

# **Environmental Assessment**

**Naples Power Plant  
Morris County, Texas**



**U.S Department of Agriculture Rural Utilities Service**

**Prepared by:**

**Burns and McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114**

**Prepared for:**

**Arkansas Electric Cooperative Corporation  
1 Cooperative Way  
Little Rock, AR 72209**

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## List of Abbreviations

Abbreviation	Term/Phrase/Name
AADT	Annual Average Daily Traffic
ACHP	Advisory Council on Historic Preservation
AECC	Arkansas Electric Cooperative Corporation
AEP	American Electric Power
AJD	Approved Jurisdictional Determination
APE	area of potential effect
APSC	Arkansas Public Service Commission
BACT	Best Available Control Technology
BGEPA	Bald and Golden Eagle Protection Act
BMPs	best management practices
CAA	Clean Air Act
CCGT	combined cycle gas turbine
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CWA	Clean Water Act
dBA	A weighted decibel
EA	environmental assessment
ELCC	Electric Load Carrying Capability
EMF	electromagnetic fields
Entergy	Entergy Arkansas Inc.
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Maps
FPPA	Farmland Protection Policy Act
gpm	gallons per minute
GSU	generator step-up
HAP	hazardous air pollutant
H <sub>2</sub>	hydrogen



IPaC	Information for Planning and Consultation
ITC	investment tax credits
kV	kilovolt
m	meter
MACT	Maximum Achievable Control Technology
MISO	Mid-continent Independent System Operator
MMBtu/hr	million British thermal units per hour
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NESHAP	National Emission Standards for Hazardous Air Pollutants
NGPL	Natural Gas Pipeline Company
NHD	National Hydrography Dataset
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxide
NPV	net present value
NRCS	Natural Resource Conservation Science
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NWI	National Wetland Inventory
NWP	Nationwide Permit
OGE	Oklahoma Gas and Electric
O&M	operation and maintenance
OMS	Organization of MISO States
OSHA	Occupational Safety and Health Administration
PCN	Pre-construction Notice
PEM	palustrine emergent
PM <sub>2.5</sub>	particulate matter 2.5 microns or less in diameter
PM <sub>10</sub>	particulate matter 10 microns or less in diameter
PPAs	power purchase agreements
PRM	planning reserve margin
Project Site	100 acres located approximately one mile northwest of Naples, in Morris County, Texas
PRS	Power Requirements Study



PSD	Prevention of Significant
PSS	palustrine scrub shrub
PUB	palustrine unconsolidated bottom
PV	photovoltaic
RFPs	requests for proposals
ROR	run-of-river
ROW	right-of-way
RTO	regional transmission organization
RUS	Rural Utilities Service
SCGT	simple-cycle gas turbine
SCR	selective catalytic reduction
SER	Significant Emission Rate Thresholds
SHPO	State Historic Preservation Office
SIL	Significant Impact Level
SMNR	small modular nuclear reactor
SO <sub>2</sub>	sulfur dioxide
SPP	Southwest Power Pool
SSURGO	Soil Survey Geographic Database
SWEPco	Southwestern Electric Power Company
SWP3	Stormwater Pollution Prevention Plan
SWPA	Southwestern Power Administration
TCEQ	Texas Commission of Environmental Quality
THPO	Tribal Historic Preservation Officer
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
tpy	tons per year
TWDB	Texas Water Development Board
TxDot	Texas Department of Transportation
µg/m <sup>3</sup>	micrograms per cubic meter
USACE	U.S. Army Corp of Engineers
USC	U.S. Code
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service



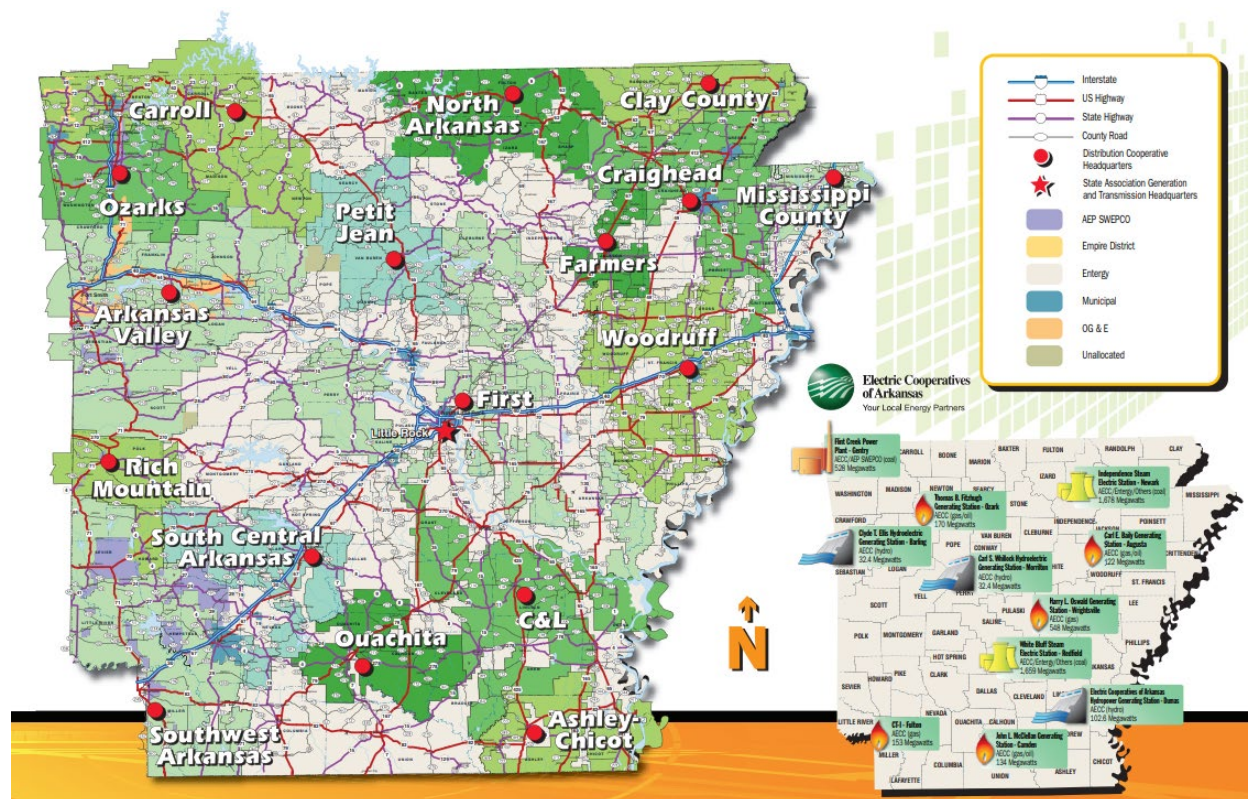
USGS	U.S. Geological Survey
US EIA	U.S. Energy Information Agency
VOCs	volatile organic compounds
WOTUS	Waters of the U.S.



# 1.0 Introduction

Arkansas Electric Cooperative Corporation (AECC) provides reliable, affordable, and responsible energy to its 17 electric distribution cooperatives and 1.2 million members in Arkansas and surrounding states. Approximately 62 percent of Arkansas's geographic area and approximately 30 percent of the total load in the state is served by AECC and its member cooperatives (see Figure 1-1).

**Figure 1-1: AECC Service Territory**



AECC is a generation and transmission cooperative with a total of 4,530 megawatts (MW) of owned or purchased generation capacity. AECC's fully-owned generation plants include two natural gas/-oil-fueled plants, three hydroelectric generating stations on the Arkansas River, four natural gas (only) fueled plants, and one large-scale solar photovoltaic (PV) plant. AECC also owns portions of four coal-fueled power plants in Arkansas. AECC also utilizes purchase power agreements for additional energy resources including hydroelectric energy from the Southwestern Power Administration (SWPA), wind energy, solar energy, and a comparably small amount of coal-fueled energy. In the four-year period 2020-2023, AECC's fossil-fueled resources provided total energy equivalent to 61% of member energy needs, AECC's non-fossil resources provided 20%, and net energy purchases from the regional transmission organization (RTO) markets provided 19%.

The number of transmission facilities owned by AECC is limited despite AECC covering the majority of Arkansas. Four AECC-owned transmission lines are part of the interconnected Bulk Electric System as defined by the North American Electric Reliability Corporation (NERC). Other transmission facilities owned

by AECC are transmission substations, generator interconnection, or radial lines to load-serving distribution substations. Because the boundary between the Southwest Power Pool (SPP) and Mid-continent Independent System Operator (MISO) RTOs passes through Arkansas, portions of AECC's loads and generation resources are embedded within each RTO footprint. Within MISO, AECC's facilities connect to the Entergy Arkansas Inc. (Entergy) transmission system, and within SPP, AECC's facilities connect to the American Electric Power (AEP), Oklahoma Gas and Electric (OGE), and the SWPA transmission systems. Under these arrangements, AECC works closely with the RTOs and transmission owners to ensure that interconnections are adequately planned, designed and constructed in order to ensure the reliability of the Bulk Electric System.

## **1.1 Project Description**

### **1.1.1 Proposed Action**

AECC is requesting a loan from the U.S. Department of Agriculture (USDA), Rural Utilities Service (RUS) to procure and construct two Siemens 450-MW simple-cycle gas turbines (SCGT), located approximately one mile northwest of Naples, in Morris County, Texas (the "Project Site"). AECC owns 100 acres that were historically forested and scrub/shrubland at the Project Site. Approximately 40 acres would be disturbed with approximately 90 acres ultimately being fenced. The general location of the Project Site including the transmission line is shown in Figure 1-2 and the proposed site layout is shown in Figure 1-3. AECC is a member-owned, member-led wholesale power generation and transmission cooperative created in 1949 by rural electric cooperatives to provide electricity reliably and affordably for rural areas of Arkansas and its surrounding states.

The proposed action will be located within the SPP footprint, and will meet a portion of AECC's mandated need for firm generation capacity within that footprint by the year 2028.

To support operations of the new combustion turbines, multiple existing natural gas pipelines extend through the northern portion of the Project Site to supply fuel. The lateral pipelines are not owned or operated by AECC.

An existing transmission line, consisting of a single-circuit 345 kilovolt (kV) line extends north-south along the eastern boundary of the Project Site providing access to existing transmission line right-of-way (ROW) at the Project Site. The transmission line is owned and operated by Southwestern Electric Power Company (SWEPCO, a subsidiary of AEP).

Water for the site will be sourced from a new well or wells that would be constructed on-site. The number of wells required will be dependent upon the aquifer yield characteristics determined from yet-to-be completed well drilling and pump testing. The well or wells that end up being permitted will be capable of pumping up to 350 gallons per minute in aggregate, and will be used to refill the onsite storage tanks. Daily water use will come from the storage tanks.

The Project would be constructed over an approximately 2-year period. The footprint for construction of this Project is approximately 40 acres, located within a historically forested and scrub/shrubland area within the Project Site boundary (Figure 1-2). Construction activities would also include equipment laydown, temporary offices, and parking.

The proposed action will require the following major new components:



- Advanced-class SCGT and auxiliary equipment
- Air cooled generator and auxiliary equipment
- Selective catalytic reduction (SCR) and Oxidation Catalyst Systems
- Generator step-up (GSU) and auxiliary transformers
- Fuel oil tanks, offload, and forwarding equipment
- Water tanks
- Electrical equipment for the station including the switchyard
- Onsite switchyard to accommodate interconnection to the grid
- Fire protection
- Natural gas metering, filtering and pressure regulating equipment
- Permanent offices and warehousing
- Permanent plant roads, lighting, fencing, and cameras
- Water supply
- Inlet cooling system

These proposed actions will be treated as connected actions:

- Reconductored electrical distribution line

This Connected Action is anticipated to have no long-term effects as all poles will remain in place (i.e. no new ROW).

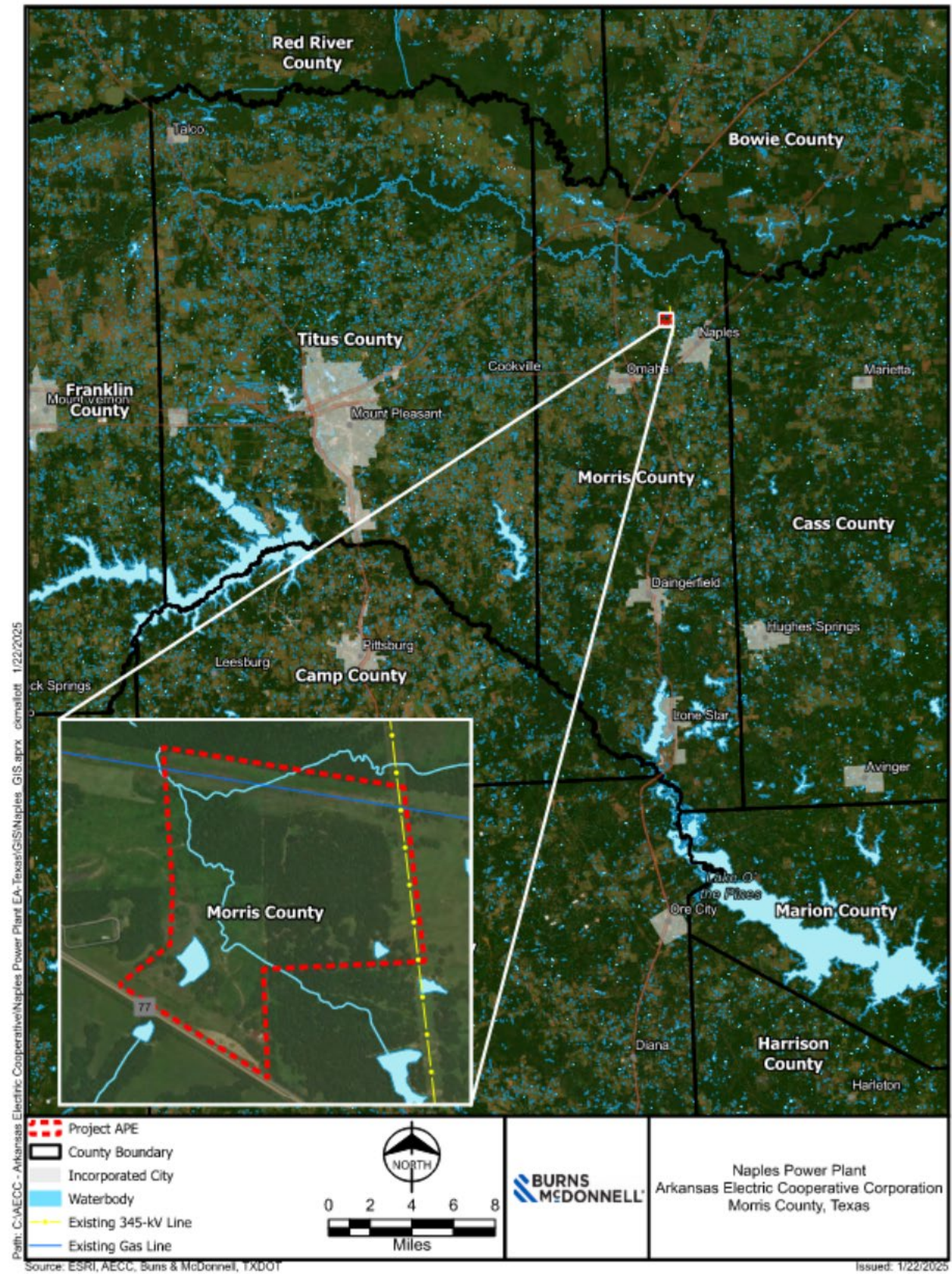
### **1.1.2 Agency and Program Objectives**

RUS's action is the decision to provide financing assistance for the Proposed Action through the Electric Infrastructure Loan & Loan Guarantee Program. Under the Rural Electrification Act of 1936, as amended, the Secretary of Agriculture is authorized and empowered to make loans to nonprofit cooperatives and others for rural electrification for the purpose of financing the construction and operation of generating plants, electric transmission and distribution lines, or systems for the furnishing and improving of electric service to persons in rural areas (7 U.S. Code [USC] § 904). A primary function or mission of RUS is to carry out the electric loan program (7 USC § 6942).

USDA, Rural Development is a mission area that includes three federal agencies – Rural Business-Cooperative Service, Rural Housing Service, and RUS. The agencies have in excess of 50 programs that provide financial assistance and a variety of technical and educational assistance to eligible rural and tribal populations, eligible communities, individuals, cooperatives, and other entities with a goal of improving the quality of life, sustainability, infrastructure, economic opportunity, development, and security in rural America. Financial assistance can include direct loans, guaranteed loans, and grants in order to accomplish program objectives.

This Environmental Assessment (EA) was prepared in accordance with Title 7 of the Code of Federal Regulations (CFR) Part 3100 (7 CFR 3100), which prescribes the policies and procedures of the USDA for implementing the National Environmental Policy Act (NEPA) of 1969, as amended, Title 7 CFR 1970 which provides environmental policies and procedures for the RUS, and the USDA Rural Development guidance document 1970-C which serves as a guide for preparing EAs under NEPA.

Figure 1-2: Naples Power Plant Location





**Figure 1-3: Proposed Layout of New Equipment**



## 1.2 Purpose and Need

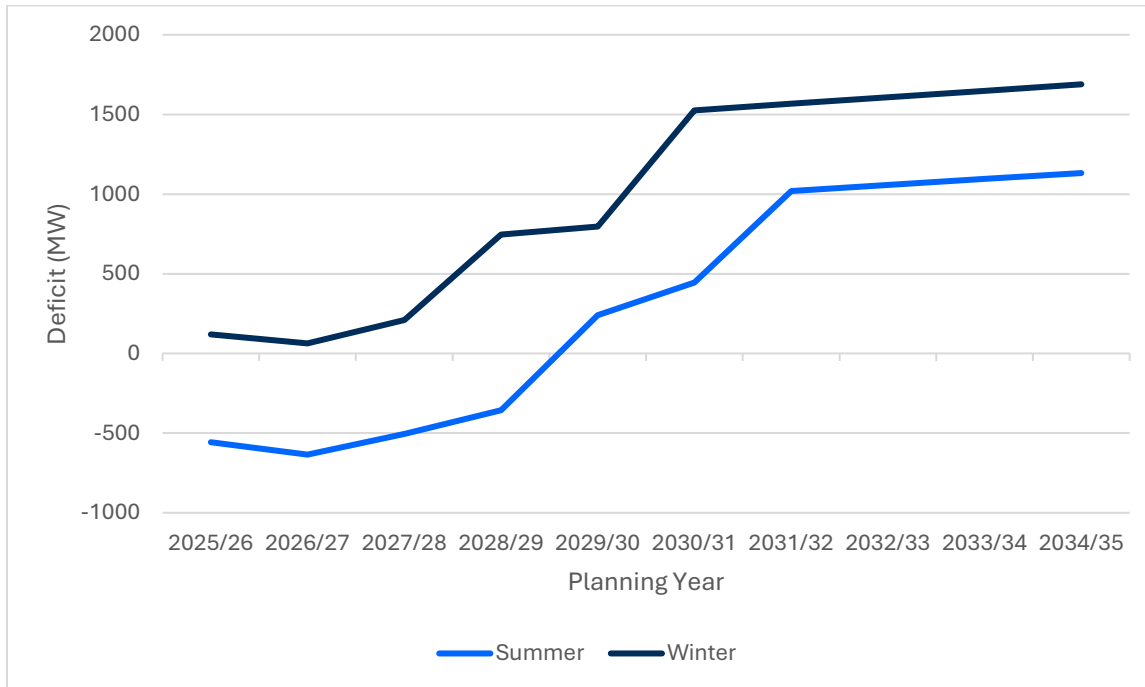
### 1.2.1 Introduction

The SPP and MISO RTOs establish and enforce generation resource adequacy requirements as ultimately approved by the Federal Energy Regulatory Commission (FERC). These requirements define firm generation capacity levels that each load-responsible utility such as AECC must maintain. The resource requirements are expressed as a percentage margin above firm peak demand, referred to by both SPP and MISO as the ‘planning reserve margin’ (PRM). The requirements are presently enforced one year forward and include large financial penalties for any shortfalls. The penalties within SPP are explicitly designed to be between 25% and 100% higher than the cost of installing new gas-fueled generation capacity. Beginning in the year 2022 and continuing, SPP and MISO have implemented dramatic increases to the required PRMs of electric load serving entities such as AECC, most particularly for Winter seasons. These changes have greatly increased AECC’s need for firm generation capacity in upcoming years, and AECC’s critical season of need within both RTOs has shifted from the Summer season to the Winter season.

The primary planning horizon of AECC’s most recent studies spans the years 2025 through 2034. The Base Case firm capacity need scenario includes the most recent load growth forecasts and assumes retention of most all of AECC’s existing accredited capacity through the planning horizon, with the exception of two relatively large coal-fueled generation plants which are subject to cease-to-burn coal dates in years 2028 and 2030.

AECC’s load forecasts are updated annually in conjunction with the Member Cooperatives applying the Power Requirements Study (PRS) process. The forecasts are based on various scenarios, resulting in values for a mid-range growth forecast as well as a low growth forecast and a high growth forecast. The compound peak firm demand growth of the most recent forecasts for the years 2024 to 2034 ranges from 1.4% to 2.1% per year.

Figure 1-4 summarizes AECC’s most recent Base Case projection of remaining firm capacity need within upcoming years. This Base Case scenario shows a need for 120 MW of firm capacity in 2025, increasing to 747 MW in year 2028 and 1,526 MW in year 2030. Assuming 92% of future installed capacity will qualify for firm accreditation, about 1,660 MW of new *installed* generation capacity will be needed by 2030.

**Figure 1-4: AECC Base Case Overall Need for Firm Generation Capacity**

AECC believes it is prudent and necessary to pursue actions to achieve at minimum the future generation capacity needs represented by the Base Case scenario, and to develop contingency plans for high potential need due to a combination of possible higher load growth and/or potential loss of additional existing firm capacity. The proposed action provides for approximately 56% of the year 2030 Base Case scenario capacity need, and about 49% of the high growth scenario capacity need summarized here.

## 2.0 Alternatives

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To determine if RUS can fund the Proposed Action, Alternatives that meet the purpose and need should be considered. Several options were evaluated to meet the identified future capacity needs. The options that were evaluated but eliminated from consideration, the preferred alternative, and the no action alternative are discussed in more detail below.

### 2.1 Introduction

AECC staff conduct studies of a full range of firm generation capacity alternatives on an ongoing basis and has recently conducted technical and economic analysis to address meeting the need for additional firm generation resources described in Section 1. As described within this section, natural gas fueled capacity with onsite backup fuel represents the only alternative that could feasibly meet the overall need, and also represents the most economical alternative for achieving all but a minor portion of the need.

Analysis conducted includes both ownership of alternatives and potential purchase opportunities identified from requests for proposals (RFPs) and other bilateral discussions. Costs of developing and owning the various alternatives were developed with assistance of consultants, as well as discussions with other entities actively developing facilities and AECC's own recent experiences such as the Woodruff County 122 MW (ac) solar PV facility and the Fitzhugh site 99 MW aeroderivative gas turbine facility.

### 2.2 Alternatives Considered

The following is a brief discussion of alternatives recently evaluated for AECC to meet the overall need for firm capacity which AECC faces in the upcoming years, and somewhat more specifically to meet the 1,660-MW or greater need that AECC presently faces by the year 2030.

- **Load Management and Energy Efficiency** – Load management is voluntary on the power user side. Load management and energy efficiency programs represent very limited potential given that AECC has already developed several cost-effective programs.
- **Buying Open Market Power Purchase Agreements (PPA's)** - AECC presently has several long-term PPAs which contribute to meeting overall capacity and energy needs. AECC issued an RFP to acquire capacity specifically within SPP. None of the proposals provided a long-term economical alternative to building new resources. AECC did select some of the short-term options to bridge the gap until new resources could be added.
- **Renewables** – Renewables are not as cost-effective as SCGTs. Solar PV and battery storage options had reduced accreditation during Winter season, which is AECC's critical season of generation. Wind-powered generation currently makes up approximately 10 percent of AECC's existing generation portfolio. These facilities are in Oklahoma and Kansas, areas with much more favorable wind conditions. Renewables are not a dispatchable generation source.
- **Hydrogen Combustion** – The advanced class combustion turbines for the SCGT and CCGT alternatives are presently capable of burning a mixture of 30% to 50% hydrogen by volume; however, that fuel isn't broadly available. AECC will continue to be actively engaged in reviewing for future cost effectiveness.



Remaining alternatives to consider include various fossil fuel generation sources. Alternatives for the technology to meet the identified need are described in the next section.

### **2.2.1 Technology Selection**

A technology assessment was completed to determine the self-build generation technology that best met the identified need. SCGTs and combined-cycle gas turbines are capable of generating the amount of capacity need identified and were selected for further analysis.

A SCGT will generate power by combusting natural gas and propelling the exhaust through a turbine. The spinning turbine is connected to a generator. An advanced-class SCGT has the lowest total cost when looking at 20 years of operation, less reliance on the energy market, and greater flexibility. An advanced-class SCGT benefits from faster ramp rates, greater efficiency, and economies of scale due to larger unit capacity.

Combined-cycle units are a combination of gas and steam turbines. The result is that the generation of electricity is increased almost by 50%. The waste heat from the gas turbine is routed to the nearby steam turbine, which generates extra power. However, combined-cycle units require significant amounts of water for process use and cooling. Higher temperatures within the units require additional maintenance. Additionally, the units aren't designed for fast response.

Based on the abilities of these technologies, the economic analyses discussed above, and contacting multiple manufacturers for bids, the alternative of natural gas-fired, simple-cycle combustion turbines (i.e., the Proposed Action) is the best approach for AECC to meet the identified need. The Proposed Action will balance AECC's traditional and more intermittent renewable generation assets on the system.

### **2.2.2 Alternative Project Locations**

For the identified technology, AECC will need a site that can accommodate new generation. As stated above, AECC must add new resources by 2028 or sooner. Based on the large need in the region, an ideal site must have adequate transmission, high pressure natural gas, and other infrastructure to support operations. Multiple sites were investigated to determine suitable locations for the project's development within AECC's service territory. The proposed site needed to be capable of accommodating up to 900 MW of natural gas fueled simple-cycle generation and possess the necessary infrastructure critical to plant development.

Three major interstate gas pipelines extend through the property's north side allow access to diverse gas production areas as well as 345-kV transmission line that extends through the property's east side. The site is located on a ranch situated in rural northeast Texas. Additionally, topography of the site allows for the inclusion of a 200+ surface acre lake x 90-foot dam height for consideration if combined cycle were chosen over simple cycle.

## **2.3 Proposed Action Alternative**

After evaluating multiple sites across Arkansas and the region, AECC chose a 100-acre site northwest of Naples, Texas due to its direct access to a natural gas supply and transmission line interconnection. Based on a review of available and feasible alternatives, the construction of two new 450-MW, natural gas-fired simple cycle combustion turbines located at the Naples Power Plant is the Proposed Action Alternative to effectively address all purpose and need criteria described in Subsection 1.2. Under the Proposed Action Alternative, RUS would approve AECC's financing request and AECC would construct and operate the new generating facility.

The Proposed Action would burn natural gas, with the capability to use fuel oil as a backup, would employ SCR technology to control nitrogen oxide (“NO<sub>x</sub>”) emissions, and employ Oxidation Catalyst technology to reduce/control Carbon Monoxide (“CO”) emissions.

To support operation of the new combustion turbines, a natural gas pipeline located directly north of the Project Site will be tapped to supply fuel to the Project Site. The new 16-inch lateral would be approximately 500-feet long extending from a tap point within the Project Site boundary from the Natural Gas Pipeline Company of America LLC (NGPL) pipeline (see Figure 1-2). The lateral pipeline will be constructed by AECC.

Transmission interconnection will occur on site to the existing 345-kV transmission line. The existing Bowie-Cass distribution line adjacent to the site will be reductored to provide service power back to the Naples Power Plant as a connected action. Water supply to the Project would be supplied by a new onsite well. Potential impacts associated with the construction, rebuilding, and operation of the transmission line, natural gas lateral, and water well, are analyzed as part of the proposed action in this EA. Subsection 1.1.1 describes the other major components of the proposed action.

The Project would be constructed over a 24-month period. The footprint of the site is approximately 100 acres with construction occurring on a smaller footprint. The site is located primarily in an open agricultural area within the Project Site boundary (Figure 1-2). Construction activities would also include equipment laydown, temporary offices, and parking.

## 2.4 No Action Alternative

Under the No Action Alternative, RUS would not provide financial assistance to AECC for the construction of the Naples Power Plant. As a result, AECC would be required to secure alternative financing for the proposed Project or secure power to address the projected capacity shortfall from other third-party resources. The No Action Alternative would result in increased Project financing costs, which would have an adverse impact on the financial viability of the Project or require AECC to get power from another source. Those sources would include buying very expensive open-market PPAs or increasing power output from existing generating resources in the AECC service territory (e.g., existing coal-fired power plants, etc.). If power capacity is not obtained elsewhere, the region can expect rolling blackouts of varying intensity, especially during winter polar vortex events and extreme summer heat. The option for new PPAs is limited because the region is expected to see a shortfall in capacity for fossil-fueled sources when several coal facilities are proposed for retirement.



## 3.0 Affected Environmental/Environmental Consequences

Chapter 3 provides descriptions of the existing environmental conditions of the Project Site areas and the impacts that may be expected from constructing and/or operating the Proposed Action. This chapter provides an understanding of the affected environment and potential environmental consequences for the following resources: air quality; biological resources including vegetation, wildlife, and special status species; cultural resources; geology and soils; infrastructure, transportation, public health and safety; land use; noise; socioeconomics; visual resources; and water resources. Federal, state, and local regulations that apply to managing these resources are also discussed in the context of the existing environment. AECC's proposed Project will be located on a greenfield site in northeast Texas (Figure 1-2). The Site is located in Morris County, approximately one mile northwest of the City of Naples.

