Carr, Price, & Singhurst, 2007; USFWS, 1987). The Laredo formation is predominantly located 26 miles northwest of the study area (Bureau of Economic Geology [BEG], 1976). **Table 3** describes the soils in Webb County and their potential to support ashy dogweed based on texture, drainage, and salinity. The study area is located in an area with low potential to support ashy dogweed. During the March 23, 2015 reconnaissance-level site visit, URS qualified biologists did not observe this species in the study area. The TXNDD reports two EOOs for this species approximately 1.5 miles west and approximately 4.5 miles southeast of the study area (TPWD, 2015b). However, based on the site visit it is likely that the ashy dogweed would not be impacted.

Table 3: Soil Rating for Ashy Dogweed

Soil Description	Soil Map Unit Symbol	Likelihood of Supporting Ashy Dogweed
Moderate to deep, well-drained, non-saline, sands to sandy loams	Brb, CoB, CpB, DmB, DRB, DvB, HeB, NuB, Rg	High
Well-drained, non-saline, loams (excluding sandy loams and clay loams)	CRB, DeB, DsB, LgA, LgB, NDF, NOC, VkC, ZAC	Medium
Clays or clay loams; saline soils; or poorly drained	AgB, Ar, Bd, CaB, CfA, JQD, LrA, MCE, MgC, MnB, Mo, PaB, Pt, Te, To, VrB	Low
Source: (Wu & Smeins, 2000)		

Johnston's frankenia generally grows in sparsely vegetated, rocky, gypseous hillsides or saline flats, where it occurs within the mesquite-blackbrush. Populations appear to be restricted to pockets of hyper-saline soil with salinity and sodium content that is around 10 times greater than soils outside the populations (68 Federal Register 27961 [May 22, 2003]). The soil units that occur within the study area are CaB and MCE, which are saline soils. During the March 23, 2015 reconnaissance-level site visit, URS qualified biologists did not observe this species in the study area. The TXNDD reports four EOOs for this species approximately 3.5, 3.7, 4, and 4.7 miles southwest the study area (TPWD, 2015b). However, based on the site visit it is likely that Johnston's frankenia would not be impacted.

3.0 Potential Impacts of Proposed Action

3.1 Hydrology

According to the NHD and NWI mapping no features were mapped within the study area. Additionally, no streams or wetland features were identified during the March 23, 2015 reconnaissance-level site visit. Therefore, no impacts to streams, wetlands, or other water features are anticipated. Additionally, according to FEMA maps, the study area is not located within the 100-year floodplain. Therefore, no impacts are anticipated.

3.2 Vegetation

The primary impact to vegetation resulting from the site preparation and construction of the Javelina supplemental radar unit would be the removal of existing vegetation. Construction would be performed in such a manner as to minimize adverse impacts to vegetation and retain existing groundcover wherever possible. The majority of the vegetation within the study area has already been disturbed as a result of the inadvertent hydro-axing prior to the March 23, 2015 reconnaissance-level site visit. Where necessary, all remaining trees, brush, and undergrowth would be removed prior to construction. Industry standard erosion and sedimentation best management practices (BMPs) would be used during construction activities.

3.3 Birds

Threats to MBTA-protected birds include habitat alteration, direct mortality of individuals, eggs, or young, and destruction of nests. To minimize impacts to migratory birds, URS recommends the following industry standard BMPs during construction activities:

- In accordance with the MBTA, construction activities and vegetation clearing should be conducted outside peak-nesting seasons (March-August) to avoid any adverse effects to the migratory birds and their habitat. If construction and vegetation clearing occurs from March through August, construction personnel shall be made aware of MBTA species, their habits, regulatory status, and environmental staff clearing areas for construction shall take these species into account. In the event of the discovery, it is recommended that activities in the vicinity of the species be immediately stopped and a qualified biologist consulted to assess the presence of the species to provide proper management recommendations. Work may proceed on other activities while the species is evaluated.
- Ground-nesting species such as Killdeer (*charadrius vociferus*) have the potential to be found on-site. Construction personnel should be made aware of these species, their habits, and regulatory status, and biological monitors clearing areas for construction should take these species into account. In the event of the discovery, it is recommended that activities in the vicinity of the species be immediately stopped and a qualified biologist consulted to assess the presence of the species to provide proper management recommendations. Work may proceed on other activities while the species is evaluated.
- In the event that migratory birds or their nests are present prior to or during construction, actions should be implemented to ensure migratory birds, their nests, eggs, and young would not be harmed. This can be achieved by establishing buffer distances from the nests in which clearing and construction should not occur until the nests are no longer active. These distances would be determined on a case-by-case basis as different birds require varying buffer distances (i.e., raptor or passerine). Consultation with a qualified biologist would be necessary to determine these buffer distances.