This chapter assesses the potential impacts of the Proposed Action Alternative and the No Action Alternative. The No Action Alternative provides a basis for comparison in which none of the Project components would be constructed. The U.S. Environmental Protection Agency's ("EPA's") NEPAassist tool was used as a starting point to identify potential concerns for the various resources to be analyzed (Appendix A).

### 3.1 Land Use, Formally Classified Lands, Geology, Soils, and Farmland

#### 3.1.1 Affected Environment

##### Land Use

Multi-Resolution Land Characteristics Consortium's National Land Cover Database was utilized to determine land cover within the 100-acre area Project boundary. Land cover within the Project boundary historically contained mixed forest and deciduous forest. Locations surrounding the Project boundary are primarily composed of shrub/scrub, woody wetlands, and deciduous and mixed forests. A full breakdown of land use types identified within the Project boundary is shown in Table 3-1.

**Table 3-1: Land Cover Identified within the Project Site Boundary**

Land Use Type	Acres
Herbaceous	0.6
Open water	1.1
Developed medium intensity	2.2
Emergent herbaceous wetland	2.4
Developed low intensity	4.7
Hay/pasture	7.1
Developed open space	7.1
Evergreen forest	8.2
Woody wetland	14
Mixed forest	16.4
Deciduous forest	18
Shrub/scrub	18.2

Land Use Type	Acres
<b>Total</b>	<b>100</b>

Source: National Land Cover Dataset, 2021

### Formally Classified Lands

There are no formally classified lands within the Project Site boundary. The nearest protected area is White Oak Creek Wildlife Management Area, which is managed by Texas Parks and Wildlife Department and is located approximately 1.1 miles to the north.

### Geology

Texas geologic map data from the U.S. Geological Survey (“USGS”) was used to determine the geology of the site (USGS, 2019). According to the map, the Wilcox group makes up the area geology. The Wilcox group is formed from Paleocene to Eocene geologic age sedimentary rock consisting of mudstone, with varying amounts of sandstone, lignite, ironstone concretions, and glauconite (USGS, 2025).

### Soils

The general soils maps of Morris County, published by the USDA Natural Resources Conservation Service (“NRCS”) (USDA, 2024), were referenced for the following descriptions of the general soil map units within the Project Site boundary. The NRCS Soil Survey Geographic (“SSURGO”) database was used to identify the specific soil map units associated with the Project Site boundary as mapped by the USDA-NRCS. The SSURGO database is generally the most detailed level of soil geographic data available and utilizes information contained in published NRCS soil surveys. The Project Site boundary consists of three USDA-NRCS soil map units, as summarized in Table 3-2. There are no hydric soils within the Project Site boundary.

Soils present in the proposed Project Site area are classified as having a moderate risk of corrosion to concrete. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. The soils present on the Site were classified as having a high risk of corrosion of uncoated steel. The rate of corrosion of uncoated steel is related to factors such as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil.

**Table 3-2: Soil Map Units within the Project Site Boundary**

Map Soil Unit Symbol	Description	Acres
WoE	Woodtell fine sandy loam, 5 to 20 percent slopes	88.9
WoC	Woodtell fine sandy loam, 2 to 5 percent slopes	10.7
WrB	Woodtell-Raino complex, 1 to 3 percent slopes	0.4

Source: USDA, 2024

### Farmland

The Site and surrounding areas consist of pastureland and historically tree-covered areas that were used for ranching. The USDA’s Web Soil Survey lists the present soils as not prime farmland (Table 3-2). There are no agricultural areas using center pivot irrigation near the Project Site.

## 3.1.2 Environmental Consequences

The following sections summarize potential environmental consequences of the Proposed Action Alternative and No Action Alternative related to land use, formally classified lands, geology, soils, and farmland.

### **3.1.2.1 Proposed Action Alternative**

Construction and operation of the Proposed Action would impact the existing rangeland land use. Soils within the Project Site boundary are not hydric and are not considered prime farmland. Form AD-1006 was filled out by AECC and submitted to NRCS. NRCS's evaluated the Site as required by the Farmland Protection Policy Act (FPPA) and concluded that the Project Site does not contain prime farmland and is therefore exempt from FPPA. A majority of the trees within the Project Site have been cleared by the previous landowner, and the remainder of the site is pastureland. Construction and operation of the Proposed Action will therefore not have adverse impacts on prime farmland.

### **3.1.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts to land use, formally classified lands, geology, soils, or farmland at or near the Proposed Action because no construction or operation would occur.

### **3.1.3 Mitigation**

Construction and operation of the Proposed Action will alter the current land use. The Project Site was used as a ranch by the previous landowner. Forested areas of the Project Site were previously cleared by the former landowner. Therefore, no mitigation measures are anticipated.

During construction, portions of the Project Site will be cleared, grubbed, graded, excavated, and revegetated. In areas not impacted by these activities, such as areas that do not require clearing, existing vegetation will be preserved where practicable. The amount of soil exposed during construction will be minimized. NRCS requested topsoil to be placed back as the surface layer when backfilling trenches.

Temporary seeding will be applied to areas of exposed soil that have not been brought to final grade yet, where the establishment of vegetation is desired. Additionally, temporary seeding will occur in disturbed areas where further land-disturbing activities will not be performed for a period greater than 30 days, and vegetative cover is required for less than 1 year.

Final stabilization is achieved when all soil-disturbing activities at the site have been completed and a uniform (i.e., evenly distributed, without large bare areas) vegetation cover has been established on all unpaved areas or areas not covered by permanent structures or with alternative surfacing, such as riprap or crushed rock.

## **3.2 Floodplains**

### **3.2.1 Affected Environment**

The U.S. Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Maps ("FIRM") indicates that there are no 100- or 500-year floodplains within the Project Site boundary (FEMA, 2007).

### **3.2.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to floodplains.

### 3.2.2.1 Proposed Action Alternative

All construction that will take place will not result in any impacts to floodplains. No future impacts to floodplains are anticipated during operation of the Proposed Action. The Proposed Action will not result in any additional runoff or impedance of flood flows.

### 3.2.2.2 No Action Alternative

The No Action Alternative would have no short- or long-term impacts to floodplains as no construction or operation would occur.

### 3.2.3 Mitigation

As construction and operation of the Proposed Action will have no impacts on floodplains, no mitigation measures are required.

## 3.3 Wetland and Water Bodies

### 3.3.1 Affected Environment

Burns & McDonnell completed a desktop assessment using current and historical aerial imagery, NRCS soil survey data, FEMA FIRMs and the U.S. Fish and Wildlife Service (“USFWS”) National Wetland Inventory (“NWI”) Maps and USGS National Hydrography Dataset (“NHD”). The NWI data indicates the potential presence of palustrine unconsolidated bottom (“PUB”) wetlands and riverine wetlands within the proposed Project Site boundary. A total of 3.55 acres of NWI wetlands are mapped within the Project Site boundary. The NHD data shows there is one stream present in the Project Site boundary. Based on the assessment it was determined a field visit would be necessary to identify any wetlands or other aquatic resources that may be present within the Project Site boundary.

Burns and McDonnell conducted onsite wetland delineations on February 26-27, 2024. The delineation was completed following the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region – Version 2.0* (Regional Supplement). An additional site visit was conducted on November 13, 2024, in response to an information request received from the U.S. Army Corp of Engineers (USACE) in support of the Approved Jurisdictional Determination (“AJD”) review.

Burns & McDonnell identified a total of 1.11 acres of palustrine emergent (PEM) wetlands and 0.61 acres of palustrine scrub shrub (PSS) wetlands (Table 3-3). The Project Site also included 1.83 acres of ponds classified as PUB. PUB features were unvegetated open water; however, a wetland fringe may be within the feature boundary. Three wetlands and one pond found within the Project Site were considered potential waters of the U.S. (WOTUS) subject to USACE jurisdiction under Section 404 of the Clean Water Act (CWA). There were two ponds and three other wetlands that were considered non-jurisdictional.

Burns & McDonnell identified a total of 8,185 feet of linear waterbodies within the Project Site, consisting of 3,906 linear feet of ephemeral streams and 4,279 linear feet of intermittent streams (Table 3-4). No traditional navigable waterways exist within the Project Site. One named intermittent stream; Mary Lees Branch, runs through the Project Site along with two other intermittent streams and were considered to be relatively permanent waters. These three streams were considered potential WOTUS, subject to USACE jurisdiction under Section 404 of the CWA. The remaining nine streams found are ephemeral and are not likely to be considered jurisdictional. Table 3-3 and Table 3-4 summarize the identified wetlands and

streams, respectively, within the Survey Area. The wetlands report is attached as Appendix B, containing maps with callouts of surveyed wetlands and streams.

**Table 3-3: Delineated Wetlands within the Survey Area by Type**

Wetland Type <sup>1</sup>	Delineated Area (Acres)	Description <sup>2,3</sup>
PEM	1.11	Characterized by a 30 percent or greater areal cover of emergent, herbaceous vegetation. Additionally, the combined areal cover of shrubs, saplings, and trees in these wetlands was less than 30 percent. Dominant vegetation included Cherokee sedge ( <i>Carex cherokeensis</i> ), common rush ( <i>Juncus effusus</i> ), gaping grass ( <i>Steinchisma hians</i> ), saw-tooth blackberry ( <i>Rubus argutus</i> ). Wetland hydrology was indicated by high water table, saturation, crayfish burrows, oxidized rhizospheres along living roots, surface soil cracks, geomorphic position, and a positive FAC-neutral test.
PSS	0.61	Characterized by a 30 percent or greater areal cover in the shrub/sapling stratum and an aerial cover of less than 30 percent in the tree stratum. Dominant vegetation included groundsel tree ( <i>Baccharis halimifolia</i> ), black willow ( <i>Salix nigra</i> ), common rush, and saw-tooth blackberry. Wetland hydrology was indicated by surface water, high water table, saturation, drift deposits, and a positive FAC-neutral test.
PUB	1.83	Characterized by less than 20 acres in size, active wave formed or bedrock shoreline features lacking, water depth in the deepest part of basin less than 2.5 meters at low water, and salinity due to ocean derived salts less than 0.5ppt. Includes all nontidal wetlands dominated by trees, shrubs, persistent emergent, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt.

<sup>1</sup>Symbols for wetland type: PEM = palustrine emergent, PSS= palustrine scrub-shrub, PUB = palustrine unconsolidated bottom.

<sup>2</sup>Source: Cowardin et al 1979

<sup>3</sup>Source: Descriptions as observed by Burns & McDonnell onsite wetland delineations completed February 26-27, 2024.

**Table 3-4: Streams Identified within the Survey Area**

Stream Type	Delineated Length (Feet)	Characterization <sup>1</sup>
Ephemeral	3,906	A defined bed and bank but had limited or no flow during the site visit, indicating that the stream largely carries water only during and after precipitation events. Common riparian vegetation included post oak ( <i>Quercus stellata</i> ), southern red oak ( <i>Quercus falcata</i> ), and horsebriar ( <i>Smilax rotundifolia</i> ).
Intermittent	4,279	The presence of a limited volume of flow at the time of the site visit, indicating that the stream is partially fed by groundwater but that the streams may not flow during dry periods. Common riparian vegetation included groundsel tree ( <i>Baccharis halimifolia</i> ), Bermuda grass ( <i>Cynodon dactylon</i> ), Japanese honeysuckle ( <i>Lonicera japonica</i> ), Carolina Cranesbill ( <i>Geranium carolinianum</i> ), and common rush ( <i>Juncus effusus</i> ).

<sup>1</sup>Source: Characterizations as observed by Burns & McDonnell onsite wetland delineations completed February 26-27, 2024.

No other wetlands, water bodies, or other aquatic resources have been identified within the Survey Area except for as noted above. Coordination with USACE is expected to result in concurrence with this determination.

### **3.3.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to wetlands and water bodies.

#### **3.3.2.1 Proposed Action Alternative**

AECC has selected suitable locations for laydown staging that will be necessary for construction of the Proposed Action to avoid any wetlands impacts. The Project Site has been selected to avoid and minimize wetland impacts as much as practical.

Extensive wetland delineations were conducted, and preliminary findings were submitted to USACE (Appendix B). USACE determined that the Proposed Action footprint contains jurisdictional and non-jurisdictional waters. Ongoing coordination with USACE Fort Worth District is occurring and an AJD is anticipated. One entrance road to the Project Site will have to cross Mary Lees Branch stream and the installation of a culvert will be utilized to maintain the stream's integrity. Construction and operation of the Proposed Action will have no significant effects on jurisdictional wetlands. A USACE Nationwide Permit (NWP) permit will be required for the crossing of Mary Lees Branch. It is likely there will be removal of overgrown vegetative trees, consisting of horsebriar, honeysuckle, yaupon, post oak, southern red oak, white oak, and loblolly pine. A pre-construction notice (PCN) under NWP 14 was submitted on February 27, 2025 (Appendix D).

#### **3.3.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts to wetlands and water bodies at or in the vicinity of the Proposed Action because no construction or operation would occur.

### **3.3.3 Mitigation**

Construction and operation of the Proposed Action will avoid most jurisdictional wetlands to the extent practical. AECC will obtain the applicable NWP for the Proposed Action. Appropriate best management practices ("BMP") outlined in the NWP will be followed to minimize impacts from the facility. It is anticipated there will be no significant impacts on wetlands and no specific mitigation measures are required (e.g. spanning streams, no permanent impacts).

## **3.4 Water Resources**

### **3.4.1 Affected Environment**

#### **Surface Waters, Water Supply, and Discharge**

As discussed in Section 3.3: Wetland and Water Bodies there are surface waters present within the Project Site boundary. However, these are not sources that are viable for water supply and siting has been selected to avoid permanently impacting these sources to the extent practical.

Private wells to supply water is the most viable option for the Naples Power Plant. The Texas Water Development Board ("TWDB") website was utilized to determine an appropriate nearby public water source (TWDB, 2021).

### **Groundwater**

According to the TWDB, the Project Site overlies the Carrizo-Wilcox aquifer, a major aquifer extending from the Louisiana border to the border of Mexico in a wide band adjacent to and northwest of the Gulf Coast Aquifer. According to EPA's NEPAAssist (see Appendix A), no sole source aquifers underlie the Project Site. AECC is performing water quality and pumping capacity tests for groundwater supply to the facility.

### **Water Quality**

Water quality in the Carrizo-Wilcox Aquifer shows isolated areas of slightly saline to moderately saline groundwater in the eastern and central portion of the aquifer and more widespread areas of slightly to moderately saline groundwater in the southwest. Groundwater in the unconfined area is hard and typically has total dissolved solids concentrations less than 1,000 milligrams per liter. Groundwater in the confined area of the aquifer is generally softer and has total dissolved solids concentrations less than 1,000 milligrams per liter except in southern and western portions of the aquifer (TWDB, 2024). There are no 303d waterbodies (i.e., waterbodies that do not meet water quality standards) within the Project Site. However, Mary Lees Branch flows into White Oak Creek. White Oak Creek is listed as a 303d waterbody and is impaired due to bacteria (*Escherichia coli*).

## **3.4.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to water resources.

### **3.4.2.1 Proposed Action Alternative**

#### **Construction**

There are minimal surface water resources near the Site. Three wetlands, one pond, and three streams were considered potential WOTUS, subject to USACE jurisdiction under Section 404 of the CWA. Two ponds and three other wetlands identified on the Project Site were considered non-jurisdictional. The remaining nine streams found are ephemeral and are not likely to be considered jurisdictional. AECC will follow BMP during construction. BMPs may include silt fence, inlet protection, straw wattle barriers, riprap, erosion control blankets, and other erosion and sediment control measures as necessary. Appropriate sediment and erosion control BMP will be installed prior to initiating soil-disturbing activities, such as installation of new foundations and concrete pads. All BMP will be maintained as necessary throughout construction of the Proposed Action.

Construction activities from the Proposed Action will not impact the groundwater at the Project Site. Accordingly, no lowering of the groundwater level will be required during construction.

#### **Operation**

Groundwater will be used as the Proposed Action's water source. Hydrogeological studies and well exploration activities will be conducted to help determine how many wells will be needed to support the Proposed Action and what the effects on the surrounding area may be. General daily water consumption at the plant will be very low as simple-cycle gas turbines do not use water for cooling as no steam is produced. Daily use at the site will include showers, sinks, toilets, and eye-wash stations, and occasionally the turbines will be washed. Water withdrawal will also be used to fill water storage tanks; however, that is not a common activity. AECC will provide the appropriate information to regulatory agencies as the design progresses and will apply for permits that may be needed. AECC anticipates that the design of the well(s) will not affect other users' abilities to operate their wells in the area. As a safeguard, any new wells will be pump-tested and

monitored to ensure that adjacent wells are not affected. The Proposed Action is expected to use a maximum of 350 gallons of water per minute (“gpm”) to refill on-site tanks and for emissions control during oil usage, as needed. The majority percentage of water use will be below this for typical operation. Water will be used at the site for process water and sanitary purposes. Wastewater streams include process water, sanitary water, and stormwater.

Facility waste streams (i.e., toilets, sinks, etc.) are directed to two onsite septic systems with lateral fields (one for construction and one for operation). The Proposed Action’s process water and stormwater will result in discharged liquids to an onsite settling pond. Drains for areas around equipment that could be contaminated with oil would be gravity drained and directed through oil/water separators prior to discharge to the settling pond. The outfall from the settling pond is expected to be the point of compliance for the facility’s water discharge permit and will be discharged via a pipe to the ground before flowing to Mary Lees Branch. A facility Texas Pollutant Discharge Elimination System (“TPDES”) Permit will be obtained as appropriate through the State of Texas Environmental Electronic Reporting System (STEERS).

The proposed Action Alternative will have no effect on the water quality or the impairment status of the surrounding areas.

#### **3.4.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts to water resources at or in the vicinity of the Proposed Action because no construction or operation would occur.

#### **3.4.3 Mitigation**

Construction and operation of the Proposed Action is anticipated to have minimal impacts on surface waters or groundwater. AECC will obtain the applicable NWP for the Proposed Action and will employ good water management practices and BMPs during construction and operation in compliance with the TPDES permit.

### **3.5 Coastal Resources**

#### **3.5.1 Affected Environment**

The Facility is proposed to be located in an area where there are no coastal resources.

#### **3.5.2 Environmental Consequences**

As there are no coastal resources near the Proposed Action, there is no potential for environmental consequences of the proposed Action Alternatives related to coastal resources.

### **3.6 Biological Resources**

The biological resources of the area surrounding the Proposed Action along with the impacts on biological resources because of the Proposed Action are discussed in the following sections.

#### **3.6.1 Affected Environment**

The following sections discuss vegetation, wildlife, and special status species within the Study Area.



### 3.6.1.1 Vegetation

The Project Site is within the Cross Timber Transition level IV ecoregion as mapped by the U.S. Environmental Protection Agency (Wood et al., 2005). The Survey Area was previously dominated by woodland and was cleared by the previous landowner. Common vegetation in the Survey Area included Bermuda grass (*Cynodon dactylon*), dogfennel (*Eupatorium capillifolium*), little bluestem (*Schizachyrium scoparium*), groundseltree (*Baccharis halimifolia*), yaupon (*Ilex vomitoria*), Cherokee sedge (*Carex cherokeensis*), common rush (*Juncus effusus*), and Japanese honeysuckle (*Lonicera japonica*). There are no vegetation species listed as federally threatened or endangered in Morris County (IPaC, 2025).

### 3.6.1.2 Wildlife

A habitat assessment survey was completed to evaluate the potential for special-status species or their critical habitat to occur within or in the vicinity of the Project Site (Appendix C). Special-status species are defined as species designated by the USFWS as Endangered, Threatened, Proposed for Listing or Candidate for Listing under the Endangered Species Act (“ESA”) and species protected under the Bald and Golden Eagle Protection Act (“BGEPA”).

Based on special-status species lists generated from the sources shown below, a habitat assessment was completed to evaluate the potential for special-status species to occur within the Project Site and its vicinity and to determine the presence or absence of designated or proposed critical habitat. The habitat assessments were based on review of the following sources and field observations:

- The natural history and known geographical and elevation range of the special-status species.
- USFWS Information for Planning and Consultation (“IPaC”) tool used to determine protected or likely to be protected under the ESA that are known or likely to occur in the Proposed Action vicinity.
- Results of a Texas Parks and Wildlife Department (“TPWD”) listed species and known critical habitat and the TPWD Natural Diversity Database online review to identify known occurrences of protected species.
- Observations recorded by Burns & McDonnell during field reconnaissance in February 2024, of the habitats present in the Project Site (Appendix C)

In total, fourteen federal- and state-listed ESA species and two BGEPA listed species were evaluated for their potential to occur in the area of the Project Site. Table 3-5 shows ESA-listed, proposed, and candidate species and designated or proposed critical habitat considered for potential to occur in the area of the Project Site. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.

**Table 3-5: Morris County Federally Threatened and Endangered Wildlife Species**

Common Name	Scientific Name	Species Status <sup>a</sup>		Effect / Potential to Occur
		USFWS	TPWD	
Birds				
Piping Plover	<i>Charadrius melodus</i>	T	T	No effect, Unlikely to occur.  Migratory bird species that may pass through the area of the Project Site during annual migration; however, they would only be expected to occur temporarily as migrant, transient, or rare vagrant. There are no documented records of the piping plover in the area of the Project Site. This species is not expected to occur due to the general absence of appropriate habitat.
Rufa Red Knot	<i>Calidris canutus rufa</i>	T	N/A	No effect, Unlikely to occur.  It is an uncommon migrant along the coast, especially the Upper Texas coast, and very rare to casual inland, primarily in the eastern half of the state where the Project Site is located.
Bachman's sparrow	<i>Peucaea aestivalis</i>	N/A	T	N/A, May occur.  Bachman's sparrow are present in overgrown fields with thickets and overgrown grassy hillsides throughout the area of Project Site; therefore this species may occur.
Swallow-tailed kite	<i>Elanoides forficatus</i>	N/A	T	N/A, Unlikely to occur.  Migratory bird species that may pass through the area of the Project Site during annual migration; however, they would only be expected to occur temporarily as migrant, transient, or rare vagrant.
White-faced ibis	<i>Plegadis chihi</i>	N/A	T	N/A, Unlikely to occur.  Migratory bird species that may pass through the area of the Project Site during annual migration; however, they would only be expected to occur temporarily as migrant, transient, or rare vagrant.
Wood stork	<i>Mycteria americana</i>	N/A	T	N/A, Unlikely to occur.  Migratory bird species that may pass through the area of the Project Site during annual migration; however, they would only be expected to occur temporarily as migrant, transient, or rare vagrant.

Common Name	Scientific Name	Species Status <sup>a</sup>		Effect / Potential to Occur
		USFWS	TPWD	
Bald Eagle <sup>1</sup>	<i>Haliaeetus Leucocephalus</i>	Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)		No effect.  The Project Site is within the general range of the bald eagle; however, there are no documented occurrences, and no eagles or eagle nests were observed.
Golden Eagle <sup>1</sup>	<i>Aquila Chrysaetos</i>	Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)		No effect.  The Project Site lies outside of the general breeding range of the golden eagle and the species would only be present within the area of the Project Site as a very casual to casual vagrant.
Fish				
Paddlefish	Polyodon spathula	N/A	T	N/A, Does not occur.  Paddlefish are restricted to the Red River Basin, Caddo Lake, and major rivers 4ft in depth or greater in NE Texas. These elements are absent from the area of the Project Site.
Insects				
Monarch butterfly	<i>Danaus plexippus</i>	PT	N/A	N/A. If future listing occurs a determination of May Affect but Not Likely to Adversely Affect is appropriate.  Monarch butterflies may occur in the area of the Project Site during fall and spring migration; however, any impacts on the species from the Proposed Action would be expected to be discountable and insignificant.
Mammals				
Tricolor Bat	<i>Perimyotis subflavus</i>	PE	N/A	N/A. If future listing occurs a determination of May Affect but Not Likely to Adversely Affect is appropriate.  The area of the Project Site supports leaf clusters and cedar trees suitable for tricolored bat roosts. Conducting tree clearing during bats' inactive season is generally recommended as a best management practice.

Common Name	Scientific Name	Species Status <sup>a</sup>		Effect / Potential to Occur
		USFWS	TPWD	
<b>Black bear</b>	<i>Ursus americanus</i>	N/A	T	N/A, Unlikely to occur.  The black bear does not have established populations in NE Texas and are only expected to occur as a migrant, transient, or vagrant within the area of the Project Site.
<b>Reptiles</b>				
<b>Alligator Snapping Turtle</b>	<i>Macrochelys temminckii</i>	PT	T	Not required, Does not occur.  The Project Site lacks the appropriate habitat for this species. The alligator snapping turtle is closely associated with perennial aquatic habitats, rivers, and large tributaries. These elements are absent from the Project Site.
<b>Northern scarlet snake</b>	<i>Cemophora coccinea</i>	N/A	T	N/A, May occur.  Suitable habitats for the northern scarlet snake are present in the form of well drained soils with pine and hardwood scrub and grassland habitats.
<b>Mollusks</b>				
<b>Louisiana pigtoe</b>	<i>Pleurobema riddellii</i>	N/A	T	N/A, Does not occur.  Louisiana pigtoe are restricted to the Red River Basin, Caddo Lake, and major rivers 4ft in depth or greater in NE Texas. These elements are absent from the Project Site.
<b>Southern hickorynut</b>	<i>Obovaria arkansasensis</i>	N/A	T	N/A, Does not occur.  Southern hickorynut are restricted to the Red River Basin, Caddo Lake, and major rivers 4ft in depth or greater in NE Texas. These elements are absent from the Project Site.

Accessed February 23, 2024.

<sup>1</sup>BGEPA Listed Species.

(a) Species listings are as designated by USFWS (2025) TPWD (2024a)

(b) Federal Listings: T= Threatened, PE= Proposed Endangered, PT= Proposed Threatened, C= Candidate

A field-based habitat assessment was completed on February 26-27, 2024, to evaluate the potential for special-status species or their critical habitat to occur within or in the vicinity of the Project Site (Appendix C).

### 3.6.2 Environmental Consequences

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to biological resources.

#### 3.6.2.1 Proposed Action Alternative

##### 3.6.2.1.1 Vegetation

The Project Site is located on a site that was previously dominated by bottomland forests and some grasslands. The previous landowner logged most of the trees on the property. Approximately 40 acres of the site will be fully disturbed once construction of the Proposed Action is complete. It is anticipated that the remaining areas of the site will continue to exist in its present state. It is expected that construction-related disturbances from the Proposed Action will not provide an opportunity for the establishment of invasive species as the area will not be conducive to the growth of vegetation.

##### 3.6.2.1.2 Wildlife

In total, fourteen federally- and state-listed ESA species and two BGEPA listed species were evaluated for their potential to occur in the area of the Project Site. Two federally proposed threatened, and one federally proposed endangered ESA listed species were determined to have potential to occur in the area of the Project Site. No BGEPA species had the potential to occur on the Project Site area.

As indicated above in Table 3-5, there is no designated critical habitat for federally endangered or threatened species at the Project Site as identified in the IPaC report dated March 6, 2025. Therefore, the Proposed Action will have no effect on protected species or their critical habitats; nor will the Proposed Action result in short- or long-term impacts to protected species or critical habitats that may occur in Morris County. While there is potentially suitable habitat for some endangered, threatened, or candidate species in the Project Site area, no impacts are anticipated to federally listed species that may occur in Morris County if avoidance techniques like performing tree clearing activities during the winter are employed. The previous landowner cleared many of the trees on the property. Any remaining trees to be removed would be cut during the appropriate regulatory timeframe. A “no jeopardy” effect determination letter for the tricolored bat was sent to the USFWS Texas Coastal and Central Plains Ecological Services Field Office on March 26, 2025. Their response, dated March 28, 2025, stated that the tricolored bat is not currently protected under the ESA, so any measures to avoid or minimize impacts would be voluntary. It was recommended that if tricolored bat presence is assumed, to avoid removing suitable roost trees during the pup season (May 1 through July 15). USFWS concurred that impacts to the tricolored bat would be minimal, if any additional tree clearing necessary is conducted outside of the pup season.

For the two BGEPA listed species evaluated, bald eagle was determined to have a potential to occur of **Unlikely** as no bald eagle nests were observed within the vicinity of the Project Site during the habitat assessment and there are no documented occurrences. Golden eagles were determined to have potential to occur of **None** but may be observed as temporary visitors.

As referenced in Table 3-5, the Proposed Action will have no short- or long-term impacts to migratory birds or eagles as there is no suitable habitat on the Project Site, and construction is not anticipated to result in any long-term impacts to wildlife at the Site. Noise and human activity that are associated with construction may result in short-term, temporary displacement impacts to wildlife species foraging in the area. Ongoing operations are not likely to have great impacts to surrounding species.

### 3.6.2.2 No Action Alternative

The No Action Alternative would have no short- or long-term impacts to biological resources at or in the vicinity of the Proposed Action because no construction or operation would occur.

### 3.6.3 Mitigation

#### 3.6.3.1 Vegetation

As construction and operation of the Proposed Action will have minimal impacts to onsite vegetation and will not lead to the introduction of invasive species, no mitigation measures will be necessary.

#### 3.6.3.2 Wildlife

Construction and operation of the Proposed Action will have no impacts to listed threatened or endangered species, migratory birds, or eagles. Good conservation practices such as tree clearing during the tricolor bats' inactive season will be implemented as needed, however, the previous landowner has already cleared many trees on the Project Site. Any remaining trees to be removed would be cut during the appropriate regulatory timeframe. Should instances such as the observation of an active bald eagle nest occur during construction activities, AECC will work with the USFWS to minimize potential impacts. No impacts to listed threatened or endangered species, migratory birds, or eagles are expected to occur within the Project Site.

## 3.7 Historic and Cultural Resources

### 3.7.1 Affected Environment

In accordance with Section 106 of the National Historic Preservation Act and 36 CFR Section 800.1, federal agencies are required to consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation ("ACHP") a reasonable opportunity to comment on such undertakings. If there is more than one federal agency, a lead federal agency may be designated to act for all of the federal agencies. The federal agency or lead federal agency is responsible for coordination with consulting parties which may include the State Historic Preservation Office ("SHPO"), Tribal Historic Preservation Officers ("THPO") if tribal land is involved, Indian Tribes, the public, the ACHP, local governments, and applicants.

The following investigations have been completed to assist the federal agency in their compliance with Section 106. The area of potential effect ("APE") has been defined as the entirety of the Naples property (the "Project Site"). The total area for this investigation is 100 acres.

The cultural resources investigation was designed to conform with the Council of Texas Archeologists *Intensive Terrestrial Survey Guidelines* and the Secretary of the Interior's *Standards and Guidelines for Identification*. The first part of this investigation consists of a background review of previously recorded cultural resources and previously reported cultural resources surveys in a Study Area consisting of the Project Site and a 0.5-mile (0.8-km) buffer around the APE. The second part of the investigation consists of the field survey of the Project Site to include systematic shovel testing at 100-meter (m) intervals along each transect and each transect spaced at 30-m apart. Additional shovel tests were excavated at approximately 10-m (32.8-foot) intervals around buildings identified within the physical APE during the survey.

RUS defined the APE for the Proposed Action as an area that includes all construction and excavation activity required to construct, modify, improve, or maintain any facilities; any right-of-way or easement areas

necessary for the construction, operation, and maintenance of the Proposed Action; all areas used for excavation of borrow material and habitat creation; and all construction staging areas, access routes, utilities, spoils areas, and stockpiling areas. Impacts that come from the undertaking at the same time and place with no intervening causes, are considered “direct” regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.). “Indirect” effects to historic properties are those caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable.

Based on this definition, the APE consists of the approximately 100-acre Project Site. The APE does not include any tribal lands as defined pursuant to 36 CFR § 800.16(x). This definition was submitted to the SHPO and THPOs in the agency coordination letters sent December 23, 2024 with a follow-up findings letter sent on February 6, 2025 (see Appendix D).

The Project Site is in the Floodplains and Low Terraces Ecoregion of Texas (Griffith et al. 2007) The Floodplains and Low Terraces are part of the larger East Central Plains region which is commonly used for pasture and range land. It includes only the wider floodplains of major streams such as the Sulphur, Trinity, Brazos, and Colorado rivers (Griffith et al. 2007).

The cultural resources inventory fieldwork was conducted between February 12 and February 15, 2024. The historic resources survey was conducted in February 2024. A total of 77 shovel tests were excavated in the APE. All shovel tests were negative for cultural material. One historic resource consisting of one historic-age building and four modern (non-historic) buildings within the physical APE during the survey. This Resource was recommended not eligible for National Register of Historic Places (“NRHP”) inclusion under all four criteria. An additional eight historic-age resources were identified on six properties within the non-physical (visual) APE. One resource was recommended for further research as it likely qualifies for NRHP. However, it is located at the western edge of the non-physical APE and no further assessment of Proposed Action effects on the resources was recommended. The remaining resources were deemed not eligible for NRHP inclusion.

### **3.7.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to historic and cultural resources.

#### **3.7.2.1 Proposed Action Alternative**

Based on the findings of no historic properties affected during background research and field surveys, the cultural report was submitted to the SHPO. SHPO stated a finding of no adverse effect to historic or cultural properties was appropriate.

The cultural report and findings of no adverse effect were presented to the following tribes for concurrence:

- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Muscogee (Creek) Nation
- Tonkawa Tribe of Indians Oklahoma
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco, & Tawakonie), Oklahoma

No tribes responded with any objections to the findings in the Section 106 consultation requests. Details of the consultations are provided in Appendix D.

Therefore, construction and operation of the Proposed Action is expected to have no adverse effects on any historic or cultural properties.

### **3.7.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts to historic and cultural resources at or in the vicinity of the Proposed Action because no construction or operation would occur.

### **3.7.3 Mitigation**

Avoidance of any identified historic or cultural resources is recommended for the Proposed Action.

If avoidance is not possible, it is recommended that a testing and data recovery plan be developed and implemented to mitigate impacts to the sites. No further archaeological work is recommended for the site. All ground-disturbing activities have the potential to unearth human remains.

As construction and operation of the Proposed Action will have no impacts on historic or cultural properties, no mitigation measures are necessary. Should any material of historical significance be discovered during construction activities, appropriate steps will be taken following the reviewed Unanticipated Discoveries Plan for Cultural Resources and Human Remains (UDP) (Appendix E).

## **3.8 Aesthetics**

### **3.8.1 Affected Environment**

The Project Site is primarily undeveloped with a mixture of pasture, woodlands, and herbaceous areas. However, a majority of the trees on the Project Site have been cleared by the previous landowner. To the south of the Site is a highway. There are existing natural gas pipelines that run through the northern portion of the property. Additionally, there is a transmission line that extends along the eastern boundary. There is gently rolling topography with some trees and an older large barn on the property. The properties surrounding the Site are similar in composition and are primarily composed of pasture/hay lands and grassland/woodlands/herbaceous areas. There are three ponds onsite with some treed areas around the banks.

The Proposed Action will interconnect to the onsite transmission line inside the Project Site boundary. The Bowie-Cass distribution line will undergo a reconductoring as part of a connected action and will occur within an existing ROW that already contains a distribution line and is within the Project Site. It is expected that there are no long-term effects due to this.

### **3.8.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to aesthetics.

#### **3.8.2.1 Proposed Action Alternative**

The aesthetics of the surrounding area would be altered by the Proposed Action. Vegetation would need to be cleared and light emissions at the Project Site would increase compared to current levels of light emissions, as a result of facility lighting. The approximately 140-foot stack at the facility, other facility equipment, transmission line structures, and switching station would introduce new features to the landscape. The Proposed Action is not anticipated to significantly impact any visual resources of the surrounding areas.



### 3.8.2.2 No Action Alternative

The No Action Alternative would have no short- or long-term impacts to aesthetics at or in the vicinity of the Proposed Action because no construction would occur.

### 3.8.3 Mitigation

Construction will have temporary visual impacts. Once the Proposed Action is built, there will be long-term aesthetic changes associated with the new facilities. The previous landowner cleared a majority of the trees from the Project Site. Removal of additional trees may be necessary; however, AECC intends to leave as many remaining trees bordering the property in place to work as a visual buffer, no other mitigation measures are proposed.

## 3.9 Air Quality

The air quality of the area surrounding the Project Site and the impacts of the Proposed Action on air quality are discussed in the following sections.

### 3.9.1 Affected Environment

According to the Koppen climate classification, the Project Site is in the Northern Hemisphere's Humid Subtropical zone. Features of this zone include generally warm and humid summers with mild winters. Periods of extreme cold are infrequent and typically do not last more than a few days. There are no significant precipitation differences between seasons and dry months in the summer. Winter precipitation is dominated by rainfall that tends to be widespread, continuous, and uniform in intensity and tied almost exclusively to synoptic-scale systems. Summertime precipitation is heavy and intense in nature produced by individual thunderstorms or thunderstorm complexes. Average annual rainfall (based on annual precipitation occurring years 1901-2000) in Morris County is 45.72 inches (National Centers for Environmental Information, 2025).

The federal government established the National Ambient Air Quality Standards ("NAAQS") under the Clean Air Act ("CAA") to protect public health (including the sensitive populations such as asthmatics and the elderly), safety, and welfare from known or anticipated effects of eight air pollutants: sulfur dioxide ("SO<sub>2</sub>"), particulate matter 10 microns or less in diameter ("PM<sub>10</sub>"), particulate matter 2.5 microns or less in diameter ("PM<sub>2.5</sub>"), carbon monoxide ("CO"), nitrogen dioxide ("NO<sub>2</sub>"), ozone, lead ("Pb"), and carbon dioxide ("CO<sub>2</sub>"). The Significant Impact Level ("SIL") and NAAQS thresholds are listed in Table 3-6, below.

**Table 3-6: NAAQS and SIL Thresholds**

Pollutant <sup>a</sup>	Averaging Period	NAAQS <sup>b</sup>	SIL <sup>c,d</sup>
		( $\mu\text{g}/\text{m}^3$ ) <sup>e</sup>	( $\mu\text{g}/\text{m}^3$ )
SO <sub>2</sub>	3-hour	1,300	25
	1-hour	196	7.8 <sup>f</sup>
PM <sub>10</sub>	24-hour	150	5
PM <sub>2.5</sub>	Annual	9	0.13
	24-hour	35	1.2
CO	8-hour	10,000	500
	1-hour	40,000	2,000
NO <sub>2</sub>	Annual	100	1
	1-hour	188	7.52 <sup>f</sup>
Lead	Rolling 3-hour	0.15	--

- (a) SO<sub>2</sub> = sulfur dioxide, PM<sub>10</sub> = particulate matter 10 microns or less in diameter, PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter, CO = carbon monoxide, NO<sub>2</sub> = nitrogen dioxide
- (b) NAAQS = National Ambient Air Quality Standards
- (c) SIL = Significant Impact Level
- (d) SIL values listed are for Class II areas
- (e)  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter
- (f) interim SIL value

Morris County, Texas is in attainment for all pollutants, meaning that the area follows federal clean air standards. The closest air quality monitoring site is approximately 14 miles to the southwest of the Project Site and monitors the pollutants SO<sub>2</sub>. The next closest monitoring site is approximately 38 miles to the northeast of the Project Site and monitors the pollutant PM<sub>2.5</sub>. There is also an air monitor approximately 50 miles southeast of the Project Site which monitors pollutants PM<sub>2.5</sub>, NO<sub>2</sub>, and ozone.

### 3.9.2 Environmental Consequences

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to air quality.

#### 3.9.2.1 Proposed Action Alternative

Construction and operation of the proposed gas turbine at the Project Site would be subject to applicable state and Federal air quality regulations. These regulations would apply to the Proposed Action equipment (two SGT6-9000HL turbines and associated auxiliary equipment). Regulations applicable to the Proposed Action are Title 30 of the Texas Administrative Code, New Source Performance Standards (“NSPS”), National Emission Standards for Hazardous Air Pollutants (“NESHAP”), and Maximum Achievable Control Technology (“MACT”). The following sections provide potential environmental consequences of construction and operation of the Proposed Action related to air quality.

#### Construction

Air emissions from the construction of the Project will occur due to 1) vehicular emissions from increased traffic from the construction work force and construction deliveries, 2) internal combustion engine emissions from construction equipment, and 3) fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions from excavating, site preparation, and storage piles. These emissions from construction activities can be difficult to quantify, as

they are dependent on the number and type of construction vehicles in operation at any given point during construction, the number of construction workers driving to and from the Site, and the number and type of construction activities occurring. Generally, air emissions from construction are low and temporary in nature, fall off rapidly with distance from the construction site, and will not result in any long-term impacts.

### **Operation**

AEEC proposes installing two approximately 450-MW (each) Siemens SGT6-9000HL simple-cycle dual fuel combustion turbines to be constructed on a greenfield site. The turbines will have a maximum heat input of 3,925 million British thermal units per hour (“MMBtu/hr”), higher heating value when firing natural gas and 3,401 MMBtu/hr when firing fuel oil. The turbines will have a fuel usage limit to show compliance with applicable NSPS and state permitting limits. The combustion turbines will install continuous emission monitoring systems or predictive monitoring systems to monitor emissions of NO<sub>x</sub>.

Operation will be restricted to comply with the NSPS Subpart TTTTa. Subpart TTTTa regulates CO<sub>2</sub> emissions from electric generating units under the NSPS (CAA 111b regulations). The standard provides a limit for combustion turbines that commenced operations or reconstruction after May 23, 2023, that have a base load rating greater than 250 MMBtu/hr and that serve a generator capable of selling greater than 25 MW of electricity to a utility power distribution system. The combustion turbines that are part of the Proposed Action would qualify as “intermediate load” turbines under Subpart TTTTa as they supply between 20 percent and 40 percent of their potential electric output as net-electric sales on both a 12-operating-month and 3-year rolling average basis. An intermediate load simple-cycle turbine is limited to 1,170 – 1,560 pounds of CO<sub>2</sub> per gross megawatt-hours (“MWh”). The turbines will comply with the limit in Subpart TTTTa.

The combustion turbines will each have an SCR system to control emissions of NO<sub>x</sub> and an oxidation catalyst to control emissions of CO. To minimize the emissions of SO<sub>2</sub> and PM/PM<sub>10</sub>/PM<sub>2.5</sub>, the SCGT emissions will be controlled through the use of pipeline quality natural gas and good combustion practices as specified by the manufacturer, such as maintaining proper temperature and pressure, fuel to air ratios, excess oxygen, etc. to avoid incomplete combustion byproducts. CO<sub>2</sub> emissions will be minimized with the use of natural gas as the main fuel, with fuel oil only being used as backup.

The potential emissions from the SCGT were analyzed at 100%, 75%, and 40% load on natural gas, and 100%, 75%, and 70% on fuel oil. The overall emissions were compared first to the Prevention of Significant (“PSD”) threshold of 250 tons per year, and if any one pollutant (besides CO<sub>2</sub>e) exceeded that threshold then the remaining pollutants were compared to the PSD Significant Emission Rate Thresholds (“SER”). If a pollutant exceeds the SER, then that pollutant will trigger the need for PSD review for that pollutant, which includes air dispersion modeling, Best Available Control Technology (“BACT”) analysis, and other permitting tasks.

The worst case, future potential-to-emit calculations were performed for each pollutant for the Proposed Action and are listed in Table 3-7. Because the potential emissions of criteria pollutants are above the PSD permitting threshold, the Proposed Action triggers the PSD permitting process. Accordingly, a BACT analysis was required for CO, NO<sub>x</sub>, volatile organic compounds (“VOCs”), PM/PM<sub>10</sub>/PM<sub>2.5</sub>, and CO<sub>2</sub>e as they are above the SER, along with a modeling analysis. The Proposed Action is expected to exceed the 100 tpy threshold for five criteria pollutants and therefore will be considered a Part 70 Major source.

**Table 3-7: Total Proposed Action Emission Summary**

<b>Pollutant</b>	<b>Potential Emissions (tons per year [tpy])<sup>b</sup></b>	<b>PSD Threshold (tpy)</b>	<b>PSD SER Threshold (tpy)</b>	<b>PSD Review Applicable (Yes, No)</b>
NO <sub>x</sub>	<b>474</b>	250	40	Yes
CO	<b>538</b>	250	100	Yes
SO <sub>2</sub>	20	250	40	No
VOC	<b>81</b>	250	40	Yes
PM/PM <sub>10</sub> <sup>c</sup> /PM <sub>2.5</sub> <sup>c</sup>	<b>62</b>	250	25/15/10	Yes
CO <sub>2</sub> e	<b>1,695,737</b>	75,000 <sup>d</sup>	75,000	Yes

(a) NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds; PM= total particulate matter; PM<sub>10</sub> = particulate matter less than 10 microns in diameter; PM<sub>2.5</sub> = particulate matter less than 2.5 microns in diameter

(b) Numbers in bold indicate the Significant Emission Rate significance level is exceeded.

(c) Filterable plus condensable

(d) If the Proposed Action does not trigger PSD for any other pollutant, the CO<sub>2</sub>e PSD threshold does not apply per Utility Air Regulatory Group vs EPA (Case#12-1146, June 23, 2014 before the Supreme Court of the United States Court).

NESHAP are contained in 40 CFR Part 63. NESHAP are emissions standards set by the EPA for specific source categories. The NESHAP require the maximum degree of emission reduction of certain hazardous air pollutant (“HAP”) emissions that the EPA determines to be achievable, which is known as the MACT standards.

The facility is expected to be a minor source of HAPs (less than 25 tons per year of total HAPs and less than 10 tons per year of any single HAP). Therefore, the facility is not subject to MACT standard Subpart YYYYY: National Emission Standards for HAPS for Stationary Combustion Turbines.

The acid rain provisions of the CAA Amendments are specified in 40 CFR Part 72 through 78. The requirements are applicable to utilities and other facilities that combust fossil fuel (mainly coal) and generate electricity for wholesale or retail sale. Often referred to as the Acid Rain Program, the program establishes the reduction of emissions of acid rain forming pollutants, specifically, SO<sub>2</sub> and NO<sub>x</sub> emissions. The Proposed Action will be subject to the Acid Rain Program because the combustion turbines are considered a utility unit under the program definition and do not meet the exemptions listed in 40 CFR 72.6(b). The Acid Rain Program requires that the Proposed Action hold allowances for SO<sub>2</sub> per 40 CFR 72.9(c)(1) and conduct recordkeeping and reporting per 72.9(f). The continuous emission monitoring requirements of 40 CFR Part 75 establish requirements for the monitoring, recordkeeping, and reporting of SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> per 40 CFR Part 75.1(a).

### 3.9.2.2 No Action Alternative

The No Action Alternative would have no short- or long-term impacts to air quality at or in the vicinity of the Proposed Action because no construction or operation would occur. However, there will still be a need for power capacity that will be obtained elsewhere, likely from existing fossil-fueled sources or new PPAs with fossil-fueled sources.

### 3.9.3 Mitigation

Construction activities will have air emissions but are anticipated to be minimal outside of the construction areas and are temporary in nature. The majority of the construction emissions will be from fugitive sources and construction equipment. Fugitive dust control measures could include, but are not limited to, the following:

- Applications of water;
- Paving or watering of roadways after completion of grading;
- Reduction in speed on unpaved roadways to 15 miles per hour or less; and
- Seeding of areas within 30 days of final grading establishment

For operations, the air emissions calculations have determined that the Proposed Action will require a Part 70 Major Source operating permit. All equipment will meet all applicable NAAQS, NSPS, and NESHAP limits. The Proposed Action will include an SCR system to control NO<sub>x</sub> emissions and an oxidation catalyst to control CO and VOC emissions. Good combustion practices as specified by the manufacturer such as maintaining proper temperature and pressure, fuel to air ratios, excess oxygen, etc. to avoid incomplete combustion byproducts and the use of pipeline quality natural gas will mitigate emissions of SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. AECC submitted an air permit application for the Proposed Action on April 14, 2025 to the Texas Commission of Environmental Quality (“TCEQ”) via the STEERS portal and will adhere to the conditions and requirements of the issued permit during operation of the Proposed Action.

## 3.10 Socio-Economic Impact Assessment

### 3.10.1 Affected Environment

To identify general socioeconomic patterns in the area of the Project Site, various socioeconomic characteristics have been reviewed, including population growth trends, employment data, and economic indicators.

#### **Population Growth Trends**

The Site is in Naples County, Texas, a predominantly rural county that has experienced a decrease in population over the last 10 years. Table 3-8 presents the population trends near the Proposed Action.

**Table 3-8: Population Trends**

	<b>Texas</b>	<b>Morris County</b>
2010 Census (population)	25,145,561	12,934
2020 Census (population)	29,145,505	11,973
% Change 2020-2021	15.9%	-7.4%
2023 Estimate (population)	30,503,301	12,066

Source: USCB, 2010 and 2020b

#### **Employment and Income**

In 2020, Morris County’s resident labor force, defined as the population aged 16 and over, was 9,652 individuals, or 80 percent of the total population (11,973); 4,905 of these workers were employed, resulting in an annual unemployment rate of (for the civilian labor force) of 7.3 percent [U.S. Census Bureau (“USCB”),

2023d]. Major industries in Morris County include educational service, health care, and social services. Table 3-9 provides the employment characteristics for the state, county, and local community.

**Table 3-9: 2023 Employment Data**

	<b>Texas</b>	<b>Morris County</b>	<b>Census Tract 9501</b>	<b>Census Tract 9501 Group 1</b>
Population 16 years and over	23,026,070	9,652	3,518	N/A
In labor force	15,025,019	5,290	1,777	N/A
Employed (civilian labor force)	14,140,748	4,905	1,626	N/A
Unemployed (civilian labor force)	765,912	385	151	N/A
Armed forces	118,359	0	0	N/A
Not in labor force	8,001,051	4,362	1,741	N/A
Percent unemployed (civilian labor force)	5.1%	7.3%	8.5%	N/A
Top occupation	Management, business, science, and arts occupations	Management, business, science, and arts occupations	Management, business, science, and arts occupations	N/A
Top industry	Educational services, and health care and social assistance	Educational services, and health care and social assistance	Educational services, and health care and social assistance	N/A

Source: USCB, 2023d

The unemployment rate and poverty rate in Morris County is higher than that of Texas as a whole. Census Tract 9501 in northern Morris County has 4,390 residents that live within the Census Tract. Census Tract 9501 and Morris County have both higher unemployment rates and higher poverty rates than the state. No income or employment data exists for Census Block Group 1. Table 3-10 shows income and poverty data for the state, county, and local community. See Figure 3-1 for Census Tract and Block Group boundaries for Morris County.

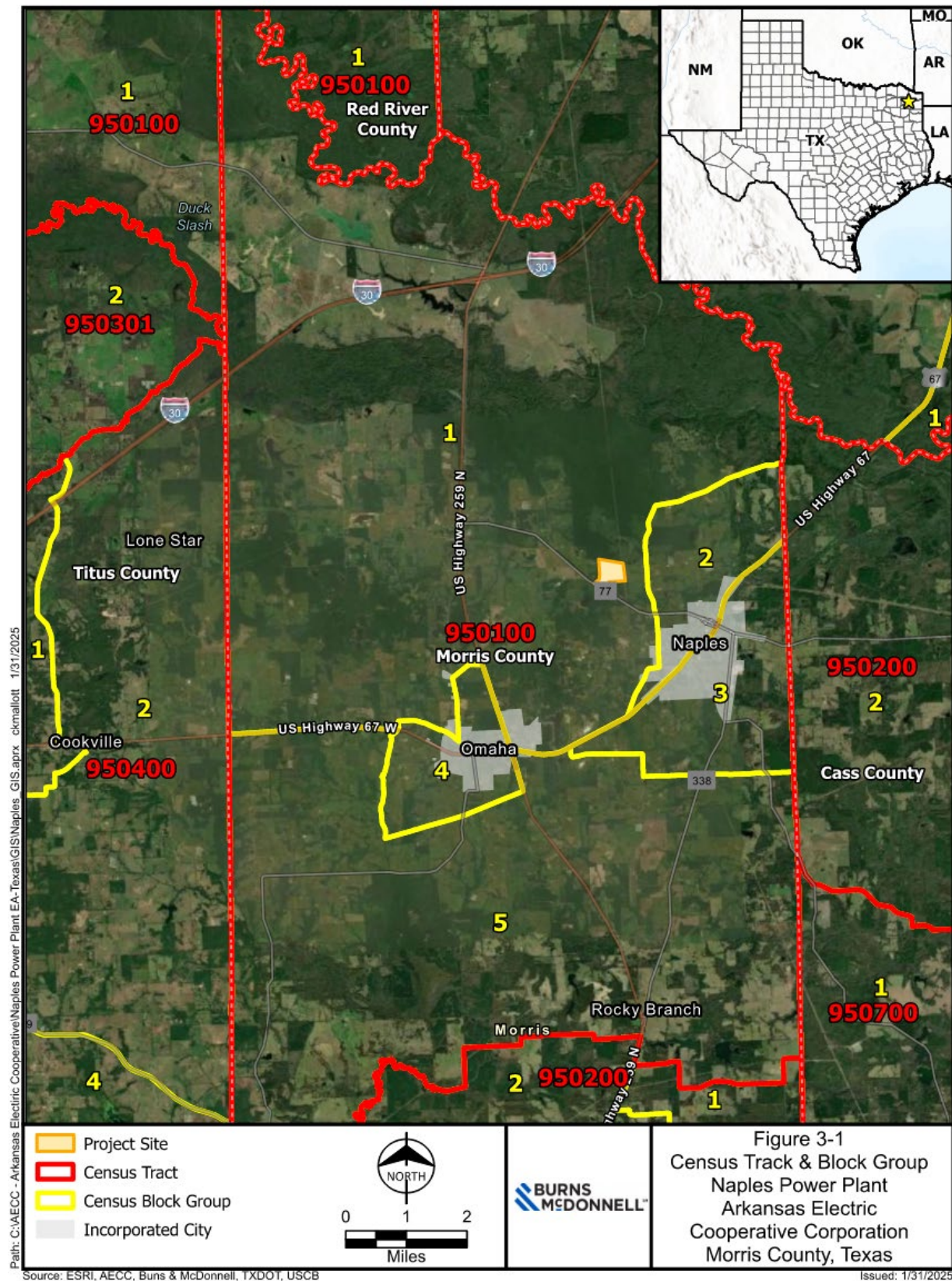
**Table 3-10: 2023 Income and Poverty**

	<b>Texas</b>	<b>Morris County</b>	<b>Census Tract 9501</b>	<b>Census Block Group 1</b>
Median household income in 2020 dollars	\$76,292	\$55,082	\$50,326	N/A
Families and people whose income in the past 12 months is below the poverty level	13.8%	16.9%	18.7%	N/A

Source: USCB, 2023b and USCB, 2023c



Figure 3-1: Census Tract and Block Groups





**Housing**

Morris County has 5,812 housing units with 5,038 occupied housing units and 772 vacant housing units. Seventy-five percent of the occupied housing units are owner-occupied. The median value of owner-occupied housing in Morris County was \$110,200, versus the state-wide median value of owner-occupied housing of \$260,400 (USCB, 2023a).

**Area Public Service and Utilities****Educational Facilities**

The closest school to the Site is Pewitt High School, approximately 2.3 miles south of the Site within Morris County. The next closest school is Pewitt Elementary, approximately 2.9 miles south of the Site.

**Medical Facilities**

The closest hospital to the Site is Titus Regional Medical Center in Mt Pleasant, Texas, about 15.8 miles west-southwest of the Site. Titus Regional Medical Center has a 24-hour advanced level trauma emergency room with physicians trained in Advanced Trauma Life Support and is also a Primary Stroke Center with 24-hour cardiology coverage. The medical center also has surgical services, imaging services, and an intensive care unit.

During construction, the EPC is responsible for the emergency response plan. The plan will have a site map showing areas for assembly, location of emergency stations, and site evacuation route.

The site will have on-site safety professionals during working hours for non-life-threatening injuries and first aid treatment. The local medical treatment facility will be used for medical services beyond that scope.

**Fire Protection**

The closest fire department to the Site is located approximately 1.8 miles southeast of the Site located in Naples, Texas.

**Police Protection**

The closest police department to the Site is located approximately 1.8 miles southeast of the Site located in Naples, Texas. The Morris County Sheriff's Office is located approximately 12.7 miles south of the Site in Daingerfield, Texas.

**Potable Water, Sanitary Sewer, Electricity, Gas, and Solid Waste**

The Site is in a rural area. Onsite wells will be used for water supply. Electricity to the Site will be supplied by existing onsite electrical distribution lines. Natural gas will be supplied by NGPL via a tap onsite. Solid waste will be disposed of through a local, licensed service provider and sanitary waste will utilize on on-site septic system with lateral line fields.

**Recreation and Open Space**

Public recreational land does exist near the Site. White Oak Creek State Park, which is located approximately 1 mile to the north, includes recreational opportunities for hunting, fishing, hiking, horseback riding, and wildlife viewing.

**3.10.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to the local population.

### **3.10.2.1 Proposed Action Alternative**

The current capital cost estimate for the improvements is approximately \$950 million. Some of this cost could be distributed locally due to construction activities temporarily stimulating the local community. Additional jobs in the construction trades such as pipefitters, electricians, insulators, construction management personnel, laborers, and carpenters may be available. Peak construction labor force for the Proposed Action is expected to be approximately 550 employees. The length of peak employment will range from a few weeks to several months, depending on skill or specialty.

Gas stations, convenience stores, and restaurants in nearby communities and in Naples and Omaha could experience increases in business during the construction period in response to activity from construction workers.

The construction workforce required for the Proposed Action may have an impact on the availability of temporary housing. Construction workers may seek temporary housing for varying time periods based on their individual roles in the Proposed Action. Morris County has a limited supply of temporary housing units available for use by construction workers relocating to the area on a temporary basis. Short-term housing is likely to experience the largest increase in demand due to the transient nature of construction workers and their limited duration in the area of the Project Site. Generally, housing options for construction crews will consist of area hotels or RV camps.

The Proposed Action will be located in a rural area with relatively few homes and businesses within close proximity to the Project Site. Adverse human impacts as a result of the Proposed Action will include additional noise and traffic impacts during construction, temporary visual impacts during construction, and changes in long-term visual impacts during operation.

### **3.10.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts on the local population at or in the vicinity of the Proposed Action because no construction or operation would occur.

### **3.10.3 Mitigation**

Socioeconomic impacts from the Proposed Action are expected to be insignificant. Therefore, no mitigation measures are required for socioeconomic impacts.