3.4 Threatened and Endangered Species

Threats to the black bear, jaguarundi, and ocelot include habitat alteration, particularly land clearing practices, and direct mortality. To minimize impacts to these species, URS recommends the following industry standard BMPs during construction activities:

- Construction personnel should be educated on the potential presence of these special-status species, avoidance measures, and beneficial practices. Beneficial practices should include limiting ground disturbance, excluding the use of detrimental seed mixes, avoiding direct mortality, establishing and posting speed limits on newly created roads, and enforcing driving speed limits. Revegetation efforts shall exclude mat-forming grasses, such as buffelgrass (*pennisetum ciliare*), to the greatest extent practicable.

Threats to the reticulate collared lizard, the Texas horned lizard, the Texas tortoise, and the Texas indigo snake include habitat alteration, particularly land clearing practices, the conversion of native grazing lands to farms and improved pastures, the planting of alien mat-forming grasses, including buffelgrass, for livestock grazing, and direct mortality. To minimize impacts to these species URS recommends the following additional industry standard BMPs during construction activities:

- For the reticulate collared lizard, Texas tortoise, Texas indigo snake, and Texas horned lizard from March to September, or when warm weather occurs during October to February, any excavations holes or trenches created during construction should be covered overnight or inspected every morning to ensure no individuals have been trapped. Additionally, it is recommended that site construction and routine road maintenance proceed with caution,

especially when ambient temperatures are low. These species are less active during low temperatures and are less able to avoid construction equipment. Additionally, Texas horned lizards are known to rest and bed on roadsides, and the grading of roads can kill or uncover them, which can expose them to predators during low temperatures.

- Placement of drift fencing to keep the reticulate collared lizard, Texas tortoise, Texas indigo snake, and Texas horned lizard from entering the construction area should be considered. The fence should be buried at least six (6) inches deep and at least 24 inches high. It should be maintained during the construction period and only removed after the construction is completed and the disturbed site has been revegetated.
- It is recommended that a qualified biological monitor sweep the construction site ahead of construction equipment during the initial clearing of the site in order to relocate any individuals found outside of the project site.

4.0 Conclusions

Based on the desktop analysis, the species with potential to occur within the study area include the black bear, jaguarundi, ocelot, white-nosed coati, reticulate collared lizard, Texas horned lizard, Texas indigo snake, and Texas tortoise. During the March 23, 2015 reconnaissance-level site visit, URS qualified biologists did not observe ashy dogweed or Johnston's frankenia within the study area. Therefore, it is unlikely that these species would be impacted. By implementing the above mentioned BMPs, adverse effects to the remaining species are not expected as a result of the Proposed Action to construct and operate a supplemental radar unit on the Javelina site.

5.0 References

- BEG (Bureau of Economic Geology). (1976). *Laredo Sheet*. The University of Texas at Austin.
- Campbell, L. (1995). *Endangered and Threatened Animals of Texas: Their Life History and Management*. Austin, Texas: Texas Parks and Wildlife Press.
- Conant, R., & Collins, J. T. (1998). *Reptiles and Amphibians of Eastern and Central North America. Third Edition. Expanded*. Boston: Houghton Mifflin Company.
- Cowardin, L. M., Carter, V., Golet, F. C., & LaRoe, E. T. (1979). *Classification of Wetlands and Deepwater Habitats of the United States*. Washington, D.C.: U.S. Fish and Wildlife Services.
- Dixon, J. R. (2013). *Amphibians and Reptiles of Texas*. College Station, Texas: Texas A&M Press.
- Elliott, L. F., Diamond, D. D., True, C. D., Blodgett, C. F., Pursell, D., German, D., et al. (2014). *Ecological Mapping Systems of Texas: Summary Report*. Austin, Texas: Texas Parks and Wildlife Department.
- Feldhamer, G. (2003). *Wild Mammals of North America*. The John Hopkins University Press.
- FEMA (Federal Emergency Management Agency). (2008). *Map Search*. Retrieved March 16, 2015, from