## **3.11 Noise**

### **3.11.1 Affected Environment**

The Proposed Action is located in Morris County, Texas, just outside of Naples and 2.3 miles northeast of Omaha. Surrounding the immediate Project Site are agricultural fields and woodlands. Based on aerial imagery, there are 11 residences within the surrounding area of the proposed construction activity and Proposed Action equipment that were included in the Sound Study (Appendix F). Primary existing noise sources in the area include traffic from Highway 77, occasional bird and plane flyovers, and nighttime insect noise.

**Noise Regulations**

The area immediately surrounding the Proposed Action is unincorporated residential and agricultural. There are residential properties to the east, west, and south of the Project Site property and agricultural fields on all sides of the Project Site.

Applicable Federal, state, county, and municipal noise ordinances were reviewed for the surrounding area. The Proposed Action is outside of any municipalities, and the State of Texas and Morris County do not have noise ordinances with applicable numerical sound level limits.

**3.11.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the Proposed Action Alternatives and No Action Alternative related to noise.

**3.11.2.1 Proposed Action Alternative****Construction**

Proposed Action construction would result in temporary and minor noise impacts to the surrounding area. Construction-related sounds would vary in intensity and duration depending on specific stages and activities of construction but would not be permanent. Nearby residences (nearest residence is approximately one-tenth of a mile away) may temporarily experience increased noise during construction.

Construction of the Proposed Action is expected to last approximately 24 months and will involve Project Site preparation, excavation, placement of concrete and other typical industrial construction practices. Construction schedules are anticipated to be able to construct on a 7-day per week 24-hours per day schedule in order to minimize the length of calendar time that temporary construction impacts affect the area. There are certain operations that, due to their nature or scope, must be accomplished in part outside typical working hours. Such work generally consists of activities that must occur continuously, once begun (such as pouring concrete foundations).

The impacts that various construction-related activities might have will vary considerably based on the proximity to the property line. Generic sound data ranges are available for various types of equipment at certain distances. Table 3-11 lists generic activities and their minimum and maximum instantaneous sound levels at 50 feet.

**Table 3-11: Range of Typical Construction Equipment Noise Levels in A weighted decibel (“dBA”)**

<b>Generic Construction Equipment</b>	<b>Minimum Noise at 50 feet</b>	<b>Maximum Noise at 50 feet</b>
Backhoes	74	92
Compressors	73	86
Concrete Mixers	76	88
Cranes (movable)	70	94
Dozers	65	95
Front Loaders	77	96
Generators	71	83
Graders	72	91
Jack Hammers and Rock Drills	80	98
Pumps	69	71
Scrapers	76	95
Trucks	83	96

Source: Federal Highway Administration, Highway Construction Noise.

The types of equipment listed in the table above may be used at various times and for various amounts of time. Construction of the Proposed Action may involve driving piles. Equipment noise will be addressed during construction, and sound dampening material may be used if necessary. Most activities will not occur at the same time. There will be periods when concrete needs to dry and no construction occurs. Sound levels are expected to be quieter for areas where activities are occurring at distances greater than 50 feet from the property line.

Noise from construction is expected to be localized and temporary. The actual noise levels generated by construction will vary on a daily and hourly basis, depending on the activity that is occurring, and the types and number of pieces of equipment that are operating. Noise resulting from construction will vary with equipment type and age, type of work being done, distance from receptor, and meteorological conditions. It is expected that most construction will be done during the daytime when receptors are less sensitive to noise and that the noise will be intermittent. Any excessive construction noise should be of short duration and have minimal adverse long-term effects on land uses or activities associated with the Project Site area.

### **Operation**

A noise study was completed for the Proposed Action operational sound levels based on the expected equipment. The noise study is provided in Appendix F and includes background sound monitoring and acoustical modeling for the Proposed Action.

The Proposed Action could operate day or night. Base operational sound levels for the Proposed Action indicate that the Proposed Action may be audible during periods of low traffic. Sound levels for the Proposed Action at the worst-case receptors, R04 and R02, are expected to be 6 to 7 dBA above the existing ambient sound level, which indicates a moderate increase to the existing nighttime sound levels. Sound levels for the Proposed Action at all other surrounding receptors are expected to be closer to the existing ambient sound

levels, resulting in minor increases to the existing nighttime sound levels. A summary of the existing ambient sound levels and the predicted Proposed Action-generated sound levels during operation are shown in Table 3-12 below for the nearest noise-sensitive receptors.

**Table 3-12: Proposed Action Background and Operational Sound Levels**

<b>Receptor Location</b>	<b>Ambient Sound Levels (dBA)<sup>1</sup></b>	<b>Predicted Sound Levels (dBA)</b>
R1	48	52
R2	48	61
R3	48	50
R4	48	59
R5	48	51
R6	48	50
R7	48	50
R8	48	54
R9	48	55
R10	48	54
R11	48	51

There are no limits in the area to comply with and predicted unmitigated sound levels are expected to be generally consistent with the existing ambient environment. Proposed Action noise potential impacts are likely to range from low to moderate on the nearby neighbors.

### **3.11.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts to noise at or in the vicinity of the Proposed Action because no construction or operation would occur.

### **3.11.3 Mitigation**

Sound mitigation measures are not required for the Proposed Action since there are no applicable noise limits for the Project Site area. Occupational Safety and Health Administration (“OSHA”) standards will be met onsite. Details of any optional mitigation measures are to be determined, but it is anticipated that stack silencers will be utilized to reduce impacts to the surrounding properties.

<sup>1</sup> Lowest measured average daytime or nighttime  $L_{eq}$

## **3.12 Transportation**

### **3.12.1 Affected Environment**

The Project Site is bordered by State Highway 77 (SH-77) at its southern boundary. SH-77 is a two lane, asphalt paved highway that extends generally in an east-west direction connecting Naples to State Highway 259 (SH-259). Per Texas Department of Transportation's (TxDOT) Annual Average Daily Traffic ("AADT") Interactive Map, the 2023 AADT for SH-77 is approximately 764 vehicles per day. The AADT for SH-259 is approximately 1,380 vehicles per day near the intersection with SH-77.

### **3.12.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to transportation.

#### **3.12.2.1 Proposed Action Alternative**

Existing highways and county roads will be used to provide Site access during construction. Within the Site property boundary, an access road will be constructed for use as the primary construction access road. Traffic will include equipment and material deliveries and the construction labor force. The frequency of onsite vehicular traffic will be proportionate to the onsite construction labor projections.

The peak construction labor force for the construction of the Proposed Action is anticipated to be approximately 550 employees. This labor, along with equipment and material deliveries in support of the Proposed Action, is expected to increase daily vehicle and truck traffic (above current operation) by approximately 550 round trips per day during peak construction periods. Construction material deliveries may occur during the day during off-peak travel times and will typically not interfere with worker shift changes and commuter traffic.

Although additional vehicular traffic will result from the construction of the Proposed Action, the impacts will be temporary. Traffic impacts will be greatest along Highway 77 and vary according to construction delivery and construction labor shift changes. The roadway capacity of any route and level of service to the traveling public will not be substantially impacted in all other areas.

The construction entrance to the site will be on Highway 77. Operating permits will be issued by the state or county for oversized truck movements, as required. It is anticipated that roads, bridges, and crossings in the area are sufficient for the Proposed Action's delivery and transportation needs. No adverse impacts are anticipated.

#### **3.12.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts to transportation at or in the vicinity of the Proposed Action because no construction or operation would occur.

### **3.12.3 Mitigation**

As construction and operation of the Proposed Action will have only temporary impacts on transportation, no mitigation measures are planned. Existing roads damaged by construction traffic will be repaired once construction is complete. Plans to control traffic during peak times may be required. AECC will coordinate

the proper construction signage near Project Site access points on the roads used by construction vehicles to make drivers aware of the increased hazards associated with the construction vehicle(s) presence.

### **3.13 Human Health and Safety**

#### **3.13.1 Affected Environment**

Two potential human health and safety concerns associated with the Proposed Action are to be considered: electromagnetic fields (“EMF”) and risk management associated with hazardous materials.

EMF are associated with high-voltage electric transmission lines and substations/switch stations, generally those greater than 230kV. EMF drops off rapidly with distance from the transmission lines (EPA, 2024b). All of the offsite high-voltage transmission lines and substations necessary for the Proposed Action are in place. The Proposed Action will require a minor transmission line interconnection, a rebuild of the existing transmission line back to the substation, and then substation modifications to accommodate the Proposed Action and connect to the AECC’s grid. The Facility’s access will generally be restricted to AECC employees and contractors, and substations are surrounded by security fencing to limit access to the area.

There are a number of risks to human health and safety possible in the course of constructing and operating a power plant, including hazards such as fire, slips, trips, falls, electrical hazards, confined space entry, and many others. Additionally, hazardous substances or wastes may be released, generated, or required for construction and operation of the Facility. Examples may include the use and storage of fuels, lubricating oils, chemicals, and other materials that may be considered hazardous.

#### **3.13.2 Environmental Consequences**

The following sections summarize potential environmental consequences of the proposed Action Alternatives and No Action Alternative related to transportation.

##### **3.13.2.1 Proposed Action Alternative**

EMF will be strongest directly under the transmission line and will decrease with increasing distance from the transmission line ROW. The Proposed Action will include a substation to tie into the existing transmission line on site. The interconnection is not anticipated to increase risks due to EMF along the current transmission ROW. The existing distribution line will undergo reconductoring as part of a Connected Action, but is anticipated to have low overall voltage.

During construction, the Project Site will be managed to prevent harm to the general public. The general public will not be allowed to enter any construction areas associated with the Proposed Action. The major risk to the general public will be from an increase in traffic volume on the roadways near the Project Site as a result of commuting construction workers and transportation of equipment and materials.

Construction and operation of the Proposed Action will also involve the use and storage of regulated and hazardous materials. During construction, diesel fuel, gasoline, and lubricating oils from heavy equipment and vehicles may accidentally leak or spill. Hydraulic fluid, paints, and solvents will likely be used during the construction phase as well. Additionally, the presence of aboveground fuel storage tanks and oil-filled equipment present the potential to release into the environment.



### **3.13.2.2 No Action Alternative**

The No Action Alternative would have no short- or long-term impacts on human health or safety at or in the vicinity of the Proposed Action because no construction or operation would occur.

### **3.13.3 Mitigation**

A safety briefing is required for employees and contractors. Adequate training for human health and safety concerns will be mandatory for all construction workers on the Project Site. Personal safety equipment such as hard hats, ear and eye protection, and safety boots will be required for all workers onsite. Accidents and injuries will be reported to the designated safety officer onsite.

During construction and operation, all used oil generated at the proposed Project Site and other potentially hazardous materials (automotive fluids, spray paint cans, etc.) will be collected and properly handled by a licensed/permitted recycler.

Construction-related hazards will be effectively mitigated by complying with all applicable federal and state occupational safety and health standards, applicable National Electrical Safety Code regulations, and utility design and safety standards.

Proper risk management can reduce human health and safety concerns from the presence of hazardous materials. To reduce the potential for a release of regulated or hazardous materials during the construction phase of the Proposed Action, work will be planned and performed in accordance with OSHA standards and protocols addressing the use of potentially hazardous materials and applicable federal and state environmental regulations. If a hazardous release were to occur, emergency response, cleanup, management, and disposal of contaminated soils will be conducted according to EPA and state standards. Conformance to these standards and procedures will reduce the potential for significant impacts resulting from the release of hazardous materials during the construction phase.

## **3.14 Summary of Impacts**

The following table (Table 3-13) provides a summary of potential impacts by Alternative.

**Table 3-13: Summary of Potential Impacts**

<b>Resource</b>	<b>Impacts from Proposed Action</b>	<b>No Action Alternative</b>
Air Quality	The existing air quality in the Morris County area is designated as in attainment in regard to the NAAQS for all criteria pollutants. Construction of the Proposed Action will generate air emissions that are low and temporary in nature and will not lead to long-term impacts. For operations, the air emissions calculations have determined that the Proposed Action is considered a major PSD source and will require a Part 70 Major Source operating permit. It is anticipated that the Proposed Action would not affect the attainment status for Morris County. The Owners would comply with the issued TCEQ construction air permit that would include emission limitations, monitoring requirements, and other terms and conditions.	No unique impacts anticipated for this alternative
Biological Resources	The Proposed Action will not result in short- or long-term impacts to protected species or their critical habitats for federally endangered or threatened species.  Construction would have resulted in a reduction to the amount of forested areas onsite, however, the previous owner performed tree clearing prior to AECC acquiring the property.	No unique impacts anticipated for this alternative
Cultural Resources	Based on the distance from NRHP properties and the concurrence from SHPO that no historic properties would be affected, it is anticipated that the Proposed Action would not have adverse impacts on cultural resources.	No unique impacts anticipated for this alternative.
Geology and Soils	The Project Site would need to be graded and grading design would change the topography to facilitate storm water drainage patterns. Storm water runoff on the Site would be collected and directed to an onsite storm water detention pond.  The Site will require excavation for underground utilities (natural gas lateral) and deep structures such as pump pits. For the transmission line interconnection excavated soils from foundation drilling would be used for foundation backfill if appropriate.  Soils at the Project Site would be converted to plant site development with much of the area occupied by the facilities and covered by concrete and gravel areas. Any areas with transmission line structures would be cleared but only soil areas at the structure locations would be permanently excavated. Other areas of soils would remain largely unaffected by construction and following any necessary stabilization would be available for agriculture and other activities.	No unique impacts anticipated for this alternative

Resource	Impacts from Proposed Action	No Action Alternative
Infrastructure, Transportation, Public Health and Safety, and Hazardous Materials	<p><u>Utilities:</u> Outages would be required to update the transmission line and to allow for interconnection of the new transmission line onsite. Outages would also be required for the reconductoring of the existing distribution line and allow for connection with the Naples Power Plant. The Proposed Action would require minor construction of a private well or wells for its water supply.</p> <p><u>Transportation:</u> The daily automobile traffic to the site would increase from approximately 764 vehicles per day in the initial stages of construction to approximately 1,314 vehicles per day during peak. The traffic would begin to decrease until it reaches approximately 779 vehicles per day near construction completion and operation of the Proposed Action.</p> <p>No permanent changes to existing roads are anticipated as part of this Proposed Action. No permanent damage to roads is anticipated with the implementation of mitigation measures.</p> <p><u>Public health and safety:</u> Access roads would be blocked from public access. Existing healthcare facilities are anticipated to be sufficient for the Proposed Action during construction and operation, and no necessary improvements are anticipated. The Proposed Action would have fire suppression measures of its own, as well as facilities for the storage of hazardous materials. No City fire department improvements are anticipated. Police protection would be provided by the Morris County Sherriff's Department during both construction and operations, and no improvements are anticipated.</p> <p><u>Waste management:</u> Local waste disposal and sanitation facilities are not anticipated to be adversely affected by the additional waste streams generated during construction and operation of the Proposed Action. No additional solid wastes would be generated by the Proposed Action as byproducts from the production of electricity.</p>	No unique impacts anticipated for this alternative

Resource	Impacts from Proposed Action	No Action Alternative
Land Use, Recreation, Farmland, and Coastal Facilities	<p><u>Land use:</u> Construction and operation of the Proposed Action would convert land to industrial use and would impact existing ranchland use activities due to the conversion to industrial use. The Proposed Action will not have a significant impact on prime farmland.</p> <p><u>Recreation:</u> No direct impacts to parks are anticipated. The transmission line structures primarily extend through existing ROW. Construction traffic and any road closures would be temporary in nature and cease after construction is complete.</p> <p><u>Farmland:</u> No farming activities currently occur at the Site nor has it occurred in the recent past.</p> <p><u>Coastal:</u> No coastal facilities are located within the Project Site area or macro- corridors. No impacts to coastal facilities are anticipated due to the Proposed Action.</p>	No unique impacts anticipated for this alternative
Noise	<p>Proposed Action construction would result in temporary and minor noise impacts in the surrounding area. Construction-related sounds would vary in intensity and duration depending on specific stages and activities of construction but would not be permanent. Nearby residences may temporarily experience increased noise during construction. Minor temporary disturbances to wildlife could occur.</p> <p>A preliminary noise study was conducted. The results of this study showed noise levels are likely to have low to moderate adverse effects on nearby neighbors.</p>	No unique impacts anticipated for this alternative

Resource	Impacts from Proposed Action	No Action Alternative
Socioeconomics	<p>During construction, the Proposed Action would create up to 550 jobs during peak activity. The number of workers onsite would begin at nominal levels at the beginning of construction and steadily increase over time, declining as major construction activities are completed. Local businesses near the Facility, such as gas stations, convenience stores, and restaurants, may experience increases in business during construction due to construction workers onsite. This increased demand would cease after construction is complete and would not add considerably to the demand on existing business, services, or community facilities.</p> <p>The Proposed Action would create up to 10 to 15 full-time permanent jobs. These new permanent employees may be from the local workforce or may relocate to the area for the position. Considering the population of the City of Naples and Morris County, the addition of 10 to 15 jobs is not anticipated to considerably increase demand for housing, schools, or other local services.</p> <p>The Proposed Action would not directly impact any residences, public facilities, farming structures, cemeteries, religious facilities, or other structures. Temporary disruptions to normal traffic may occur during construction as equipment and employees commute to and from the Project Site. The frequency of the daily workforce automobile traffic would follow the Proposed Action workforce numbers onsite at a given time. The daily automobile traffic to the site would increase from approximately 764 vehicles in the initial stages of construction to approximately 1,314 vehicles for peak months. The traffic would decrease until it reaches approximately 779 vehicles near construction completion and during operation.</p>	No unique impacts anticipated for this alternative
Visual Resources	<p>The aesthetics of the surrounding area would be altered by the Proposed Action. Vegetation would need to be cleared permanently for the Project Site. The Project Site would require lighting for safety and security. Light emissions at the Project Site would increase compared to current levels of light emissions as a result of facility lighting. The dominant visual features of the Proposed Action would be a stack (approximately 140 feet tall) and other facility equipment.</p> <p>The transmission line interconnection and existing distribution line reconductoring will occur on site and within or adjacent to existing ROW.</p>	No unique impacts anticipated for this alternative

Resource	Impacts from Proposed Action	No Action Alternative
Water Resources	<p><u>Surface Water:</u> The Site has been chosen to avoid permanently impacting surface water sources as much as practical. One entrance road to the Project Site will have to cross Mary Lees Branch stream and the installation of a culvert will be utilized to maintain the stream's integrity. A USACE NWP permit will be required for the crossing of Mary Lees Branch and a PCN was submitted on February 27, 2025. The outfall from the onsite settling pond will discharge via a pipe to the ground before flowing to Mary Lees Branch. This discharge point is expected to be the point of compliance for the facility's water discharge permit. A TPDES permit will be obtained as appropriate during construction and operation.</p> <p><u>Groundwater:</u> The Project Site overlies the Carrizo-Wilcox aquifer; however, no sole source aquifers underlie the area. Groundwater is the most viable option for water supply to the Naples Power Plant. The installation of a well or wells will be required to support the Proposed Action; therefore, there will be minimal impacts due to groundwater use.</p> <p><u>Floodplain:</u> The Site is not within 100- or 500-year floodplains.</p> <p><u>Wetlands/Riparian:</u> Construction and operation of the Proposed Action will avoid most jurisdictional wetlands to the extent practical. All laydown and staging areas necessary for construction have been selected to avoid any jurisdictional wetland impacts. AECC will obtain the applicable NWP for the Proposed Action. Appropriate BMPs outlined in the NWP will be followed to minimize impacts from the facility. It is anticipated there will be no significant impacts on wetlands and no specific mitigation measures are required (e.g. spanning streams, no permanent impacts).</p> <p><u>Wastewater:</u> Facility waste streams from the Proposed Action will be directed to onsite septic systems. Process water from the Proposed Action and stormwater will be discharged to an onsite settling pond.</p>	No unique impacts anticipated for this alternative.

## 4.0 Cumulative Effects

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Cumulative effects may result from the incremental effects of an action when added to the effects of other past, present, and reasonably foreseeable actions, regardless of what agency or person undertakes such other actions.

The following resources were determined to have no direct effects, therefore no cumulative effects, and will not be further evaluated in this section:

- Floodplains
- Coastal Resources
- Biological Resources
- Historic and Cultural Resources
- Socioeconomics
- Human Health and Safety

### 4.1 Region and Influence

To determine cumulative effects, impacts on each resource are analyzed for a geographic scope that includes an area footprint appropriate for the resource. Various areas of Morris County were analyzed for regional cumulative impacts. The TxDOT interactive GIS website<sup>2</sup> was accessed to determine if any road projects are occurring in the area. News articles were researched, and discussions were held with local agencies. The identified actions are described in the following section.

### 4.2 Past, Present, and Reasonably Foreseeable Actions

Past actions that have affected the resources of the area include:

- Construction of highway removed land from use and created on-going air and noise sources;
- Construction of the existing natural gas pipeline on and adjacent to the Project Site have permanently removed certain land from use;
- Construction of the existing transmission and distribution lines on and adjacent to the Project Site took land out of use;
- Tree clearing at the Project Site by the previous owner altered the land use and vegetative state of the property.
- Agricultural and livestock activities potentially impacted soils and water quality.

Present actions that have affected the resources of the area may include:

- Continued operation of the past natural gas and electric transmission and distribution actions

Reasonably foreseeable actions that may affect the resources of the area include:

- Highway projects unrelated to the Proposed Action including resurfacing US-77 the main roadway leading to the Project Site (currently underway or beginning soon), and resurfacing US-67 and US-

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<sup>2</sup> [https://www.txdot.gov/apps/statewide\\_mapping/statewideplanningmap.html](https://www.txdot.gov/apps/statewide_mapping/statewideplanningmap.html)



259 within the next four years will have minimal effects during construction, but no additional long-term effects are anticipated. State Highway 338, and Roads FM 2888 and FM-144 also have resurfacing and/or safety improvements projects currently underway or scheduled to begin soon.

The various entities involved in implementing each of these actions would have been and are required to obtain their own permits, clearances, and/or licenses prior to construction and operation of their respective actions. These entities would also be responsible for the on-going maintenance and compliance of their actions. The potential cumulative impacts on each resource are described in the following sections.

#### **4.2.1 Land Use, Formally Classified Lands, Geology, Soils, and Farmland**

Much of the surrounding area is pastureland or forested areas used as ranchland with scattered residences. Past and present actions have affected the land use and soils in the surrounding area through vegetation clearing or conversion to other uses. The Proposed Action would further remove land from ranchland land use, converting to industrial use for the plant site. Much of the area occupied by these facilities will be covered by concrete and gravel areas. Interconnection with the existing transmission line would require several structures and excavation for structure foundations. Trench excavation would be relatively shallow and would not be expected to have any impact on the area geology. Care would need to be taken during excavation and installation of the natural gas lateral and transmission line interconnection structures to minimize overall soil disturbance, control runoff, and avoid mixing of soil profiles and compaction during storage and trench backfilling. Should trenchless techniques be used for installation of the pipeline lateral, potential disturbance to soils would be reduced compared to trench installation. The Project Site would be graded. Grading design would change the topography to facilitate site construction and stormwater drainage patterns. After construction is completed disturbed areas would be stabilized as appropriate, either revegetated or covered with gravel or solid pavement material. The installation of a water well would be required to supply water to the Proposed Action and would have minimal impacts to geology at the Project Site. Impacts to soils and geological resources are anticipated to be minimal with the implementation, monitoring, and maintenance of appropriate BMPs during Proposed Action construction and operation. Therefore, minimal cumulative impacts to land use, soils, and geological resources are anticipated.

Prime farmlands are not present; therefore, there would be no impacts to prime farmlands. No formally classified lands are present within 1.0 mile of the Project Site; therefore, no impacts to formally classified lands are anticipated.

#### **4.2.2 Wetlands and Water Bodies**

As discussed in Section 3.3.1, several wetlands and water bodies were identified for the Project Site, and there are more adjacent to the site. Present and future actions are subject to federal permitting requirements that may not have existed previously. While the identified present and future actions in the area may also have the potential to impact wetlands and water bodies, each of the entities undertaking those actions will be required to survey, permit, and/or mitigate impacts to wetlands, implementing what the USACE determines is appropriate. Ongoing coordination with USACE Fort Worth District is in progress regarding an AJD request. Permits for wetland and waterbody impacts will be obtained. A PCN was submitted to USACE on February 27, 2025. Appropriate BMPs outlined in the NWP will be followed to minimize impacts. It is anticipated that wetlands and waterbody impacts will mostly be avoidable for other actions. Therefore, there are not anticipated to be significant cumulative impacts to wetlands or waterbodies in the area.

### **4.2.3 Water Resources**

Existing groundwater wells are present in the surrounding area. An onsite groundwater well will be required to supply water to the Proposed Action. Hydrogeological studies will be conducted to help determine the number of wells required for the Proposed Action and what the impacts on the surrounding area may be. The SCGTs have low rates of water consumption; therefore, an impact to other users' wells in area is not anticipated. Construction activities are not anticipated to impact the groundwater at the Project Site. During operation of the Proposed Action, process water and stormwater will be directed to onsite settling pond. The facility will obtain a TPDES permit that requires effluent quality standards to be met. Therefore, no cumulative impacts are anticipated. Sanitary water will be directed to onsite septic systems and no cumulative impacts are anticipated.

### **4.2.4 Aesthetics**

The landscape of Morris County has been altered by residential and business development, and agriculture. Construction of identified past activities required vegetation clearing and, in some instances, built permanent visual features into the viewshed (e.g., existing transmission line and other community infrastructure). The Proposed Action will have minimal impacts to the aesthetics due to vegetation clearing, light emissions, stack height, and transmission interconnect structures.

The aesthetics of the surrounding area could be altered by reasonably foreseeable future actions. Vegetation could need to be cleared and light emissions from construction could occur. However, none of the identified future actions are likely to cause long-term effects, having a limited footprint. Overall, aesthetics impacts are anticipated to be localized and not significantly affect large areas of Morris County.

### **4.2.5 Air Quality**

Past actions would have contributed to emissions during construction and vehicle operation in the area. Present actions have the potential to impact air quality during construction and operation. Construction activities are typically intermittent and temporary in nature, ceasing after construction is complete. The identified future actions are reasonably expected to have minimal and temporary air emissions during construction, but no additional emissions in the long term.

Cumulatively, these emissions are not anticipated to substantially affect the overall air quality in the region, as the TCEQ and EPA regulate activities to maintain ambient air quality. Therefore, no adverse cumulative affects to air quality are anticipated as a result of the identified actions.

### **4.2.6 Noise**

Existing residential and agricultural activities, and associated traffic all currently contribute to noise in the Study Area. Identified past actions may have increased existing noise during construction, and the addition of large roadways has created a long-term source of noise in the area. The identified present and future actions will have temporary construction noise associated with them.

Operational impacts from most of the actions are anticipated to be negligible long-term. The roadways are a long-term source of noise in the community. There have been localized cumulative noise impacts near the Project Site from the various actions, but none are currently considered adverse cumulative noise impacts because most of the actions are expected to have no long-term impact or are far enough away to not create cumulative impacts.

#### **4.2.7 Transportation**

Construction of any of the actions have the potential to increase traffic to the area; however, these impacts would be intermittent and temporary in nature. Construction traffic accessing the Project Site would primarily consist of automobile traffic for craft labor, construction management staff, contractors, equipment, and vendors. Material and equipment deliveries may be made by large trucks as well as heavy haul vehicles. Traffic on the Project Site is anticipated to primarily consist of heavy construction equipment and material transport equipment. The frequency and intensity of the daily workforce automobile traffic would follow the Proposed Action workforce numbers at a given time. When possible, bulk deliveries would be scheduled to avoid peak traffic on local roads.

No permanent changes to roads are anticipated as a part of this Proposed Action. Reasonably foreseeable actions will temporarily affect traffic while the roadways are repaved. Long-term, no permanent damage to roads and no significant cumulative effects are anticipated.

## 5.0 Summary of Mitigation

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The following Table 5-1 is a summary of mitigation proposed for the Proposed Action by resource.

**Table 5-1: Summary of Mitigation**

<b>Resource</b>	<b>Potential Environmental Consequences</b>	<b>Mitigation Measures Required</b>	<b>Intensity of Residual Effects</b>
Land Use, Formally Classified Lands, Geology, Soils, and Farmland	Land use within the area is expected to change from forest and grassland to industrial for a small portion of the site, and land not used for facilities will likely remain unchanged.	No mitigation measures are anticipated	Minimal
Floodplain	Construction will not occur in any floodplain	No mitigation measures are anticipated	None
Wetlands and Water Bodies	Three wetlands, one pond, and three streams were considered jurisdictional within the construction zone and have the potential to be impacted by the Proposed Action construction. The remaining waters identified on the Project Site were considered non-jurisdictional.	Construction will have no impact to jurisdictional wetlands. The crossing of the jurisdictional stream (Mary Lees Branch) will be permitted through a USACE NWP and a PCN has been submitted. Coordination with USACE is ongoing and an AJD is anticipated. AECC's EPC contractor will prepare a SWP3 that will describe the BMPs to be implemented during construction. No other mitigation measures are anticipated.	Low
Water Resources	Water supply to the facility will be supplied by a new dedicated well or wells.	The facility will have its own dedicated water supply. The number of wells necessary to support the Proposed Action is yet to be determined. AECC anticipates that the design of the well or wells will not affect other well users in the surrounding area. New well/s will be pump-tested and monitored to ensure that adjacent wells are not affected. No mitigation is necessary.	Minimal
	Soil erosion and stormwater runoff into nearby streams and rivers may impact waterways during construction.	Before construction activities commence, AECC's EPC contractor will apply for the appropriate TCEQ TPDES Construction Stormwater permit and will follow all requirements of the permit. AECC's EPC contractor will prepare a SWP3 that will describe the BMPs to be implemented during construction.	Minimal
	The Proposed Action will discharge process water and stormwater to an onsite settling pond. The outfall from the settling pond will be discharged via a pipe to the ground before flowing to Mary Lees Branch.	Once TCEQ inspects the site and it passes following completion of construction, that will conclude the construction stormwater permit obligation. AECC's operational runoff for the plant will be covered in the facility's operational TPDES permit and the appropriate conditions will be followed.	Minimal

Resource	Potential Environmental Consequences	Mitigation Measures Required	Intensity of Residual Effects
Threatened and Endangered Species	The tricolored bat and monarch butterfly are species proposed for listing under the ESA. The Proposed Action may affect but is not likely to adversely affect the tricolored bat and monarch butterfly if future listing occurs. The Proposed Action was determined to have no effect on the piping plover or red knot.	Many of the trees historically present on the Project Site were cleared by the previous owner. Any further tree clearing necessary will occur in the appropriate timeframe. A no jeopardy determination letter was submitted to USFWS on March 26, 2025. USFWS concurred that impacts would be minimal if trees are removed during the tricolor bat's inactive season. The tricolor bat is not currently protected by the ESA, so any measures to avoid impacts to the species are voluntary.	Minimal
	Potential bird strikes on transmission lines may occur.	No bald or golden eagles are likely to occur on the Project Site. Other migratory birds are likely to exist in the area, however, no known concentration of nesting was found. The Proposed Action does not cross major waterways.	None
Vegetation	Construction will occur on previously disturbed grassland and historically forested land used for ranching.	Many trees were cleared by the previous property owner. No mitigation measures are anticipated.	Minimal
	It is not expected that construction related disturbances will provide an opportunity for the establishment of invasive species as the area will not be conducive to the growth of vegetation.	No mitigation measures are anticipated.	None
Wildlife	The facility will be built in an area of grassland and historically forested land used for ranching. Habitat and foraging characteristics will be permanently removed before and after construction of the Proposed Action.	Many trees were cleared by the previous property owner. Any further tree clearing necessary will occur in the appropriate timeframe. No other mitigation measures are anticipated.	Minimal
	During construction, noise and activity may drive wildlife out of the area immediately surrounding the Project Site.	No mitigation is needed. After construction ends, wildlife will return.	Minimal
	Construction activities will not introduce or spread invasive species in the area.	No mitigation measures are anticipated.	None
Historical and Cultural Properties	Construction will occur on soils previously disturbed by ranching and no eligible resources were identified.	No mitigation measures are anticipated. An Unanticipated Discovery Plan (Appendix E) has been created.	Minimal
Aesthetics	There will likely be visual contrast from the new Facility.	Many trees were cleared by the previous property owner. General landscaping and maintaining existing tree line buffer will be used where practical. No other mitigation measures are anticipated.	Minimal



Resource	Potential Environmental Consequences	Mitigation Measures Required	Intensity of Residual Effects
Air Quality	Air emissions from construction are low and temporary in nature, fall off rapidly with distance from the construction site, and will not result in any long-term impacts.	Fugitive dust control measures will include, but are not limited to, the following: <ul style="list-style-type: none"> <li>• Applications of water;</li> <li>• Paving or watering of roadways after completion of grading;</li> <li>• Reduction in speed on unpaved roadways to 15 miles per hour or less;</li> <li>• Seeding of areas within 30 days of final grading establishment</li> </ul>	Minimal
	Emissions from construction activities can be difficult to quantify, as they are dependent on the number and type of construction vehicles in operation at any given point during construction, the number of construction workers driving to and from the site, and the number and type of construction activities occurring, etc.	Air emissions from construction equipment are low and temporary in nature, fall off rapidly with distance from the construction site, and will not result in any long-term impacts. Construction equipment will be properly maintained. No other mitigation is anticipated.	Minimal
	Emissions will occur from operation of the Proposed Action.	Air emission calculations have determined that the Proposed Action will be permitted as a major PSD source. All equipment will meet the applicable NAAQS, NSPS and NESHAP limits. The Proposed Action will include an SCR system to control NO <sub>x</sub> emissions and an oxidation catalyst to control CO and VOC emissions. Good combustion practices as specified by the manufacturer such as maintaining proper temperature and pressure, fuel to air ratios, excess oxygen, etc. to avoid incomplete combustion byproducts and the use of pipeline quality natural gas will mitigate emissions of SO <sub>2</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> . AECC will comply with the requirements in the air construction permit, once received. A Title V operating permit will be applied for within 12 months after the commercial operation date.	Low
Socioeconomic and Community Resources	Proposed Action will generally have a positive impact on the socioeconomics of the surrounding areas.	No mitigation measures are anticipated.	None



Resource	Potential Environmental Consequences	Mitigation Measures Required	Intensity of Residual Effects
Noise	Noise will be produced from the construction equipment and activities. Actual noise levels generated by construction will vary on a daily and hourly basis, depending on the activity that is occurring, and the types and number of pieces of equipment that are operating.	Any excessive construction noise should be of short duration and have minimal adverse long-term effects on land uses or activities associated with the Project Site area.	Minimal
Noise	Noise will be produced from the operation of the Proposed Action.	Sound mitigation measures will be included in the base design of the Proposed Action including low noise emitting equipment and stack silencers. Details of these measures will be determined as the Proposed Action proceeds.	Low
Transportation	Construction of the Proposed Action will cause increased traffic in the area surrounding the Project Site.	As construction and operation of the Proposed Action will have only temporary impacts on transportation, no mitigation measures are anticipated.	Minimal
	Damage to existing roads during construction.	Roadways will not be purposefully damaged. In the event this does occur, repairs for damage caused by construction activities will be made when appropriate.	Minimal
Human Health and Safety	EMF will be strongest directly under the transmission line and decreases with increasing distance from the transmission line interconnection. The Proposed Action is not anticipated to significantly increase the existing EMF levels in the current transmission corridor.	No mitigation necessary.	None
	During construction, the site will be managed to prevent harm to the general public. The general public will not be allowed to enter any construction areas associated with the Proposed Action. The major risk to the general public will be from an increase in traffic volume on the roadways near the Project Site as a result of commuting construction workers and transportation of equipment and materials.	Perimeter fences and controlled access will remain in place throughout the construction and future operation of the Proposed Action. Increases in traffic will be temporary in nature and following construction will return to typical levels for the area.	Minimal

Resource	Potential Environmental Consequences	Mitigation Measures Required	Intensity of Residual Effects
	<p>There are a number of risks to human health and safety possible in the course of constructing and operating a power plant including hazards such as fire, slips, trips, falls, electrical hazards, confined space entry, and many others. Additionally, hazardous substances or wastes may be released, generated, or required for construction and operation of the Facility.</p>	<p>A safety briefing will be required for employees and contractors. Adequate training for human health and safety concerns will be mandatory for all construction workers on the Project Site. Personal safety equipment such as hard hats, ear and eye protection, and safety boots will be required for all workers onsite. Accidents and injuries will be reported to the designated safety officer onsite.</p>	Minimal
Human Health and Safety	<p>Construction and operation of the Proposed Action will also involve the use and storage of regulated and hazardous materials. During construction, diesel fuel, gasoline, and lubricating oils from heavy equipment and vehicles may accidentally leak or spill. Hydraulic fluid, paints, and solvents will likely be used during the construction phase as well. Additionally, the presence of aboveground fuel storage tanks and oil-filled equipment present the potential to release into the environment.</p>	<p>Proper risk management can reduce human health and safety concerns from the presence of hazardous materials. To reduce the potential for a release of regulated or hazardous materials during the construction phase of the Proposed Action, work will be planned and performed in accordance with OSHA standards and protocols addressing the use of potentially hazardous materials and applicable federal and state environmental regulations. If a hazardous release were to occur, emergency response, cleanup, management, and disposal of contaminated soils will be conducted according to EPA and state standards. Conformance to these standards and procedures will reduce the potential for significant impacts resulting from the release of hazardous materials during the construction phase.</p>	Minimal

## 6.0 Coordination, Consultation, and Correspondence

The following sections detail the agency and tribal coordination efforts completed for the Proposed Action and public involvement plan.

### 6.1 Public Involvement

Letters were sent to agencies to inform agency contacts that AECC had engaged RUS and was requesting financing for the Proposed Action. The letter provided a description of the Proposed Action and explained that the action triggers an EA. The agencies were provided with this information on the Proposed Action as an opportunity to ask questions and provide initial feedback. Agency correspondence is provided in Appendix D. Table 6-1 provides a list of agencies who received letters.

**Table 6-1: RUS Scoping Letter Distribution**

Agency	Date(s)	Contact	Response
<b>Federal Agencies</b>			
USACE	12/13/24	Fort Worth District	Ongoing discussions regarding AJD and NWP. PCN was submitted on February 27, 2025
NRCS	12/13/24	Alan Stahnke	Response stated that the Project Site does not contain Prime Farmland, therefore it is exempt under Farmland Protection Policy Act (FPPA) provisions. Urged the use of erosion control methods during construction and to place topsoil back as the surface layer when backfilling trenches.
USFWS	12/13/24 3/26/25	FWS Field Office	Utilized IPAC to complete two determination keys available in the area. A No Jeopardy Determination was sent to the Ecological Services Field Office on March 26, 2025. USFWS concurred that impacts would be minimal if trees are removed during the tricolor bat's inactive season. The tricolor bat is not currently protected by the ESA, so any measures to avoid impacts to the species are voluntary.
FAA	12/13/24	Andrew Hollie	Utilized Notice Criteria Tool through FAA to see if filing is required. The Notice Criteria Tool does not recommend filing until stack heights reach 135 feet or higher.
EPA	12/13/24	Earthea Nance	No response received.
DOE	12/13/24	Brian Costner	No response received.

Agency	Date(s)	Contact	Response
<b>State Agencies</b>			
TPWD	12/13/24	Karen Hardin	TPWD concurred with BMCD's endangered species report. TPWD advised if vegetation clearing cannot be avoided during nesting and pupping season, additional surveys would be needed. Additional recommendations include avoiding the use of permanent outdoor nighttime lighting, however if lighting is required, to utilize downward facing lights with shielding and other dark-sky friendly lighting. TPWD recommends avoiding clearing of flowering plants when possible and incorporating pollinator conservation into the maintenance plan during growing season.
TCEQ	12/13/24	Ryan Vise	Morris County is designated attainment/unclassified, CAA conformity requirements do not apply. Recommended that EA address actions that will be taken to prevent surface and groundwater contamination. Debris or waste disposal should be at an appropriately authorized facility.
Texas Historical Commission (SHPO)	12/23/2024	Rebecca Shelton	THC requested submittal via the eTRAC system. SHPO concurred with finding of no effect.
TSWC	12/13/24	Trey Watson	No response received.
TxDOT	12/13/24	Rebecca Wells	No response received
<b>Local</b>			
Morris County	12/13/24 1/29/25	Michael Clair Doug Reeder	Response requested further information regarding the number of wells necessary, the volume of water usage, and the impact on area resources.

Additional phone calls and meetings were conducted as needed for various agencies. These contacts were to conduct preliminary permitting outreach and to receive guidance on how to proceed with the Proposed Action. Of particular note, AECC, HillCo Partners, and Burn & McDonnell met with TCEQ on November 19, 2024 to discuss specifics of the Proposed Action and permitting approach. TCEQ indicated typical PSD process should be followed. The STEERS system should be utilized for permit applications and provided guidance on expedited reviews.

## 6.2 Agency Consultation

### 6.2.1 Permitting

Appendix G provides the Federal, State, and local permits and approvals anticipated to be required for the Proposed Action. The table includes permits that are related to the overall Proposed Action, including permits that are the responsibility of entities other than AECC.

## 6.3 Tribal Coordination

On December 23, 2024, Section 106 Initiation Letters that provided preliminary details of the Proposed Action were mailed by RUS to the tribes listed below.

- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Muscogee (Creek) Nation
- Tonkawa Tribe of Indians of Oklahoma
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma

Section 106 Findings Letters containing further details about the Proposed Action were mailed to the tribes listed above on February 6, 2025. The 30-day timeline for the second round of letters concluded on March 10, 2025. No tribes responded with any objections to the findings in the Section 106 Findings requests.

## 6.4 Locations for Public Review of EA

This EA was made available to the public for a 14-day public review and comment period beginning on June 12, 2025. Notice of Availability of the document for review and comment was published in the following newspapers:

- Naples Monitor (June 12 and June 19, 2025)

Copies of the EA were made available for public review at RUS, 1400 Independence Avenue, SW, Washington DC 20250-3201; on the RUS website at <https://www.rd.usda.gov/resources/environmental-studies/assessment/naples-power-plant>; and at the headquarters of AECC at 1 Cooperative Way, Little Rock, Arkansas 72209.

All comments from reviewers were directed to be sent via email to [RUSPublicComments@usda.gov](mailto:RUSPublicComments@usda.gov) or via mail addressed to:

Environmental and Historic Preservation Division  
USDA, Rural Utilities Service  
Environmental Protection Specialist  
1400 Independence Avenue SW  
Room 2244, Stop 1571  
Washington, DC 20250-1571

RUS received no comments on the draft EA. Should RUS choose to issue a FONSI for the Proposed Action, a newspaper notice will be published informing the public of the RUS finding and the availability of the EA and FONSI. The notice shall be prepared in accordance with RUS guidance.

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## 8.0 List of Preparers

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The environmental review for the Proposed Action was prepared by RUS, AECl, and Burns & McDonnell Engineering Company, Inc. The following is a list of preparers of this document.

### **Rural Utilities Services**

- Environmental and Historic Preservation Division

### **Arkansas Electric Cooperative Corporation**

- Stephen Cain, Director – Compliance & Support

### **Burns & McDonnell Engineering Company, Inc.**

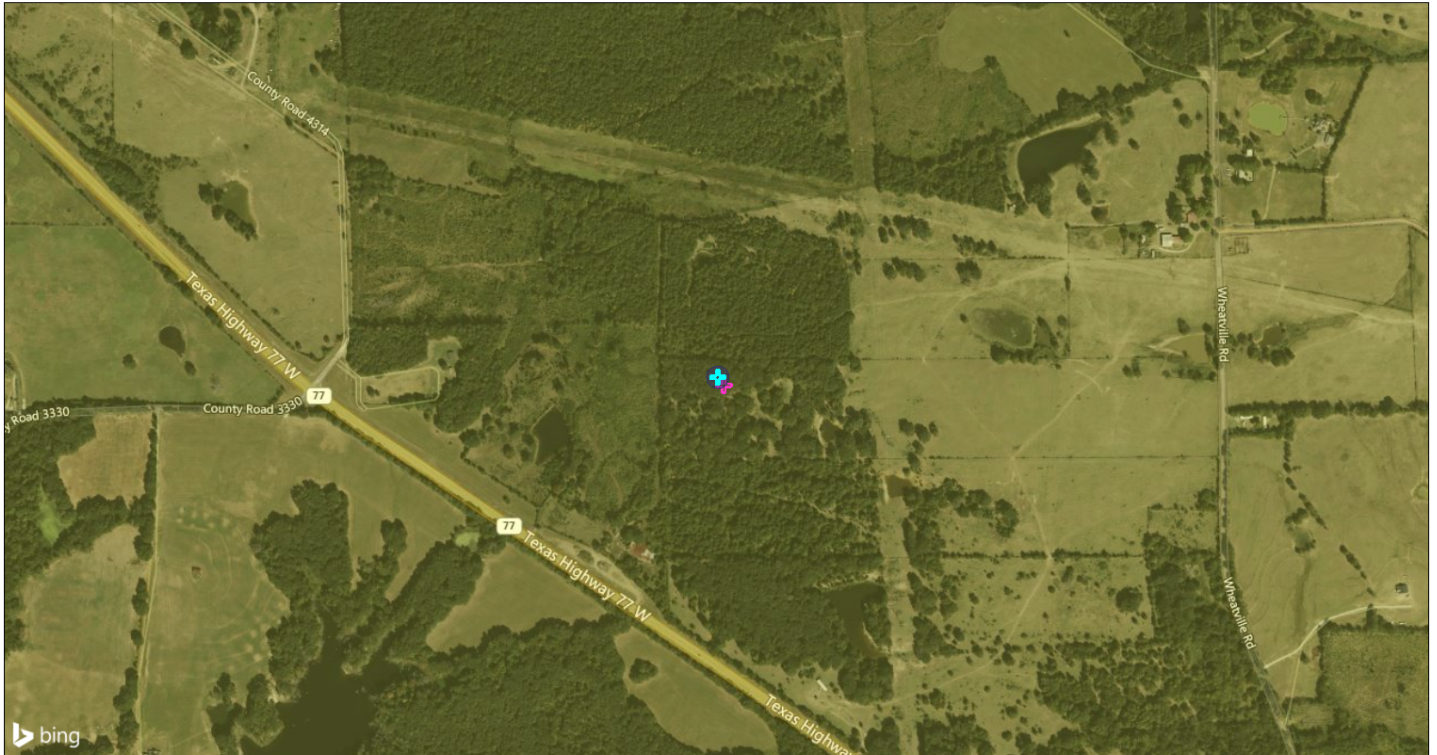
- Chris Howell, Project Manager
- Audra McCaslin, Staff Environmental Scientist
- Chris Mallott, Assistant Environmental Scientist
- Jessi Schoolcraft, Assistant Environmental Engineer
- Christa Wisniewski, Section Manager Natural and Cultural Resources

## Appendix A – NEPAassist

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# NEPAssist Report

## A3 Landscape



January 18, 2024

Project Buffer

Project 1

Search Result (point)

1:7,644

0 0.07 0.15 0.3 mi  
0 0.13 0.25 0.5 km

© 2024 Microsoft Corporation © 2023 Maxar © CNES  
(2023) Distribution Airbus DS © 2023 TomTom

Project Location	33.222045,- 94.702161
Within 2 miles of an Ozone 1-hr (1979 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of an Ozone 8-hr (2015 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a CO Annual (1971 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a NO2 Annual (1971 standard) Non-Attainment/Maintenance Area?	no
Within 2 miles of a Federal Land?	no
Within 2 miles of an impaired stream?	no
Within 2 miles of an impaired waterbody?	no
Within 2 miles of a waterbody?	yes
Within 2 miles of a stream?	yes
Within 2 miles of an NWI wetland?	Available Online
Within 2 miles of a Brownfields site?	no
Within 2 miles of a Superfund site?	no
Within 2 miles of a Toxic Release Inventory (TRI) site?	no

Within 2 miles of a water discharger (NPDES)?	no
Within 2 miles of a hazardous waste (RCRA) facility?	no
Within 2 miles of an air emission facility?	no
Within 2 miles of a school?	no
Within 2 miles of an airport?	no
Within 2 miles of a hospital?	no
Within 2 miles of a designated sole source aquifer?	no
Within 2 miles of a historic property on the National Register of Historic Places?	no
Within 2 miles of a Land Cession Boundary?	no
Within 2 miles of a tribal area (lower 48 states)?	no
Within 2 miles of the service area of a mitigation or conservation bank?	yes
Within 2 miles of the service area of an In-Lieu-Fee Program?	no
Within 2 miles of a Public Property Boundary of the Formerly Used Defense Sites?	no
Within 2 miles of a Munitions Response Site?	no
Within 2 miles of an Essential Fish Habitat (EFH)?	no
Within 2 miles of a Habitat Area of Particular Concern (HAPC)?	no
Within 2 miles of an EFH Area Protected from Fishing (EFHA)?	no
Within 2 miles of a Bureau of Land Management Area of Critical Environmental Concern?	no
Within 2 miles of an ESA-designated Critical Habitat Area per U.S. Fish & Wildlife Service?	no
Within 2 miles of an ESA-designated Critical Habitat river, stream or water feature per U.S. Fish & Wildlife Service?	no

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## **Appendix B - Wetlands Report**

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ARKANSAS ELECTRIC COOPERATIVE  
CORPORATION

# NAPLES POWER PLANT

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WETLAND DELINEATION REPORT  
PROJECT NO. 164180

REVISION 0  
APRIL 2024

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## List of Abbreviations

Abbreviation	Term/Phrase/Name
AECC	Arkansas Electric Cooperative Corporation
AJD	Approved Jurisdictional Determination
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWA Jurisdictional Memo	Joint U.S. Environmental Protection Agency and U.S. Army Corps of Engineers December 2008 Clean Water Act Jurisdictional Memorandum
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
JD Guidebook	Jurisdictional Guidebook
Manual	1987 Wetland Delineation Manual
NRCS	Natural Resource Conservation Service
NWPL	National Wetland Plant List
OBL	obligate wetland
OHWM	ordinary high-water mark
PEM	palustrine emergent
PFO	palustrine forested
Project	Naples Power Plant
PSS	palustrine scrub-shrub
Regional Supplement	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coast Plain Region (Version 2.0)
RHA	Rivers and Harbors Act
RPW	relatively permanent waters
Project Area	100-acre Project Area
TNW	traditional navigable waters
UPL	obligate upland
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code

USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WOTUS	Waters of the United States

## **Naples Power Plant Wetland Delineation Report**

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**Arkansas Electric Cooperative Corporation  
Naples Power Plant  
Project No. 164180**

**Field Investigators:**

**Randall Erwin (Lead) and Kelli Mahmoud**

**Prepared by:**

**Kelli Mahmoud, Randall Erwin, Jared Jorgensen, and Mike Dyke**

**Burns & McDonnell Engineering Company, Inc.**

**Fort Worth, Texas**

## Executive Summary

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Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), on behalf of Arkansas Electric Cooperative Corporation (AECC) conducted a wetland delineation from February 26-27, 2024, on an approximate 100-acre Project Area in Morris County, Texas. The wetland delineations were performed in accordance with procedures outlined in the U.S. Army Corps of Engineers 1987 Corps of Engineers Wetland Delineation Manual and 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region. Burns & McDonnell ecologists identified streams, ponds, and wetlands within the Project Area potentially subject to USACE jurisdiction. If the Project requires fill impacts to jurisdictional wetlands or waters, a permit may be required from the USACE.

It should be noted that only the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers have final authority to determine the location and extent of Waters of the U.S. regulated under the Clean Water Act or Rivers and Harbors Act.

## 1.0 Introduction

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AECC contracted Burns & McDonnell to perform an evaluation of potential waters of the United States (U.S.), including wetlands for the proposed Naples Power Plant (Project) in Morris County, Texas (Figure A-1, Appendix A). The Project consists of the construction of two simple cycle combustion turbines within a 100-acre area. The project is located approximately 2 miles northwest of Naples Texas, encompassing approximately 100 acres of land along the north side of highway 77 referred to herein as the Project Area. The Project is centrally located at 33.223145°, -94.703199° (datum WGS1984).

The purpose of the wetland delineation survey was to identify and record the location and extent of potential Waters of the U.S., including wetlands, as required by Section 404 of the Clean Water Act (CWA), 33 United States Code (USC) § 1344, et seq. and Section 10 of the Rivers and Harbors Act of 1899 (RHA), 33 USC § 403, et seq., and subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE). Jurisdictional waters under the CWA include Navigable Waters, which are defined as “waters of the United States, including the territorial seas” (33 USC § 1362[7]). Waters of the U.S. are further defined in the USACE’s regulations at 33 Code of Federal Regulations (CFR) § 328.3, which includes certain adjacent wetlands to Waters of the U.S. Wetlands, by applicable USACE standards, including, “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (USACE, 1987). Waterbodies (i.e., lakes, impoundments, rivers, creeks, streams, etc.) are typically identified by the presence of an ordinary high-water mark (OHWM). OHWMs are established by the presence of distinguishing physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate characteristics of the surrounding areas (33 CFR 328.3[e]).

This report provides a discussion of the methods, results, and conclusions from the wetland delineation surveys conducted from February 26-27, 2024.

An additional site visit was conducted on November 13, 2024, in response to an information request received from the USACE in support of the AJD review. Observations and photo-documentation were completed along multiple stream and drainage segments in support of USACE decision-making on stream classifications and jurisdictional connectivity of wetland and waterbody features.

## 2.0 Regulatory Framework

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Under the authority of Section 404 of the CWA and Section 10 of the RHA, the USACE regulates permits for the discharge of dredged and fill material into all Waters of the U.S., including adjacent wetlands.

For purposes of Section 404 of the CWA, Waters of the U.S. are defined in 33 CFR § 328.3, and further refined in the USACE Jurisdictional Determination Form Instructional Guidebook (JD Guidebook) (USACE, 2007) and the joint U.S. Environmental Protection Agency (US EPA)/USACE CWA Jurisdiction Memorandum dated December 2, 2008 (CWA Jurisdictional Memo). Additionally, USACE jurisdiction is subject to further interpretation subject to multiple U.S. Supreme Court decisions, including *Rapanos v. United States*, *Carabell v. United States*, and *Sackett v. EPA* (2023).

Based upon published guidance as influenced by the referenced court decisions, Waters of the U.S. (WOTUS) include:

- Traditional navigable waters (TNW), which include all waters described in 33 CFR 328.3(a)(1) and 40 CFR 230.3
- Wetlands adjacent to TNW, including adjacent wetlands that do not have a continuous surface connection to TNW
- Non-navigable tributaries of TNW that are relatively permanent waters (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (typically 3 months)
- Wetlands that exhibit a continuous surface connection to RPW as described above (e.g., they are not separated from the RPW by uplands or a berm, dike, or similar feature)

If the Project requires dredge or fill impacts to potential WOTUS, a permit may be required from the USACE Fort Worth District. Alternatively, coordination may be necessary with the USACE Fort Worth District for an Approved Jurisdictional Determination (AJD) to verify WOTUS limits.



## 3.0 Methods

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### 3.1 Pre-Field Assessment

Prior to the site investigation, Burns & McDonnell ecologists reviewed current and historical aerial imagery; Natural Resources Conservation Service (NRCS) soil survey data Morris County, Texas (NRCS, 2024a); U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory maps (USFWS, 2024); and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) (FEMA, 2024). Applicable layers were stored in a geographic information system database and reviewed to identify the location and extent of potential wetlands and waterbodies within the Project Area.

### 3.2 Wetland and Waterbody Field Survey

Burns & McDonnell ecologists performed an onsite wetland delineation from February 26-27. The field identification and delineation of potential WOTUS, including wetlands, within the Project Area were based on the presence of hydrophytic vegetation, wetland hydrology, and hydric soils in accordance with the Corps of Engineers Wetland Delineation Manual (Manual) (USACE, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0) (Regional Supplement) (USACE, 2020). The site investigation also included assessments of whether other special aquatic sites were present (i.e., sanctuaries and refuges, mudflats, vegetated shallows, coral reefs, and riffle and pool complexes [USACE, 1987]).

Representative data points of each wetland and upland community were recorded within the Project Area. Burns & McDonnell ecologists evaluated and recorded dominant vegetation and the National Wetland Plant List (NWPL)-designated indicator status (Lichvar et al., 2020), hydrology, and soil characteristics for each data point.

At locations where wetland vegetation, hydrology, and hydric soil criteria were met, the site was identified as a wetland and categorized following the Cowardin classification system as palustrine emergent (PEM) wetland, palustrine scrub-shrub (PSS) wetland, or palustrine forested (PFO) wetland (Cowardin et al., 1979). Locations that did not meet all three wetland criteria were classified as herbaceous upland, scrub-shrub upland, or forested upland based on a minimum of 30 percent aerial coverage of the uppermost vegetative layer.

The onsite delineation also included assessments of navigable and non-navigable waterways and other waterbodies (i.e., streams, ponds, irrigation canals, and agricultural ditches, etc.). Waterbodies were identified by the presence of an OHWM (USACE, 2005) and classified as perennial, intermittent, or ephemeral based field observations and the following flow regime:

- **Perennial:** Waterbodies that contain flowing water year-round during a typical year. The water table is located above the streambed for most of the year, and groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.
- **Intermittent:** Waterbodies that have flowing water during certain times of the year when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.
- **Ephemeral:** Waterbodies that flow only during and for a short duration after precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round, and groundwater is not a source of water for the stream.

### 3.3 Feature Mapping

Burns & McDonnell ecologists recorded the location of data points, wetland boundaries, and the OHWM limits of waterbodies identified within the Project Area utilizing a differentially corrected global positioning system capable of sub-meter accuracy. Geographic information system software was utilized to process and analyze data, calculate acreages and linear footage of wetland and waterbody features, and produce report maps.

### 3.4 Feature Naming

Data recorded in the field within the Project Area has a unique identifier indicating the type of feature (“W” for wetland, “S” for linear waterbody [i.e., stream], or “P” for open waterbody [i.e., pond]) followed by the unique survey team letter (i.e., “A”) and a unique sequential number beginning with 001.

## 4.0 Results

A summary of wetlands and waterbodies delineated within the Project Area, including descriptions of vegetation communities, soils, and hydrologic indicators observed is provided within the following sections. Please refer to Appendix B for Wetland Determination Data Forms prepared for the Project. The corresponding data point locations can be found in Appendix A, Figure A-2.

### 4.1 Vegetation Communities

Burns & McDonnell identified the following vegetation communities within the Project Area: herbaceous upland, scrub-shrub upland, forested upland, PEM wetland, and PSS wetland. Individual plant species are assigned a wetland “indicator status on an index of wetland fidelity that considers the frequency and abundance in wetlands versus uplands and the availability of wetland habitat across the local to regional landscape” (Lichvar and Minkin, 2008). These indicators were used to determine the dominance of hydrophytic versus non-hydrophytic vegetation at each data point within the Project Area. Table 4-1 lists the five indicator status categories and their probability to be found within a wetland community.