<https://msc.fema.gov/webapp/wcs/stores/servlet/mapstore/homepage/MapSearch.html?isFloodMap=true&AddressQuery=Upton%20County%2C%20Texas>

- Griffith, G. E., Bryce, S. A., Omernik, J. M., Comstock, J. A., Rogers, A. C., Harrison, B., et al. (2004). *Ecoregions of Texas (color poster with map, descriptive text, and photographs)*. US Geological Survey, Reston, Virginia.
- Hammerson, G. A., Lavin, P., & Mendoza, Q. F. (2007). *2008 IUCN Red List of Threatened Species*. Retrieved from *Crotaphytus reticulatus*: <http://www.iucnredlist.org/details/64012/0>
- Henke, S., & Fair, W. (1998). *Management of Texas Horned Lizards*. Kingsville, Texas: Caesar Kleberg Wildlife Research Institute.
- Howells, R. G., Neck, R. W., & Murray, H. D. (1996). *Freshwater Mussels of Texas*. Austin, Texas: University of Texas Press.
- Korn, J. (2013, September 4). Texas A&M University - Kingsville, pers. comm.
- Lockwood, M. W., & Freemann, B. (2014). *The Texas Ornithological Society Handbook of Texas Birds*. College Station, Texas: Texas A&M University Press.
- NRCS (Natural Resource Conservation Service). (1985). *Soil Survey of Webb County, Texas*. Retrieved March 18, 2015, from http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/texas/TX479/0/Webb.pdf
- Poole, J. M., Carr, W. R., Price, D. M., & Singhurst, J. R. (2007). *Rare Plants of Texas*. College Station, Texas: Texas A&M University Press.
- Schmidly, D. J. (2004). *The Mammals of Texas* (6th ed.). Austin, Texas: University of Texas Press.
- Thomas, C., Bonner, T. H., & Whiteside, B. G. (2007). *Freshwater Fishes of Texas*. College Station, Texas: Texas A&M University Press.
- TPWD (Texas Parks and Wildlife Department). (2012). Black Bear activity on the upswing in the Hill Country and South Texas. News Release: November 27, 2012. Austin, Texas.
- TPWD (Texas Parks and Wildlife Department). (2015a). *Rare, Threatened, and Endangered Species of Texas*. Retrieved March 18, 2015, from <http://tpwd.texas.gov/gis/rtest/>
- TPWD (Texas Parks and Wildlife Department). (2015b). Texas Natural Diversity Database. Retrieved March 12, 2015.
- TWDB (Texas Water Development Board). (2014). Retrieved December 30, 2014, from River Basins: http://www.twdb.texas.gov/surfacewater/river_basins/index.asp
- USFWS (U.S. Fish and Wildlife Service). (1987). *Ashy Dogwood (Thymophylla tephroleuca) Recovery Plan*. Albuquerque, NM: United States Fish and Wildlife Services.

- USFWS (U.S. Fish and Wildlife Service). (1990). *Listed Cats and Texas and Arizona Recovery Plan*. Albuquerque, NM: United States Fish and Wildlife Service.
- USFWS (U.S. Fish and Wildlife Service). (1995). *Recovery Plan, Louisiana Black Bear*. Atlanta, GA: United States Fish and Wildlife Service.
- USFWS (U.S. Fish and Wildlife Service). (2013a). *County-by-County Endangered Species List for Texas*. Retrieved December 3, 2013, from U.S. Fish and Wildlife Services: <http://www.fws.gov/southwest/>
- USFWS (U.S. Fish and Wildlife Service). (2013b). *Critical Habitat Portal*. Retrieved September 19, 2013, from <http://criticalhabitat.fws.gov/crithab/>
- USGS (U.S. Geological Survey). (2014). Retrieved April 6, 2015 from Water Resources of the United States: http://water.usgs.gov/GIS/huc_name.html#Region12
- Werler, J. E., & Dixon, J. R. (2000). *Texas Snakes*. Austin: University of Texas Press.
- Wu, B., & Smeins, F. (2000). *Multiple-scale Habitat Modeling Approach for Rare Plant Conservation*. Landscape and Urban Planning.