**Table 4-1: Vegetative Species Indicator Category and Definition**

Code	Category	Definition
OBL	obligate wetland	Hydrophyte—Almost always occurs in wetlands
FACW	facultative wetland	Hydrophyte—Usually occurs in wetlands, but may occur in non-wetlands
FAC	facultative	Hydrophyte—Occurs in wetlands and non-wetlands
FACU	facultative upland	Non-hydrophyte—Usually occurs in non-wetlands, but may occur in wetlands
UPL	obligate upland	Non-hydrophyte—Almost never occurs in wetlands

Source: Lichvar et al. (2012)

A list of the dominant vegetation found within each plant community within the Project Area can be found in the following sections. For specific vegetation species recorded at each data point, refer to the data forms in Appendix B. Representative photographs of the vegetation communities identified within the Project Area can be found in Appendix C.

#### 4.1.1 Herbaceous Upland

Herbaceous upland communities within the Project Area were dominated by nonwoody vegetation such as grasses and forbs within the herb stratum. The Regional Supplement defines the herb stratum as all herbaceous plants, including herbaceous vines, regardless of size. Occasionally, sapling/shrub species were identified as minor components within the herbaceous upland vegetation communities. Based on the technical criteria outlined in the Manual and Regional Supplement, the vegetation assemblages observed within this community are not representative of a hydrophytic plant community. Refer to Table 4-2 for a summary of the dominant plant species and their indicator status observed within the herbaceous upland communities.

**Table 4-2: Dominant Vegetation Observed in Herbaceous Upland Communities**

Stratum	Scientific Name	Indicator <sup>a</sup>	Common Name
Herbaceous	<i>Cynodon dactylon</i>	FACU	Bermuda grass
	<i>Eupatorium capillifolium</i>	FACU	dogfennel
	<i>Schizachyrium scoparium</i>	FACU	little bluestem

Source: USACE, 2018

UPL = Obligate Upland, FAC = Facultative, FACU = Facultative Upland, FACW = Facultative Wetland, OBL = Obligate Wetland

### 4.1.2 Scrub-Shrub Upland

Scrub-Shrub upland communities within the Project Area were dominated by shrubs and young trees with trunks less than 3-inch-dbh, and generally less than 20 feet in height. Occasionally, trees and herbaceous species were identified as minor components within the scrub-shrub upland vegetation communities. Based on the technical criteria outlined in the Manual and Regional Supplement, the vegetation assemblages are representative of a non-hydrophytic community. Refer to Table 4-3 for a summary of the dominant plant species and their indicator status observed within the scrub-shrub upland communities.

**Table 4-3: Dominant Vegetation Observed in Scrub-Shrub Upland Communities**

Stratum	Scientific Name	Indicator <sup>a</sup>	Common Name
Shrub	<i>Baccharis halimifolia</i>	FAC	Groundseltree
	<i>Ilex vomitoria</i>	FAC	yaupon
Herbaceous	<i>Carex cherokeensis</i>	FACW	Cherokee sedge
	<i>Cynodon dactylon</i>	FACU	Bermuda grass
	<i>Juncus effusus</i>	OBL	common rush
	<i>Schizachyrium scoparium</i>	FACU	little bluestem
Woody Vines	<i>Lonicera jamponica</i>	FACU	Japanese honeysuckle

Source: USACE, 2018

UPL = Obligate Upland, FAC = Facultative, FACU = Facultative Upland, FACW = Facultative Wetland, OBL = Obligate Wetland

### 4.1.3 Forested Upland

Forested upland communities within the Survey Corridor were dominated by trees with trunks in excess of 3 inch-dbh, regardless of height. Occasionally, sapling/shrub and herbaceous species were identified as minor components with the forested upland vegetation communities. Based on the technical criteria outlined in the Manual and Regional Supplement, the vegetation assemblages observed within this community are not representative of a hydrophytic plant community. Refer to Table 4-4 for a summary of the dominant plant species and their indicator status observed within the forested upland communities.

**Table 4-4: Dominant Vegetation Observed in Forested Upland Communities**

Stratum	Scientific Name	Indicator <sup>a</sup>	Common Name
Tree	<i>Pinus taeda</i>	FAC	loblolly pine
	<i>Quercus alba</i>	FACU	white oak
	<i>Quercus falcata</i>	FACU	southern red oak
	<i>Quercus stellata</i>	UPL	post oak
Shrub	<i>Ilex vomitoria</i>	FAC	yaupon
Woody Vines	<i>Lonicera japonica</i>	FACU	Japanese honeysuckle
	<i>Smilax rotundifolia</i>	FAC	horsebrier

Source: USACE, 2018

UPL = Obligate Upland, FAC = Facultative, FACU = Facultative Upland, FACW = Facultative Wetland, OBL = Obligate Wetland

#### 4.1.4 PEM Wetland

PEM wetland communities within the Project Area were dominated by nonwoody vegetation such as grasses and forbs within the herb stratum. The Regional Supplement defines the herb stratum as all herbaceous plants, including herbaceous vines, regardless of size. Emergent wetlands are typically dominated by perennial emergent and rooted herbaceous hydrophytes, excluding mosses and lichens that are present for most of the growing season in most years (Cowardin et al., 1979). Based on the technical criteria outlined in the Manual and Regional Supplement, the vegetation assemblages observed within this community are representative of a hydrophytic plant community. Refer to Table 4-5 for a summary of the dominant plant species and their indicator status observed within the PEM wetland communities.

**Table 4-5: Dominant Vegetation Observed in PEM Wetland Communities**

Stratum	Scientific Name	Indicator <sup>a</sup>	Common Name
Herbaceous	<i>Carex cherokeensis</i>	FACW	Cherokee sedge
	<i>Juncus effusus</i>	OBL	common rush
	<i>Steinchisma hians</i>	OBL	gaping grass
	<i>Rubus argutus</i>	FAC	saw-tooth blackberry

Source: USACE, 2018

UPL = Obligate Upland, FAC = Facultative, FACU = Facultative Upland, FACW = Facultative Wetland, OBL = Obligate Wetland

#### 4.1.5 PSS Wetland

PSS wetland communities within the Project Area were dominated by trees with trunks less than 3-inch-dbh, and generally less than 20 feet in height. Occasionally, trees and herbaceous species were identified as minor components within the PSS wetland vegetation communities. Based on the technical criteria outlined in the Manual and Regional Supplement, the vegetation assemblages are representative of a hydrophytic community. Refer to Table 4-6 for a summary of the dominant plant species and their indicator status observed within the PSS wetland communities.

**Table 4-6: Dominant Vegetation Observed in PSS Wetland Communities**

Stratum	Scientific Name	Indicator <sup>a</sup>	Common Name
Shrub	<i>Baccharis halimifolia</i>	FAC	groundsel tree
Sapling	<i>Salix nigra</i>	OBL	black willow
Herbaceous	<i>Juncus effusus</i>	OBL	common rush
	<i>Rubus argutus</i>	FAC	saw-tooth blackberry

Source: USACE, 2018

UPL = Obligate Upland, FAC = Facultative, FACU = Facultative Upland, FACW = Facultative Wetland, OBL = Obligate Wetland

### 4.2 Hydrology

According to the NRCS Climate Analysis for Wetlands Table (WETS Table) generated from data obtained from the Mount Pleasant, TX climate station, located approximately 18 miles west of the Project Area, rainfall for the area was generally lower than normal; September, November, December, and February were slightly below average (NRCS, 2024b). October and January were well above average. Precipitation data is missing for the months of October, January, and February, therefore; rainfall totals are likely

higher than presented. Refer to Table 4-7 below and the WETS Table provided in Appendix E for the recorded and normal annual and monthly rainfall amounts for the Mount Pleasant, TX Climate Station.

**Table 4-7: Recorded and Normal Rainfall for the Mount Pleasant, TX Climate Station**

Month	Recorded Rainfall (inches)	Normal Rainfall <sup>a</sup> (inches)	Departure from Normal (inches)
September 2023	1.32	3.48	-2.16
October 2023	5.66 <sup>b</sup>	4.50	1.16
November 2023	2.73	4.21	-1.48
December 2023	3.57	4.49	-0.92
January 2024	5.37 <sup>b</sup>	3.29	2.08
February 2024	2.64 <sup>b</sup>	3.80	-1.16
<b>Totals</b>	<b>21.29<sup>b</sup></b>	<b>23.77</b>	<b>-2.48</b>

Source: NRCS, 2024b

(a) Mean monthly rainfall for period 1905-2024

(b) Missing precipitation data; total precipitation may be higher.

Rainfall, or lack thereof, can influence assessments of wetland hydrology during a field survey. Field surveys were conducted following below average rainfall resulting in slightly drier conditions throughout the field survey period.

Observed wetland hydrologic indicators included surface water, saturation, drift deposits, high water table, and oxidized rhizospheres along living roots were the primary hydrology indicators observed during the delineation effort. Secondary hydrology indicators included positive FAC-neutral test, surface soil cracks, geomorphic position, and crayfish burrows.

### 4.3 Soils

Burns & McDonnell's review of the NRCS Soil Survey Geographic Database Morris County indicated that three soil series are mapped within the Project Area. None of the soil series meet the hydric soil criteria, with hydric minor components being excluded (NRCS, 2024a). Hydric soil indicators observed in wetlands within the Project Area consisted of depleted matrix. Refer to Table 4-8 for a summary of the soil series mapped within the Project Area. A detailed description and hydric status of the soil series mapped within the Project Area can be found in the Custom Soil Resource Report in Appendix D.

**Table 4-8: Summary of Mapped Soil Series within the Project Area**

Symbol	Map Unit Name	Hydric Status
WoC	Woodtell fine sandy loam, 2 to 5 percent slopes	Non-Hydric
WoE	Woodtell fine sandy loam, 5 to 20 percent slopes	Non-Hydric
WrB	Woodtell-Raino complex, 1 to 3 percent slopes	Non-Hydric

Source: NRCS (2023a)

### 4.4 Potential Waters of the U.S., Including Wetlands

Burns & McDonnell identified a total of 1.73 acres of vegetated wetlands, 8,185 feet of linear waterbodies, and 1.83 acres of ponds within the Project Area. A summary of potential Waters of the U.S., including wetlands, identified within the Project Area is provided in the following sections.

#### 4.4.1 Wetlands

Burns & McDonnell identified a total of 1.11 acres of PEM wetlands and 0.61 acres of PSS wetlands. Please refer to Table F-1 in Appendix F for a summary of each wetland delineated within the Project and Figure A-2 in Appendix A for the location of the wetlands recorded within the Project Area. Wetlands WA002 and WA004 are considered potential WOTUS, subject to USACE jurisdiction under Section 404 of the CWA. WA001 is separated from the nearest RPW and directly connected wetland by a dam feature, subject to USACE interpretation, this feature is considered a potential WOTUS, and may be subject to USACE jurisdiction under Section 404 of the CWA.

#### 4.4.2 Waterbodies and Ponds

Burns & McDonnell identified a total of 8,185 feet of linear waterbodies within the Project Area, consisting of 3,906 linear feet of ephemeral streams and 4,279 linear feet of intermittent streams. One named stream; Mary Lees Branch runs through the Project Area. There are no TNW in the Project Area. Streams SA005, SA007, and SA008 are RPW's, and are considered potential WOTUS, subject to USACE jurisdiction under Section 404 of the CWA. SA001, SA002, SA003, SA004, SA006, SA009, SA010, SA011, and SA012 are ephemeral in nature and are not likely subject to USACE jurisdiction. Refer to Table F-2 in Appendix F for a summary of each linear waterbody (i.e., stream) within the Project Area.

The Project Area included 1.83 acres of ponds classified as palustrine unconsolidated bottom (PUB). PUB features were unvegetated open water; however, a wetland fringe may be within the feature boundary. PA001 is a hillside impoundment separated from the nearest RPW and directly connected wetland by a dam feature, subject to USACE interpretation, this feature is considered a potential WOTUS, and may be subject to USACE jurisdiction under Section 404 of the CWA. PA002 is a small catchment pond along ephemeral stream SA004, and is separated from the lower segment of SA004 by a constructed dam, and is not likely subject to USACE jurisdiction. PA003 is an isolated stock pond, and is not likely subject to USACE jurisdiction. Refer to Table F-3 in Appendix F for a summary of each open waterbody (i.e., ponds) delineated within the Project Area.

## 5.0 Summary

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### 5.1 Potential Waters of the U.S., Including Wetlands

Burns & McDonnell conducted a wetland and waterbody delineation on February 25 and 26, 2024, for the proposed Naples Power Plant Morris County, Texas. Burns & McDonnell ecologists identified features within the Project Area potentially subject to USACE area, consisting of 1.11 acres of PEM wetlands, 0.62 acres of PSS wetlands, 3,906 linear feet of ephemeral streams, 4,279 linear feet of intermittent streams, and 1.83 acres of ponds. Mapped features WA002, WA004, SA005, SA007, and SA008 are considered potential WOTUS, subject to USACE jurisdiction under Section 404 of the CWA. WA001 and PA001 are subject to USACE interpretation, these features are potential WOTUS, and may be subject to USACE jurisdiction under Section 404 of the CWA.

It should be noted that this report does not represent an Approved Jurisdictional Determination (AJD) of wetlands and waterbodies; only the U.S. EPA and USACE have final authority to verify the location and extent of Waters of the U.S., including wetlands. Submittal of a full wetland delineation report, including data forms, along with a request for an AJD from the USACE Fort Worth District would be required to obtain a final determination of jurisdiction from the USACE. Dredge and fill impacts to WOTUS are regulated under Section 404 of the Clean Water Act and may require a permit from the USACE.

An additional site visit was conducted on November 13, 2024, in response to an information request received from the USACE in support of the AJD review. Observations and photo-documentation were completed along multiple stream and drainage segments in support of USACE decision-making on stream classifications and jurisdictional connectivity of wetland and waterbody features.



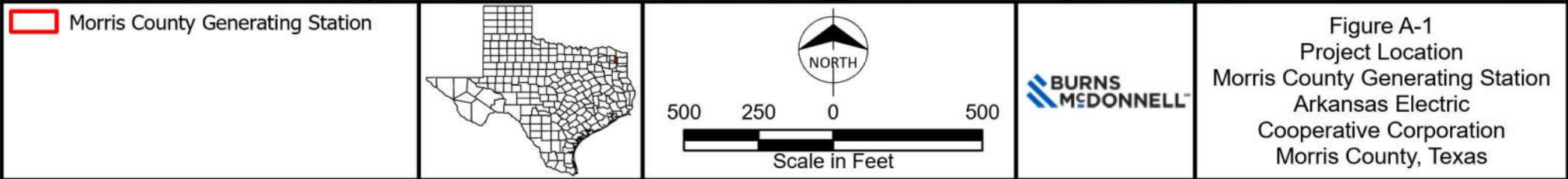
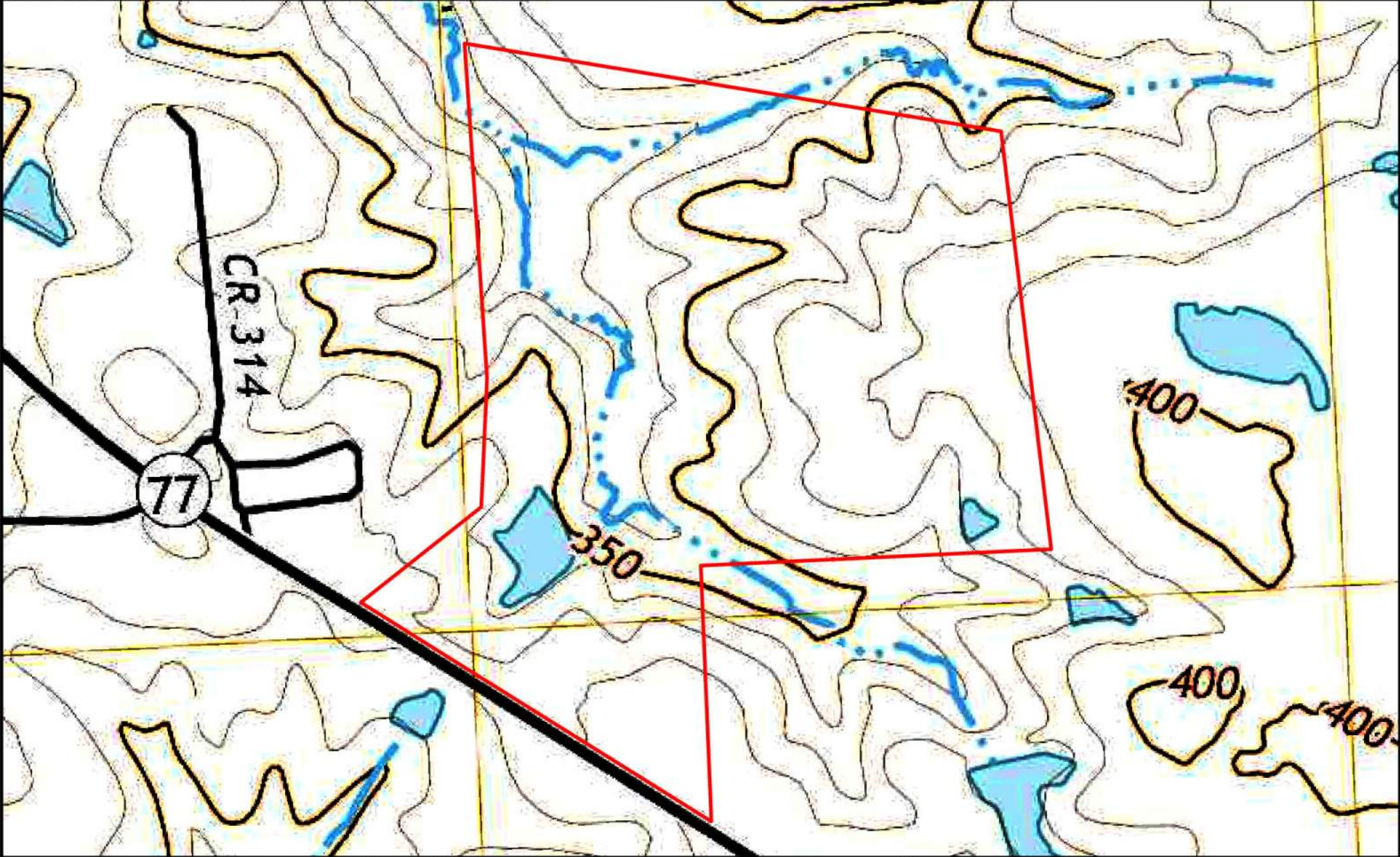
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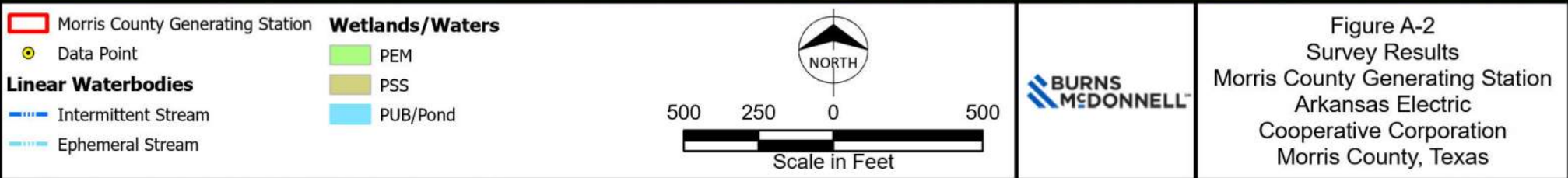
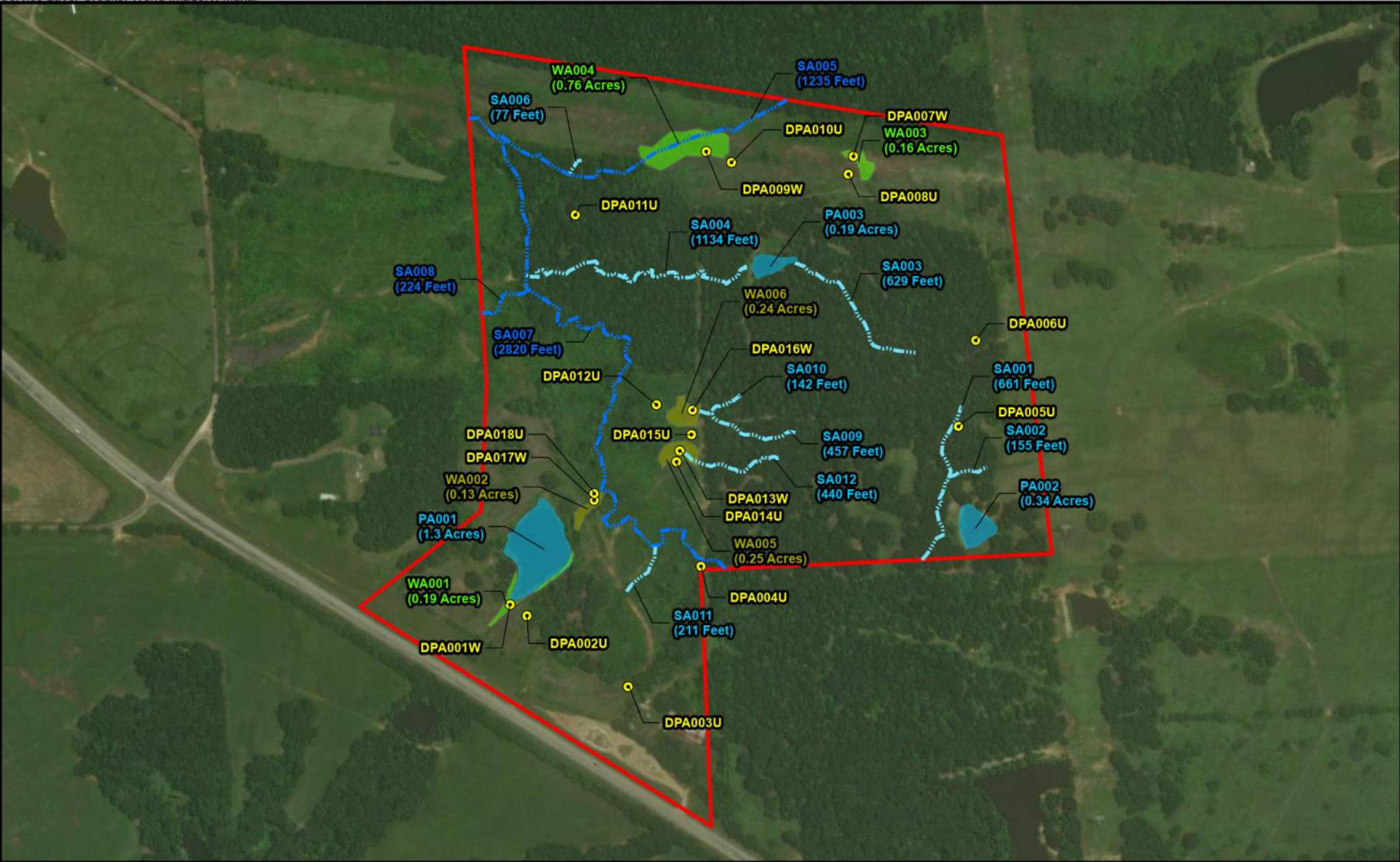
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## **APPENDIX A – VICINITY AND SITE MAPS**

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## **APPENDIX B – WETLAND DETERMINATION FORMS**

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## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-26  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA001W  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 10  
Subregion (LRR or MLRA): J 87B Lat: 33.220543 Long: -94.705726 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: PUBHh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PEM WA001</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>8</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA001W**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Herb Stratum (Plot size: 5 ft r _____ )</b>				
1. <b>Steinchisma hians</b>	70	✓	OBL	
2. <b>Juncus effusus</b>	20	✓	OBL	
3. <b>Ambrosia artemisiifolia</b>	10		FACU	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
50% of total cover: 50.00 20% of total cover: 20.00				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
  
 Total Number of Dominant Species Across All Strata: 2 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>90</u>	x 1 = <u>90</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>130</u> (B)

Prevalence Index = B/A = 1.30

**Hydrophytic Vegetation Indicators:**  
☒ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

**SOIL**

Sampling Point: DPA001W

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 5/1	60	7.5YR 4/6	40	C	M	Sandy Clay	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- ☐ **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-26  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA002U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15  
Subregion (LRR or MLRA): J 87B Lat: 33.220423 Long: -94.705525 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Forested upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA002U

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Pinus taeda</u>	<u>85</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Ilex vomitoria</u>	<u>10</u>		<u>FAC</u>															
3. <u>Juniperus virginiana</u>	<u>5</u>		<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
<u>100</u> = Total Cover 50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>305</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.05</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>305</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>95</u>	x 3 = <u>285</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>305</u> (B)																	
<b>Sapling Stratum</b> (Plot size: _____ )																		
1. _____				<b>Hydrophytic Vegetation Indicators:</b> <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <u>  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<b>Shrub Stratum</b> (Plot size: _____ )																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.														
<b>Herb Stratum</b> (Plot size: _____ )																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
<b>Woody Vine Stratum</b> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).																		

## SOIL

Sampling Point: DPA002U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 4	10YR 3/4	100					Clay Loam	
4 - 24	10YR 3/6	100					Clay Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> <b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-26  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA003U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.219654 Long: -94.704318 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil ☒, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Herbaceous upland. Soil is disturbed. Gravel was brought in to build a work site.</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) (LRR U)	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA003U**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: 15 ft r _____ )</b>				
1. <u>Salix nigra</u>	5	✓	OBL	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
5 _____ = Total Cover				
50% of total cover: 2.50 20% of total cover: 1.00				
<b>Shrub Stratum (Plot size: 15 ft r _____ )</b>				
1. <u>Ulmus alata</u>	5	✓	FACU	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
5 _____ = Total Cover				
50% of total cover: 2.50 20% of total cover: 1.00				
<b>Herb Stratum (Plot size: 5 ft r _____ )</b>				
1. <u>Cynodon dactylon</u>	40	✓	FACU	
2. <u>Eupatorium capillifolium</u>	30	✓	FACU	
3. <u>Schizachyrium scoparium</u>	20	✓	FACU	
4. <u>Vicia ludoviciana</u>	10		FACU	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 _____ = Total Cover				
50% of total cover: 50.00 20% of total cover: 20.00				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
  
 Total Number of Dominant Species Across All Strata: 5 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 20.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>105</u>	x 4 = <u>420</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>110</u> (A)	<u>425</u> (B)

Prevalence Index = B/A = 3.86

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation  
 \_\_\_ 2 - Dominance Test is >50%  
 \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**      Yes \_\_\_\_\_ No ✓

## SOIL

Sampling Point: DPA003U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	7.5YR 3/4	100					Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

**Restrictive Layer (if observed):**Type: GravelDepth (inches): 10Hydric Soil Present? Yes ☐ No ☒

Remarks:

Gravel was brought in to build a work site.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA004U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 10  
Subregion (LRR or MLRA): J 87B Lat: 33.220867 Long: -94.703372 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>Scrub shrub upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		____ Surface Soil Cracks (B6)
____ Surface Water (A1)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
____ High Water Table (A2)	____ Marl Deposits (B15) <b>(LRR U)</b>	____ Drainage Patterns (B10)
____ Saturation (A3)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
____ Water Marks (B1)	____ Oxidized Rhizospheres along Living Roots (C3)	____ Dry-Season Water Table (C2)
____ Sediment Deposits (B2)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Drift Deposits (B3)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Saturation Visible on Aerial Imagery (C9)
____ Algal Mat or Crust (B4)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
____ Iron Deposits (B5)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
____ Inundation Visible on Aerial Imagery (B7)		____ FAC-Neutral Test (D5)
____ Water-Stained Leaves (B9)		____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: DPA004U

Tree Stratum (Plot size: _____ )		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
		_____ = Total Cover		
50% of total cover: _____		20% of total cover: _____		
Sapling Stratum (Plot size: _____ )				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
		_____ = Total Cover		
50% of total cover: _____		20% of total cover: _____		
Shrub Stratum (Plot size: 15 ft r _____ )				
1.	Baccharis halimifolia	90	✓	FAC
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
		90 = Total Cover		
50% of total cover: 45.00		20% of total cover: 18.00		
Herb Stratum (Plot size: _____ )				
1.	Cynodon dactylon	40	✓	FACU
2.	Lonicera japonica	20	✓	FACU
3.	geranium carolinianum	10		UPL
4.	Juncus effusus	5		OBL
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
		75 = Total Cover		
50% of total cover: 37.50		20% of total cover: 15.00		
Woody Vine Stratum (Plot size: _____ )				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		_____ = Total Cover		
50% of total cover: _____		20% of total cover: _____		

Remarks: (If observed, list morphological adaptations below).  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	1 (A)
Total Number of Dominant Species Across All Strata:	3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	33.33 (A/B)
<b>Prevalence Index worksheet:</b>	
Total % Cover of:	Multiply by:
OBL species 5	x 1 = 5
FACW species 0	x 2 = 0
FAC species 90	x 3 = 270
FACU species 60	x 4 = 240
UPL species 10	x 5 = 50
Column Totals: 165 (A)	565 (B)
Prevalence Index = B/A = 3.42	
<b>Hydrophytic Vegetation Indicators:</b>	
___ 1 - Rapid Test for Hydrophytic Vegetation	
___ 2 - Dominance Test is >50%	
___ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<b>Definitions of Five Vegetation Strata:</b>	
<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
<b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
<b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
<b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
<b>Woody vine</b> – All woody vines, regardless of height.	
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>	



**SOIL**

Sampling Point: DPA004U

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 5	10YR 4/6	100					Sandy Loam	
5 - 24	10YR 4/3	100					Sandy Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- ☐ **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA005U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Flatwoods Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.222212 Long: -94.700158 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Forested Upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA005U

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus stellata</u>	<u>90</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. <u>Quercus falcata</u>	<u>10</u>		<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>100</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>90</u></td> <td>x 5 = <u>450</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>560</u> (B)</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>90</u>	x 5 = <u>450</u>	Column Totals: <u>120</u> (A)	<u>560</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>90</u>	x 5 = <u>450</u>																	
Column Totals: <u>120</u> (A)	<u>560</u> (B)																	
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>																		
<b>Sapling Stratum</b> (Plot size: _____ )																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
50% of total cover: _____ 20% of total cover: _____																		
<b>Shrub Stratum</b> (Plot size: _____ )																		
1. <u>Juniperus virginiana</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>10</u> = Total Cover																		
50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
<b>Herb Stratum</b> (Plot size: _____ )				<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.														
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																		
1. <u>Smilax rotundifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>10</u> = Total Cover																		
50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Remarks: (If observed, list morphological adaptations below).																		

## SOIL

Sampling Point: DPA005U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 3	10YR 3/3	100					Sandy Clay Loam	
3 - 12	10YR 5/6	100					Sandy Clay Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR O</b> )
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR S</b> )
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR O</b> )	<input type="checkbox"/> Reduced Vertic (F18) ( <b>outside MLRA 150A,B</b> )
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>LRR P, S, T</b> )
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> ( <b>MLRA 153B</b> )
<input type="checkbox"/> 5 cm Mucky Mineral (A7) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) ( <b>LRR U</b> )	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR P, T</b> )	<input type="checkbox"/> Marl (F10) ( <b>LRR U</b> )	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) ( <b>MLRA 151</b> )	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) ( <b>LRR O, P, T</b> )	
<input type="checkbox"/> Coast Prairie Redox (A16) ( <b>MLRA 150A</b> )	<input type="checkbox"/> Umbric Surface (F13) ( <b>LRR P, T, U</b> )	
<input type="checkbox"/> Sandy Mucky Mineral (S1) ( <b>LRR O, S</b> )	<input type="checkbox"/> Delta Ochric (F17) ( <b>MLRA 151</b> )	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) ( <b>MLRA 150A, 150B</b> )	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>MLRA 149A</b> )	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) ( <b>MLRA 149A, 153C, 153D</b> )	
<input type="checkbox"/> Dark Surface (S7) ( <b>LRR P, S, T, U</b> )		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**Type: GravelDepth (inches): 12Hydric Soil Present? Yes ☐ No ☒

Remarks:

**Gravel for building construction**

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA006U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.223091 Long: -94.699908 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Forested Upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) (LRR U)	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA006U

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>80</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>80</u> (A)</td> <td><u>240</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>80</u> (A)	<u>240</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>80</u>	x 3 = <u>240</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>80</u> (A)	<u>240</u> (B)																	
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>																		
Sapling Stratum (Plot size: _____ )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Shrub Stratum (Plot size: _____ )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Herb Stratum (Plot size: _____ )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Woody Vine Stratum (Plot size: _____ )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).																		

**Hydrophytic Vegetation Present?**      Yes ☒      No \_\_\_\_\_

## SOIL

Sampling Point: DPA006U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 15	10YR 4/6	100					Sandy Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> <b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**Type: Roots from timber growthDepth (inches): 15Hydric Soil Present? Yes ☐ No ☒

Remarks:

logging area

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA007W  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.225031 Long: -94.701324 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PEM WA003</b>	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<u>Secondary Indicators (minimum of two required)</u>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<input checked="" type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b>	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA007W

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Herb Stratum</b> (Plot size: _____ )				
1. <u>Carex cherokeensis</u>	40	✓	FACW	
2. <u>Juncus effusus</u>	20	✓	OBL	
3. <u>Rumex crispus</u>	10		FAC	
4. <u>Solidago altissima</u>	10		FACU	
5. <u>Ambrosia trifida</u>	10		FAC	
6. <u>Oxalis stricta</u>	5		UPL	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
95 = Total Cover				
50% of total cover: 47.50 20% of total cover: 19.00				
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
  
 Total Number of Dominant Species Across All Strata: 2 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>20</u>	x 1 = <u>20</u>
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u>20</u>	x 3 = <u>60</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>5</u>	x 5 = <u>25</u>
Column Totals: <u>95</u> (A)	<u>225</u> (B)

Prevalence Index = B/A = 2.36

**Hydrophytic Vegetation Indicators:**  
☒ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

**SOIL**

Sampling Point: DPA007W

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 5/1	70	7.5YR 5/8	30	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- ☐ **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA008U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.22485 Long: -94.701394 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Herbaceous upland</b>	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA008U**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Herb Stratum (Plot size: _____ )</b>				
1. <u>Cynodon dactylon</u>	50	✓	FACU	
2. <u>Schizachyrium scoparium</u>	30	✓	FACU	
3. <u>Carex cherokeensis</u>	10		FACW	
4. <u>Elymus canadensis</u>	10		FAC	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
50% of total cover: 50.00 20% of total cover: 20.00				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)  
  
 Total Number of Dominant Species Across All Strata: 2 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>80</u>	x 4 = <u>320</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>370</u> (B)

Prevalence Index = B/A = 3.70

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation  
 \_\_\_ 2 - Dominance Test is >50%  
 \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No ✓

**SOIL**

Sampling Point: DPA008U

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 4/6	90	7.5YR 5/8	10	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- ☐ **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA009W  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 15  
Subregion (LRR or MLRA): J 87B Lat: 33.225137 Long: -94.703124 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PEM WA004</b>	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) (LRR U)	_____ Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u>		
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA009W**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Herb Stratum (Plot size: <u>5 ft r</u> _____ )</b>				
1. <u>Carex cherokeensis</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. <u>Rubus argutus</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. <u>Juncus effusus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
4. <u>Eupatorium capillifolium</u>	<u>10</u>		<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>				
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
  
 Total Number of Dominant Species Across All Strata: 3 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>20</u>	x 1 = <u>20</u>
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>230</u> (B)

Prevalence Index = B/A = 2.30

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No \_\_\_\_\_

## SOIL

Sampling Point: DPA009W**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 4/1	70	7.5YR 5/8	30	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA010U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 10  
Subregion (LRR or MLRA): J 87B Lat: 33.225014 Long: -94.70282 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Herbaceous upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA010U

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Herb Stratum</b> (Plot size: _____ )				
1. <u>Cynodon dactylon</u>	60	✓	FACU	
2. <u>Schizachyrium scoparium</u>	20	✓	FACU	
3. <u>Carex cherokeensis</u>	10		FACW	
4. <u>Croton capitatus</u>	10		UPL	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>				
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>80</u>	x 4 = <u>320</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>100</u> (A)	<u>390</u> (B)

Prevalence Index = B/A = 3.90

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No ☒

## SOIL

Sampling Point: DPA010U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 4/6	100					Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ Organic Bodies (A6) **(LRR P, T, U)**  
☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**  
☐ Muck Presence (A8) **(LRR U)**  
☐ 1 cm Muck (A9) **(LRR P, T)**  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Coast Prairie Redox (A16) **(MLRA 150A)**  
☐ Sandy Mucky Mineral (S1) **(LRR O, S)**  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**  
☐ Thin Dark Surface (S9) **(LRR S, T, U)**  
☐ Loamy Mucky Mineral (F1) **(LRR O)**  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Marl (F10) **(LRR U)**  
☐ Depleted Ochric (F11) **(MLRA 151)**  
☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**  
☐ Umbric Surface (F13) **(LRR P, T, U)**  
☐ Delta Ochric (F17) **(MLRA 151)**  
☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**  
☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**  
☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**  
☐ 2 cm Muck (A10) **(LRR S)**  
☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**  
☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**  
☐ Anomalous Bright Loamy Soils (F20)  
**(MLRA 153B)**  
☐ Red Parent Material (TF2)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA011U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.224533 Long: -94.704755 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Forested upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		____ Surface Soil Cracks (B6)
____ Surface Water (A1)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
____ High Water Table (A2)	____ Marl Deposits (B15) <b>(LRR U)</b>	____ Drainage Patterns (B10)
____ Saturation (A3)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
____ Water Marks (B1)	____ Oxidized Rhizospheres along Living Roots (C3)	____ Dry-Season Water Table (C2)
____ Sediment Deposits (B2)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
____ Drift Deposits (B3)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Saturation Visible on Aerial Imagery (C9)
____ Algal Mat or Crust (B4)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
____ Iron Deposits (B5)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
____ Inundation Visible on Aerial Imagery (B7)		____ FAC-Neutral Test (D5)
____ Water-Stained Leaves (B9)		____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA011U

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus alba</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.00</u> (A/B)														
2. <u>Quercus falcata</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Pinus taeda</u>	<u>5</u>		<u>FAC</u>															
4. _____																		
5. _____																		
6. _____																		
<u>65</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>325</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.82</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u> (A)	<u>325</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>70</u>	x 4 = <u>280</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>85</u> (A)	<u>325</u> (B)																	
50% of total cover: <u>32.50</u> 20% of total cover: <u>13.00</u>																		
Sapling Stratum (Plot size: _____ )																		
1. _____				<b>Hydrophytic Vegetation Indicators:</b> <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  </u> 2 - Dominance Test is >50% <u>  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
50% of total cover: _____ 20% of total cover: _____																		
Shrub Stratum (Plot size: <u>15 ft r</u> )																		
1. <u>Ilex vomitoria</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>10</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>														
50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Herb Stratum (Plot size: _____ )																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
_____ = Total Cover																		
50% of total cover: _____ 20% of total cover: _____																		
Woody Vine Stratum (Plot size: _____ )																		
1. <u>Lonicera japonica</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
<u>10</u> = Total Cover																		
50% of total cover: <u>5.00</u> 20% of total cover: <u>2.00</u>																		
Remarks: (If observed, list morphological adaptations below).																		

## SOIL

Sampling Point: DPA011U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 9	10YR 2/2	100					Loam	
9 - 24	7.5YR 4/8	100					Clay	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> <b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA012U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.222547 Long: -94.703846 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Scrub shrub upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA012U

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: <u>15 ft r</u> )</b>				
1. <u>Baccharis halimifolia</u>	<u>80</u>	<u>✓</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>80</u> = Total Cover				
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>				
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>				
1. <u>Carex cherokeensis</u>	<u>70</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Rubus argutus</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>				
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>				
1. <u>Lonicera japonica</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>30</u> = Total Cover				
50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
  
 Total Number of Dominant Species Across All Strata: 4 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 75.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>70</u>	x 2 = <u>140</u>
FAC species <u>110</u>	x 3 = <u>330</u>
FACU species <u>30</u>	x 4 = <u>120</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>210</u> (A)	<u>590</u> (B)

Prevalence Index = B/A = 2.80

**Hydrophytic Vegetation Indicators:**  
   1 - Rapid Test for Hydrophytic Vegetation  
✓ 2 - Dominance Test is >50%  
   3 - Prevalence Index is ≤3.0<sup>1</sup>  
   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**      Yes ✓      No



## SOIL

Sampling Point: DPA012U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 3/6	100					Sandy Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ Organic Bodies (A6) **(LRR P, T, U)**  
☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**  
☐ Muck Presence (A8) **(LRR U)**  
☐ 1 cm Muck (A9) **(LRR P, T)**  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Coast Prairie Redox (A16) **(MLRA 150A)**  
☐ Sandy Mucky Mineral (S1) **(LRR O, S)**  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**  
☐ Thin Dark Surface (S9) **(LRR S, T, U)**  
☐ Loamy Mucky Mineral (F1) **(LRR O)**  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Marl (F10) **(LRR U)**  
☐ Depleted Ochric (F11) **(MLRA 151)**  
☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**  
☐ Umbric Surface (F13) **(LRR P, T, U)**  
☐ Delta Ochric (F17) **(MLRA 151)**  
☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**  
☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**  
☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**  
☐ 2 cm Muck (A10) **(LRR S)**  
☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**  
☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**  
☐ Anomalous Bright Loamy Soils (F20)  
**(MLRA 153B)**  
☐ Red Parent Material (TF2)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA013W  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.222063 Long: -94.703581 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PSS WA005</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		____ Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> High Water Table (A2)	____ Marl Deposits (B15) <b>(LRR U)</b>	____ Drainage Patterns (B10)
____ Saturation (A3)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
____ Water Marks (B1)	____ Oxidized Rhizospheres along Living Roots (C3)	____ Dry-Season Water Table (C2)
____ Sediment Deposits (B2)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Drift Deposits (B3)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Saturation Visible on Aerial Imagery (C9)
____ Algal Mat or Crust (B4)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
____ Iron Deposits (B5)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
____ Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
____ Water-Stained Leaves (B9)		____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		
Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>4</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>8</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA013W**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
		_____ = Total Cover		
50% of total cover: _____		20% of total cover: _____		
<b>Sapling Stratum</b> (Plot size: <u>15 ft r</u> )				
1. <u>Salix nigra</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
		<u>40</u> = Total Cover		
50% of total cover: <u>20.00</u>		20% of total cover: <u>8.00</u>		
<b>Shrub Stratum</b> (Plot size: <u>15 ft r</u> )				
1. <u>Baccharis halimifolia</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
		<u>60</u> = Total Cover		
50% of total cover: <u>30.00</u>		20% of total cover: <u>12.00</u>		
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )				
1. <u>Juncus effusus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. <u>Rubus argutus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
		<u>40</u> = Total Cover		
50% of total cover: <u>20.00</u>		20% of total cover: <u>8.00</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
		_____ = Total Cover		
50% of total cover: _____		20% of total cover: _____		
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)  
  
 Total Number of Dominant Species Across All Strata: 4 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>60</u>	x 1 = <u>60</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>80</u>	x 3 = <u>240</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>140</u> (A)	<u>300</u> (B)

Prevalence Index = B/A = 2.14

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**      Yes ☒      No ☐

**SOIL**

Sampling Point: DPA013W

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 5/1	70	10YR 6/8	30	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA014U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.221952 Long: -94.703625 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Scrub shrub upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA014U**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: 15 ft r _____ )</b>				
1. <i>Baccharis halimifolia</i>	40	✓	FAC	
2. <i>Pinus taeda</i>	5		FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
45 = Total Cover				
50% of total cover: 22.50 20% of total cover: 9.00				
<b>Herb Stratum (Plot size: 5 ft r _____ )</b>				
1. <i>Cynodon dactylon</i>	50	✓	FACU	
2. <i>Schizachyrium scoparium</i>	30	✓	FACU	
3. <i>Carex cherokeensis</i>	20	✓	FACW	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
50% of total cover: 50.00 20% of total cover: 20.00				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
  
 Total Number of Dominant Species Across All Strata: 4 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>45</u>	x 3 = <u>135</u>
FACU species <u>80</u>	x 4 = <u>320</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>145</u> (A)	<u>495</u> (B)

Prevalence Index = B/A = 3.41

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation  
 \_\_\_ 2 - Dominance Test is >50%  
 \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No ✓

**SOIL**

Sampling Point: DPA014U

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 5/6	100					Clay	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: compact  
Depth (inches): 10

Hydric Soil Present? Yes ☐ No ☒

Remarks:

**compact with roots and wood debris.**

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA015U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.222438 Long: -94.703441 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Scrub shrub upland</b>	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) (LRR U)	_____ Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) (LRR T, U)
Field Observations:		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA015U

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. <u>Baccharis halimifolia</u>	50	✓	FAC	
2. <u>Pinus taeda</u>	10		FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
60 = Total Cover				
50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>				
<b>Herb Stratum (Plot size: _____ )</b>				
1. <u>Cynodon dactylon</u>	50	✓	FACU	
2. <u>Schizachyrium scoparium</u>	20	✓	FACU	
3. <u>Carex cherokeensis</u>	10		FACW	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
80 = Total Cover				
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
  
 Total Number of Dominant Species Across All Strata: 3 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>60</u>	x 3 = <u>180</u>
FACU species <u>70</u>	x 4 = <u>280</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>140</u> (A)	<u>480</u> (B)

Prevalence Index = B/A = 3.42

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation  
 \_\_\_ 2 - Dominance Test is >50%  
 \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No ✓

## SOIL

Sampling Point: DPA015U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 5/6	100					Clay	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ Organic Bodies (A6) **(LRR P, T, U)**  
☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**  
☐ Muck Presence (A8) **(LRR U)**  
☐ 1 cm Muck (A9) **(LRR P, T)**  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Coast Prairie Redox (A16) **(MLRA 150A)**  
☐ Sandy Mucky Mineral (S1) **(LRR O, S)**  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7) **(LRR P, S, T, U)**

☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**  
☐ Thin Dark Surface (S9) **(LRR S, T, U)**  
☐ Loamy Mucky Mineral (F1) **(LRR O)**  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Marl (F10) **(LRR U)**  
☐ Depleted Ochric (F11) **(MLRA 151)**  
☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**  
☐ Umbric Surface (F13) **(LRR P, T, U)**  
☐ Delta Ochric (F17) **(MLRA 151)**  
☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**  
☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**  
☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

☐ 1 cm Muck (A9) **(LRR O)**  
☐ 2 cm Muck (A10) **(LRR S)**  
☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**  
☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**  
☐ Anomalous Bright Loamy Soils (F20)  
**(MLRA 153B)**  
☐ Red Parent Material (TF2)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**Type: compactDepth (inches): 10Hydric Soil Present? Yes ☐ No ☒

Remarks:

**Compact with roots and wood debris.**

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA016W  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0  
Subregion (LRR or MLRA): J 87B Lat: 33.222478 Long: -94.703407 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PSS WA006</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	_____ Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>4</u>		
Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>8</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA016W**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum</b> (Plot size: <u>30 ft r</u> )				
1. <u>Salix nigra</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>				
<b>Shrub Stratum</b> (Plot size: <u>15 ft r</u> )				
1. <u>Baccharis halimifolia</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>30.00</u> 20% of total cover: <u>12.00</u>				
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )				
1. <u>Juncus effusus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. <u>Rubus argutus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>				
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>60</u>	x 1 = <u>60</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>80</u>	x 3 = <u>240</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>140</u> (A)	<u>300</u> (B)

Prevalence Index = B/A = 2.14

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

## SOIL

Sampling Point: DPA016W**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 5/1	70	10YR 6/8	30	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA017W  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.221587 Long: -94.704651 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PSS WA002</b>	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> High Water Table (A2)	_____ Marl Deposits (B15) (LRR U)	_____ Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>4</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: **DPA017W**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling Stratum (Plot size: 15 ft r _____ )</b>				
1. <u>Salix nigra</u>	40	✓	OBL	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
40 = Total Cover				
50% of total cover: 20.00 20% of total cover: 8.00				
<b>Shrub Stratum (Plot size: 15 ft r _____ )</b>				
1. <u>Baccharis halimifolia</u>	60	✓	FAC	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
60 = Total Cover				
50% of total cover: 30.00 20% of total cover: 12.00				
<b>Herb Stratum (Plot size: 5 ft r _____ )</b>				
1. <u>Juncus effusus</u>	20	✓	OBL	
2. <u>Rubus argutus</u>	20	✓	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
40 = Total Cover				
50% of total cover: 20.00 20% of total cover: 8.00				
<b>Woody Vine Stratum (Plot size: 30 ft r _____ )</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 133.33 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>60</u>	x 1 = <u>60</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>80</u>	x 3 = <u>240</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>140</u> (A)	<u>300</u> (B)

Prevalence Index = B/A = 2.14

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

## SOIL

Sampling Point: DPA017W**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 5/1	70	10YR 6/8	30	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR O</b> )
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR S</b> )
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR O</b> )	<input type="checkbox"/> Reduced Vertic (F18) ( <b>outside MLRA 150A,B</b> )
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>LRR P, S, T</b> )
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> ( <b>MLRA 153B</b> )
<input type="checkbox"/> 5 cm Mucky Mineral (A7) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) ( <b>LRR U</b> )	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR P, T</b> )	<input type="checkbox"/> Marl (F10) ( <b>LRR U</b> )	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) ( <b>MLRA 151</b> )	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) ( <b>LRR O, P, T</b> )	
<input type="checkbox"/> Coast Prairie Redox (A16) ( <b>MLRA 150A</b> )	<input type="checkbox"/> Umbric Surface (F13) ( <b>LRR P, T, U</b> )	
<input type="checkbox"/> Sandy Mucky Mineral (S1) ( <b>LRR O, S</b> )	<input type="checkbox"/> Delta Ochric (F17) ( <b>MLRA 151</b> )	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) ( <b>MLRA 150A, 150B</b> )	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>MLRA 149A</b> )	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) ( <b>MLRA 149A, 153C, 153D</b> )	
<input type="checkbox"/> Dark Surface (S7) ( <b>LRR P, S, T, U</b> )		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Morris County Generating Station City/County: Morris County Sampling Date: 2024-02-27  
Applicant/Owner: Arkansas Electric Cooperative Corporation State: Texas Sampling Point: DPA018U  
Investigator(s): R. Erwin and K. Mahmoud Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
Subregion (LRR or MLRA): J 87B Lat: 33.221655 Long: -94.704649 Datum: WGS 84  
Soil Map Unit Name: Woodtell fine sandy loam, 5 to 20 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Scrub Shrub Upland</b>	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		____ Surface Soil Cracks (B6)
____ Surface Water (A1)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
____ High Water Table (A2)	____ Marl Deposits (B15) <b>(LRR U)</b>	____ Drainage Patterns (B10)
____ Saturation (A3)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
____ Water Marks (B1)	____ Oxidized Rhizospheres along Living Roots (C3)	____ Dry-Season Water Table (C2)
____ Sediment Deposits (B2)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
____ Drift Deposits (B3)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Saturation Visible on Aerial Imagery (C9)
____ Algal Mat or Crust (B4)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
____ Iron Deposits (B5)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
____ Inundation Visible on Aerial Imagery (B7)		____ FAC-Neutral Test (D5)
____ Water-Stained Leaves (B9)		____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DPA018U

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____
<b>Sapling Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____
<b>Shrub Stratum</b> (Plot size: <u>15 ft r</u> )				
1. <u>Baccharis halimifolia</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. <u>Ilex vomitoria</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. <u>Pinus taeda</u>	<u>5</u>		<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
				<u>45</u> = Total Cover
				50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>
<b>Herb Stratum</b> (Plot size: _____ )				
1. <u>Schizachyrium scoparium</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
2. <u>Cynodon dactylon</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
3. <u>Ambrosia artemisiifolia</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
4. <u>Carex cherokeensis</u>	<u>10</u>		<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>100</u> = Total Cover
				50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
  
 Total Number of Dominant Species Across All Strata: 5 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 40.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>45</u>	x 3 = <u>135</u>
FACU species <u>90</u>	x 4 = <u>360</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>145</u> (A)	<u>515</u> (B)

Prevalence Index = B/A = 3.55

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation  
 \_\_\_ 2 - Dominance Test is >50%  
 \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No ☒

## SOIL

Sampling Point: DPA018U**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 24	10YR 5/6	100					Clay	
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> <b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## **APPENDIX C – REPRESENTATIVE PHOTOGRAPHS**

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Photograph C-1: Representative view of DPA010U, an herbaceous upland, camera facing south.



Photograph C-2: Representative view of DPA012U, a scrub-shrub upland, camera facing north.





Photograph C-3: Representative view of DPA006U, a forested upland, camera facing north.



Photograph C-4: View of DPA001W, PEM wetland WA001, camera facing west.





Photograph C-5: View of DPA007W, PEM wetland WA003, camera facing west.



Photograph C-6: View of DPA009W, PEM wetland WA004, camera facing west.





Photograph C-7: View of DPA017W, PSS wetland WA002, camera facing east.



Photograph C-8: View of DPA013W, PSS wetland WA005, camera facing east.





Photograph C-9: View of DPA016W, PSS wetland WA006, camera facing west.



Photograph C-10: View of ephemeral stream SA001, camera facing south.





Photograph C-11: View of ephemeral stream SA003, camera facing south.



Photograph C-12: View of ephemeral stream SA004, camera facing south.





Photograph C-13: View of intermittent stream SA005, camera facing north.



Photograph C-14: View of Mary Lees Branch, an Intermittent stream SA007, camera facing north.





Photograph C-15: View PUB pond PA001, camera facing north.



Photograph C-16: View of PUB pond PA002, camera facing west.



Photograph C-17: View of PUB pond PA003, camera facing west.

## **APPENDIX D – SOIL SURVEY REPORT**

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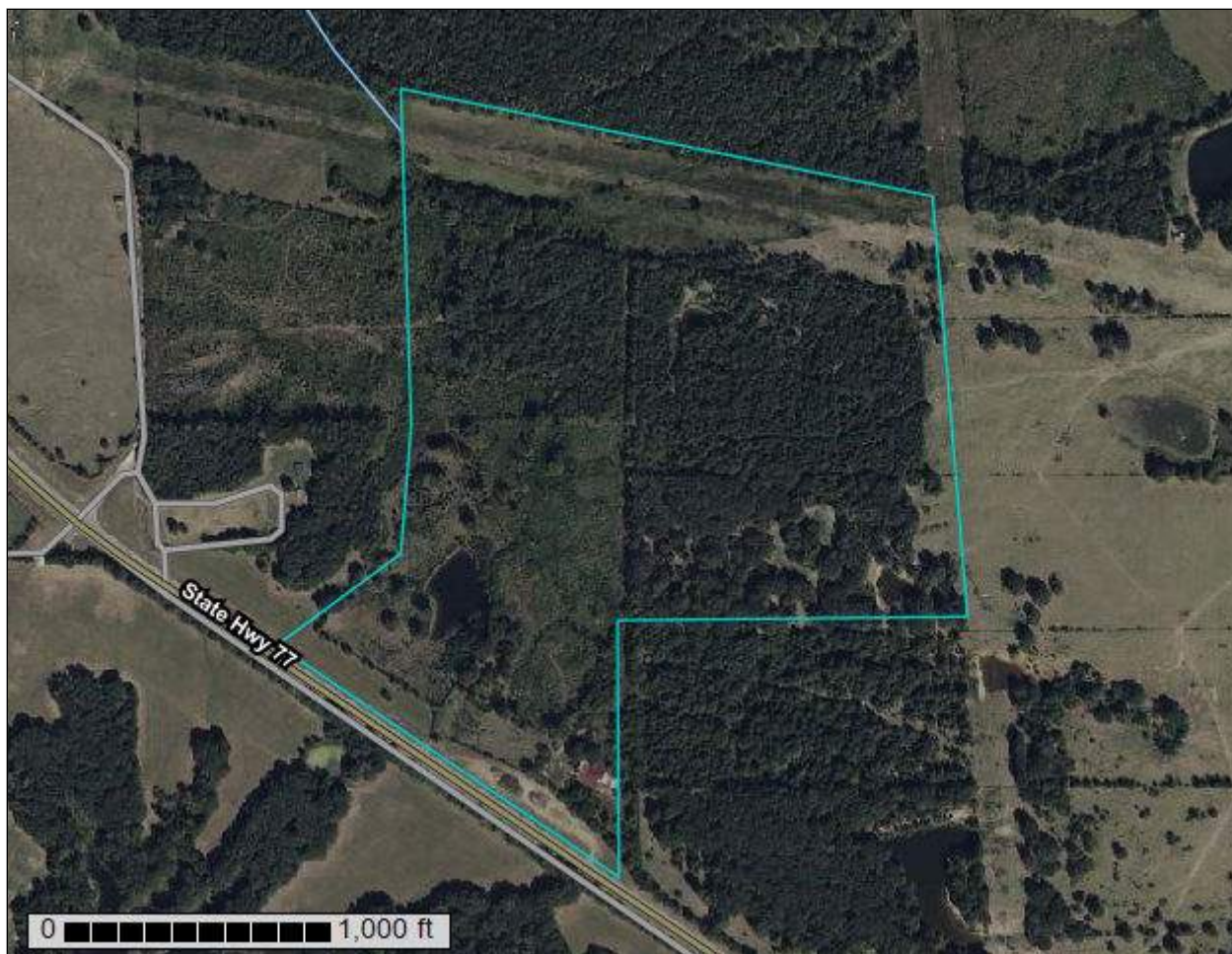
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Camp, Franklin, Morris, and Titus Counties, Texas



March 5, 2024

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

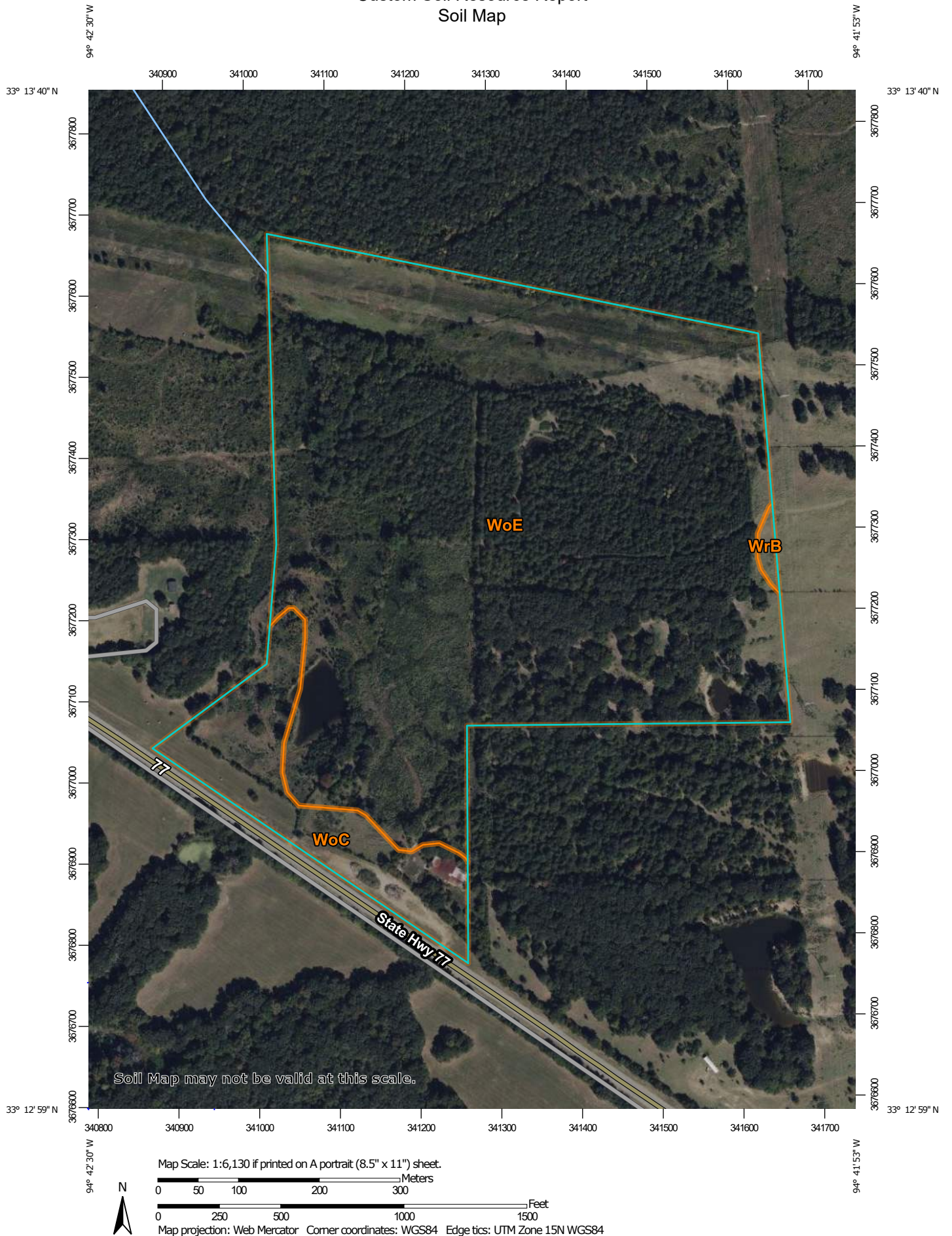
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map





# Custom Soil Resource Report

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

### Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry


 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

### Water Features

 Streams and Canals


### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Camp, Franklin, Morris, and Titus Counties, Texas  
Survey Area Data: Version 20, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
WoC	Woodtell fine sandy loam, 2 to 5 percent slopes	10.7	10.7%
WoE	Woodtell fine sandy loam, 5 to 20 percent slopes	88.9	88.8%
WrB	Woodtell-Raino complex, 1 to 3 percent slopes	0.4	0.4%
<b>Totals for Area of Interest</b>		<b>100.0</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Camp, Franklin, Morris, and Titus Counties, Texas

### WoC—Woodtell fine sandy loam, 2 to 5 percent slopes

#### Map Unit Setting

*National map unit symbol:* mbhy  
*Elevation:* 300 to 650 feet  
*Mean annual precipitation:* 40 to 46 inches  
*Mean annual air temperature:* 63 to 68 degrees F  
*Frost-free period:* 230 to 270 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Woodtell and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Woodtell

##### Setting

*Landform:* Ridges  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale in the wilcox and cook mountain formations of eocene age

##### Typical profile

*H1 - 0 to 6 inches:* fine sandy loam  
*H2 - 6 to 47 inches:* clay  
*H3 - 47 to 80 inches:* clay

##### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* 40 to 60 inches to densic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 6.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* D  
*Ecological site:* R087BY002TX - Claypan Savannah  
*Hydric soil rating:* No

#### Minor Components

##### Freestone

*Percent of map unit:* 5 percent

## Custom Soil Resource Report

*Landform:* Interfluves  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* R087BY003TX - Sandy Loam  
*Hydric soil rating:* No

### **Bernaldo**

*Percent of map unit:* 5 percent  
*Landform:* Stream terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* F133BY013TX - Terrace  
*Hydric soil rating:* No

## **WoE—Woodtell fine sandy loam, 5 to 20 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2wg9g  
*Elevation:* 240 to 550 feet  
*Mean annual precipitation:* 45 to 48 inches  
*Mean annual air temperature:* 63 to 64 degrees F  
*Frost-free period:* 233 to 248 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Woodtell and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Woodtell**

#### **Setting**

*Landform:* Ridges  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Stratified loamy residuum weathered from sandstone and shale  
and/or stratified clayey residuum weathered from sandstone and shale

#### **Typical profile**

*A - 0 to 7 inches:* fine sandy loam  
*Btss - 7 to 26 inches:* clay  
*BC - 26 to 54 inches:* clay loam  
*C - 54 to 72 inches:* clay loam

#### **Properties and qualities**

*Slope:* 5 to 20 percent

## Custom Soil Resource Report

*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 1.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 9.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* R087BY002TX - Claypan Savannah  
*Hydric soil rating:* No

### Minor Components

#### Freestone

*Percent of map unit:* 10 percent  
*Landform:* Stream terraces  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Ecological site:* R087BY003TX - Sandy Loam  
*Hydric soil rating:* No

#### Wolfpen

*Percent of map unit:* 5 percent  
*Landform:* Ridges  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* R087BY004TX - Sandy  
*Hydric soil rating:* No

## WrB—Woodtell-Raino complex, 1 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* mbj0  
*Elevation:* 250 to 650 feet  
*Mean annual precipitation:* 40 to 48 inches  
*Mean annual air temperature:* 63 to 70 degrees F  
*Frost-free period:* 230 to 275 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Woodtell and similar soils: 50 percent*

*Raino and similar soils: 30 percent*

*Minor components: 20 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Woodtell

#### Setting

*Landform: Ridges*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Interfluve*

*Down-slope shape: Linear*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from sandstone and shale in the Wilcox and Cook Mountain formations of Eocene age*

#### Typical profile

*H1 - 0 to 12 inches: loam*

*H2 - 12 to 49 inches: clay*

*H3 - 49 to 60 inches: clay*

#### Properties and qualities

*Slope: 1 to 3 percent*

*Depth to restrictive feature: 40 to 60 inches to dense bedrock*

*Drainage class: Well drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: D*

*Ecological site: R087BY002TX - Claypan Savannah*

*Hydric soil rating: No*

### Description of Raino

#### Setting

*Landform: Stream terraces*

*Landform position (three-dimensional): Tread*

*Microfeatures of landform position: Mounds*

*Down-slope shape: Linear*

*Across-slope shape: Convex*

*Parent material: Loamy alluvium of Pleistocene age derived from mixed sources*

#### Typical profile

*H1 - 0 to 23 inches: loam*

*H2 - 23 to 32 inches: loam*

*H3 - 32 to 69 inches: loam*

*H4 - 69 to 80 inches: clay*



## Custom Soil Resource Report

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* About 24 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Sodium adsorption ratio, maximum:* 2.0  
*Available water supply, 0 to 60 inches:* High (about 10.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* C  
*Ecological site:* R087BY002TX - Claypan Savannah  
*Hydric soil rating:* No

### Minor Components

#### Derly

*Percent of map unit:* 10 percent  
*Landform:* Depressions on stream terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Ecological site:* R087BY001TX - Depression  
*Hydric soil rating:* Yes

#### Talco

*Percent of map unit:* 5 percent  
*Landform:* Stream terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* F133BY001TX - Depression  
*Hydric soil rating:* Yes

#### Freestone

*Percent of map unit:* 5 percent  
*Landform:* Interfluves  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* R087BY003TX - Sandy Loam  
*Hydric soil rating:* No

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**APPENDIX E – NRCS CLIMATE ANALYSIS FOR WETLANDS TABLE**

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WETS Station: MOUNT PLEASANT, TX

\* Percent chance of the growing season occurring between the Beginning and Ending dates.

[illegible]

1918			M0.77	7.21	2.19	1.98	0.50	5.78	2.09	3.76	6.68	6.30	37.26
1919	2.71	2.68	3.16	4.01	3.53	2.73	1.77	5.74	5.10	12.69	6.51	1.70	52.33
1920	8.46	1.52	4.52	2.46	7.32	2.92	6.44	3.32	1.70	4.85	1.55	3.80	48.86
1921	3.32	1.20	4.70	6.88	1.71	6.68	4.52	2.61	2.48	0.05	2.45	2.35	38.95
1922	3.35	4.60	7.20	5.55	3.45	5.15	1.55	4.60	0.05	1.70	2.68	0.75	40.63
1923	11.30	4.02	2.92	5.10	1.45	2.20	0.09	0.69	5.05	3.82	2.62	6.02	45.28
1924	3.49	2.30	1.84	2.63	3.96	0.46	0.27	1.94	3.61	0.10	2.35	1.78	24.73
1925	2.85	1.73	2.75	6.91	2.35	1.11	2.30	0.05	0.60	6.65	3.56	0.65	31.51
1926	5.75	1.85	8.00	3.71	1.91	4.20	9.56	2.32	1.22	6.49	1.65	7.91	54.57
1927	3.18	3.04	5.25	7.02	2.22	4.85	4.15	2.67	2.56	6.62	3.14	5.04	49.74
1928	1.92	2.57	1.35	6.04	6.09	6.57	2.45	2.84	0.20	6.33	5.48	5.93	47.77
1929	4.57	3.93	2.34	3.54	7.30	0.90	1.05	0.52	3.72	2.92	2.46	2.66	35.91
1930	5.01	4.33	2.95	2.79	16.38	1.58	0.72	1.16	1.43	5.15	5.47	2.64	49.61
1931	0.94	3.72	4.91	2.22	1.79	2.17	5.10	3.71	1.14	2.72	3.77	7.23	39.42
1932	11.10	4.78	3.30	2.60	1.65	1.29	6.08	0.08	2.39	1.68	1.02	8.46	44.43
1933	4.37	3.90	3.57	3.98	3.22	0.10	9.06	2.71	2.67	1.58	0.90	4.02	40.08
1934	2.39	3.05	6.42	4.84	3.50	1.34	0.00	0.00	2.44	0.65	6.37	3.86	34.86
1935	4.54	2.52	2.77	6.42	9.92	3.42	0.82	1.32	3.03	6.34	3.84	2.40	47.34
1936	0.50	0.00	1.33	1.61	4.68	0.00	4.79	0.51	4.98	2.58	1.10	3.95	26.03
1937	7.13	2.06	5.01	3.38	2.87	M3.53	2.11	3.77	0.66	2.69	5.02	8.23	46.46
1938	10.73	3.50	5.90	6.22	2.81	2.97	2.71	3.32	2.79	0.53	2.82	2.47	46.77
1939	3.82	7.42	2.73	3.65	3.83	2.44	0.34	1.16	0.28	1.20	4.77	2.77	34.41
1940	0.90	3.10	3.38	6.47	4.83	3.61	4.59	3.35	2.12	2.23	6.32	3.89	44.79
1941	1.11	2.87	4.61	4.90	3.33	8.93	4.12	4.54	2.57	3.08	3.75	4.35	48.16
1942	1.78	1.08	2.94	8.93	3.13	4.53	0.47	6.28	3.01	2.38	1.23	5.22	40.98
1943	0.94	1.45	2.92	1.14	6.21	2.90	2.79	2.30	3.00	3.30	0.24	3.69	30.88
1944	4.38	5.79	4.20	5.81	9.33	1.32	1.89	6.52	0.57	0.00	8.84	7.82	56.47
1945	1.81	7.37	17.12	3.10	4.75	10.54	3.79	3.80	1.58	5.84	2.59	1.58	63.87
1946	6.92	4.85	3.04	5.17	14.09			3.38	1.58		11.48		50.51
1947	2.35	0.94	5.19	5.10	2.75	2.42	0.44	M3.47	8.15	1.84	7.67	6.10	46.42
1948	M3.88	3.07	3.10	3.82	11.86	0.32	2.65	2.03	2.53	2.63	4.31	2.30	42.50
1949	9.07	2.57	3.36	4.40	M0.17			M0.00	M1.22	M0.80	M0.25	1.30	23.14
1950	M3.91			M1.45	11.83	1.49	5.67	1.65	11.32	0.91	0.27	0.12	38.62
1951	4.73	4.76	2.51	2.35	2.28	4.31	3.90	0.21	5.60	2.43	2.01	1.49	36.58

1952	4.76		M0.72	8.67	6.94	0.55	2.85	0.83	0. 36	0. 18	8.23	5.27 39. 36	
1953	3.37	1.59	2.87	5.55	5.68	0.59	6.03	1.93	2. 12	2. 70	2.96	5.56 40. 95	
1954	3.42	M0.48	0.71	1.18	7.89	1.32	0.77	0.91	1. 05	8. 28	1.81	3.25 31. 07	
1955	1.81	2.40	3.66	4.21	2.59	0.47	2.66	7.35	1. 90	5. 71	1.17	1.29 35. 22	
1956	1.96	7.28	0.83	2.60	2.77	1.64	1.50	2.97	0. 06	1. 91	3.98	1.41 28. 91	
1957	2.93	2.78	6.14	10.21	6.93	4.41	0.85	1.38	7. 84	7. 23	9.43	3.04 63. 17	
1958	3.57	1.02	4.40	11.60	5.03	7.74	7.77	4.73	5. 48	2. 10	5.84	1.03 60. 31	
1959	0.40	3.44	3.05	3.87	4.68	3.14	5.61	3.62	1. 97	4. 86	1.30	6.71 42. 65	
1960	5.84	3.30	2.28	1.19	3.45	7.48	3.10	1.96	9. 21	4. 15	1.70	7.56 51. 22	
1961	2.43	2.85	5.30	1.23	3.22	4.45	3.27	5.24	2. 38	2. 19	7.00	M5. 87 45. 43	
1962	4.71	3.20	3.14	4.49	1.43	6.91	1.94	1.14	4. 59	5. 79	5.17	1.33 43. 84	
1963	1.40	0.30	2.69	6.30	3.33	2.54	6.79	1.70	1. 90	1. 00	3.22	2.29 33. 46	
1964	1.21	2.87	5.29	5.86	2.58	2.38	1.48	7.08		0. 14	3.44	1.11 33. 44	
1965	2.54	9.19	2.20	1.50	8.48		1.09	2.72	4. 28	0. 91	1.50		34. 41
1966	3.34	5.36	0.95		4.71	0.91	3.89	5.70	4. 25	2. 93	1.55	4.47 38. 06	
1967	1.84	2.29	2.18	7.83	9.34	2.63	2.60	1.77	6. 83	4. 74	1.98	6.67 50. 70	
1968	5.74	2.13	4.73	5.11	7.88	7.88	2.10	0.86	9. 85	1. 93	6.16	4.08 58. 45	
1969	2.82	6.41	7.43	3.70	4.99	0.37	0.78	0.35	2. 56	4. 56	1.94	5.52 41. 43	
1970	1.51	5.46	5.56	7.64	4.08	2.34	0.10	3.30	3. 15	7. 21	2.07	2.25 44. 67	
1971	0.66	3.70	1.67	2.14	1.95	0.72	9.77	2.68	1. 25	4. 25	5.14	9.85 43. 78	
1972	3.92	0.52	2.40	2.01	2.06	8.18	1.96	0.91	3. 45	7. 10	5.88	4.78 43. 17	
1973	3.65	3.50	7.47	7.95	2.47	8.48	3.48	0.61	9. 01	11. 84	5.98	4.06 68. 50	
1974	3.24	1.17	1.21	6.07	2.49	6.74	3.39	5.75	14. 41	3. 73	8.92	4.12 61. 24	
1975	2.17	7.15	4.79	3.40	8.88	4.80	1.06	1.17	0. 68	0. 57	1.57	2.77 39. 01	
1976	1.35	2.27	8.11	4.61	5.66	3.92	5.65	0.83	3. 89	3. 80	1.09	2.92 44. 10	
1977	2.82	4.10	6.57	5.62	1.00	2.08	1.40	3.78	1. 55	0. 28	7.30	1.96 38. 46	
1978	3.50	2.83	4.03	1.62	3.00	3.04	2.15	0.97	0. 50	0. 69	9.14	2.45 33. 92	
1979		3.19	7.27	4.54	5.16	3.46	6.36	6.45	8. 59	2. 45	1.80	2.94 52. 21	
1980	6.05	1.99	2.74	5.71	4.65	5.27	3.86	2.44	6. 01	2. 99	4.02	2.00 47. 73	
1981	0.90	2.45	2.79	0.99	11.52	8.26	3.01	1.67	2. 87	9. 97	1.99	0.53 46. 95	
1982	2.71	2.37	1.59	3.48	9.00	7.42	6.30	M2.15	1. 44	2. 23	7.50	10. 98 57. 17	
1983	0.23	3.67	4.78	1.16	3.24	3.71	1.38	2.38	0. 46	2. 28	2.85	3.39 29. 53	
1984	1.58	2.93	4.52	1.43	3.07	2.36	2.54	1.84	2. 52	14. 16	3.14	4.05 44. 14	
1985	2.05	4.69	4.75	3.92	6.87	3.52	3.47	0.67	0. 87	9. 52	4.72	5.10 50. 15	



1986	0.43	6.26	1.03	5.83	6.05	6.83	1.77	0.33	4.00	4.26	5.01	3.56	45.36
1987	3.15	6.62	M8.52	0.16	2.27	3.57	M3.49	0.27	1.71	4.16	7.34	M9.51	50.77
1988	M1.56	4.01	4.55	1.98	0.18	1.54	5.72	2.52			9.40	2.94	34.40
1989	2.63	5.24	3.84	0.90	13.93	9.93	7.75	2.75	0.71	1.77	0.63	0.57	50.65
1990	6.67	3.04	10.40	5.33	10.41	1.97		1.00	4.10	3.12	7.70	4.44	58.18
1991	4.90	4.42	1.78	6.52			3.42	1.95	4.46	6.77	2.86	6.88	43.96
1992	3.32	4.06	5.52	1.58	3.44	12.23	12.61	0.83	5.71	2.35	5.73	7.38	64.76
1993	5.09	M2.90	4.88	M4.81	7.74	2.51	0.10	1.94	4.87	9.33	3.09	2.65	49.91
1994	2.60	M2.13	4.88	0.86	7.68	2.04	7.35	M1.24	1.13	9.97	10.46	7.31	57.65
1995	M6.86	2.50	2.50	9.26	5.15	2.51	3.49	0.75	4.06	0.98	1.85	1.88	41.79
1996	2.70	1.00	3.33	2.41	2.20	4.70	4.51	8.56	2.87	4.55	5.47	3.64	45.94
1997	1.45	9.49	4.21	9.25	2.54	6.39	1.40	3.63	1.38	4.84	3.21	5.34	53.13
1998	5.87	5.38	2.88	2.59	0.81	1.15	0.16	0.87	6.23	6.56	5.32	4.27	42.09
1999	7.42	0.34	5.57	3.62	6.17	4.25	0.33	0.46	2.35	1.91	1.63	6.38	40.43
2000	3.01	2.27	4.01	3.94	8.30	10.23	0.52	0.05	2.59	2.85	11.27	M6.03	55.07
2001	4.91	10.04	8.28	1.80	8.81	M3.02	1.70	4.43	M6.32	4.68	2.53	6.72	63.24
2002	2.89	2.21	M6.41	5.97	4.05	M1.05	3.17	1.21	1.70	7.68	1.12	5.53	42.99
2003	0.02	M4.15	1.43	1.75	3.15	4.41	2.64	3.64	2.59	1.90	3.10	2.79	31.57
2004	0.68	8.10	3.61	4.16	4.36	10.11	0.66	2.25	2.70	4.15	4.45	2.61	47.84
2005	4.10	2.65	2.84	3.23	0.84	0.10	2.94	2.22	2.07	0.46	2.24	0.72	24.41
2006	4.09	3.29	6.53	2.90	0.98	2.48	0.49	1.56	1.14	3.40	2.76	5.04	34.66
2007	8.78	1.03	0.57	2.11	8.94	8.21	9.92	0.37	3.89	M1.69	M0.00	4.13	49.64
2008	1.78	4.27	8.05	5.78	6.46	5.19	0.00	6.72	6.22	3.03	2.66	2.00	52.16
2009	1.95	0.79	4.83	5.98	10.19	1.15	7.77	6.63	6.67	17.00	1.77	2.02	66.75
2010	2.62	4.46	3.45	1.97	2.38	5.10	4.95	1.05	1.38	3.42	2.25	1.67	34.70
2011	2.43	2.35	0.60	3.46	1.50	1.97	0.04	0.74	1.89	2.12	3.12	7.26	27.48
2012	4.81	3.21	6.57	M4.11	4.34	3.42	4.05	2.91	2.17	2.11	2.93	4.63	45.26
2013	2.75	M2.86	0.76	3.74	3.84	4.03	0.58	0.61	9.89	6.17	3.95	4.20	43.38
2014	2.84	3.76	3.11	3.92	6.22	2.89	1.44	1.15	2.27	4.07	2.21	3.77	37.65
2015	4.37	4.16	8.00	6.39	9.59	4.51	0.94	0.69	3.55	M0.97	12.83	13.75	69.75
2016	1.25	3.53	7.49	10.59	1.27	5.14	0.16	8.01	1.52	0.37	3.01	5.93	48.27
2017	M4.20	2.58	2.09	8.45	4.55	3.69	M4.29	8.38	0.21	1.99	1.50	4.62	46.55
2018	1.19	8.62	5.42	3.56	1.62	3.43	1.66	1.66	9.82	5.70	5.55	9.24	57.47
2019	3.65	3.11	3.01	7.70	13.76	6.67	1.13	0.64	3.45	6.50	1.85	1.14	52.61

Monthly and Annual Data for 2020-2024														
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total	Annual Avg
2020	6.36	8.65	6.22	4.08	8.14	3.38	3.27	3.31	4.70	1.81	0.96	4.67	55.55	4.63
2021	7.54	3.68	4.18	4.26	12.74	1.15	5.24	1.49	0.02	1.66	1.88	2.76	46.60	3.89
2022	0.61	2.73	3.71	5.36	3.17	2.85	0.81	7.17	1.71	5.28	5.63	4.42	43.45	3.62
2023	2.94	4.46	3.73	5.81	2.78	9.62	3.88	0.00	1.32	5.66	2.73	3.57	46.50	3.88
2024	M5.37	M2.64	M0.16											8.17
Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.														
Data missing for all days in a month or year is blank.														
Creation date: 2024-03-05														

## **APPENDIX F – WETLAND AND WATERBODY TABLES**

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**Table F-1: Summary of Wetlands Identified Within the Project Area**

<b>Feature ID</b>	<b>Cowardin Classification<sup>a</sup></b>	<b>Area (acres)</b>	<b>USACE Jurisdiction<sup>b</sup></b>
WA001	PEM	0.19	Potential S404
WA002	PSS	0.13	S404
WA003	PEM	0.16	Not Likely
WA004	PEM	0.76	S404
WA005	PSS	0.25	Not Likely
WA006	PSS	0.24	Not Likely
	<b>PEM (3)</b>	<b>1.11</b>	
	<b>PSS (3)</b>	<b>0.62</b>	
	<b>Total (6)</b>	<b>1.73</b>	

(a) PEM = palustrine emergent wetland, PSS = palustrine scrub-shrub wetland

(b) USACE jurisdiction is based upon Burns & McDonnell professional judgement and does not constitute an approved jurisdictional determination from the USACE. S404 = Feature is an RPW or directly connected to an RPW, and potentially subject to jurisdiction under Section 404 of the CWA. Potential S404= Not directly connected, but potentially subject to jurisdiction under S404 of the CWA.

**Table F-2: Summary of Streams Identified Within the Project Area**

<b>Feature ID</b>	<b>Waterbody Name</b>	<b>Flow<sup>a</sup></b>	<b>OHWL Width (feet)<sup>b</sup></b>	<b>Length within Project Area (feet)</b>	<b>USACE Jurisdiction<sup>c</sup></b>
SA001	Unnamed stream	E	2	661	Not Likely
SA002	Unnamed stream	E	1	155	Not Likely
SA003	Tributary of Mary Lees Branch	E	1	629	Not Likely
SA004	Tributary of Mary Lees Branch	E	3	1,134	Not Likely
SA005	Tributary of Mary Lees Branch	I	5	1,235	S404
SA006	Tributary of Mary Lees Branch	E	2	77	Not Likely
SA007	Mary Lees branch	I	6	2,820	S404
SA008	Tributary of Mary Lees Branch	I	2	224	S404
SA009	Unnamed stream	E	2	457	Not Likely
SA010	Unnamed stream	E	2	142	Not Likely
SA011	Tributary of Mary Lees Branch	E	3	211	Not Likely
SA012	Unnamed stream	E	1	440	Not Likely
<b>Intermittent (3)</b>				<b>4,279</b>	
<b>Ephemeral (9)</b>				<b>3,906</b>	
<b>Total (12)</b>				<b>8,185</b>	

(a) E=Ephemeral, I=Intermittent

(b) Average waterbody width within survey area measured at the OHWM.

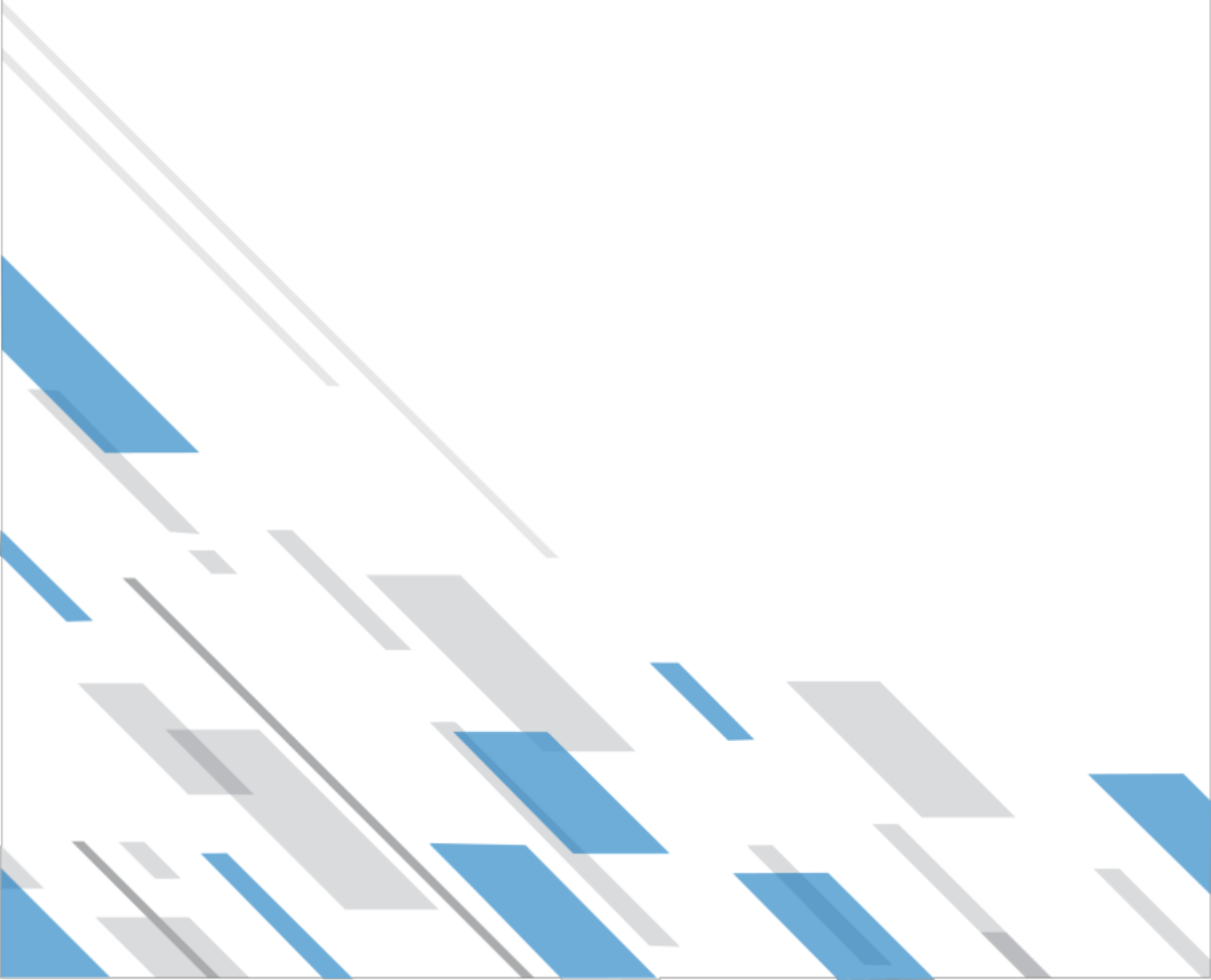
(c) USACE jurisdiction is based upon Burns & McDonnell professional judgement and does not constitute an approved jurisdictional determination from the USACE. S404 = Potentially subject to jurisdiction under Section 404 of the Clean Water Act.

**Table F-3: Ponds Identified within the Project Area**

<b>Feature ID</b>	<b>Cowardin Classification<sup>a</sup></b>	<b>Area (acres)</b>	<b>USACE Jurisdiction<sup>b</sup></b>
PA001	PUB	1.30	Potential S404
PA002	PUB	0.34	Not Likely
PA003	PUB	0.19	Not Likely
<b>Total (3)</b>		1.83	

(a) PUB = palustrine unconsolidated bottom. Note that PUB features may include wetland fringes along the margin.

(b) ) USACE jurisdiction is based upon Burns & McDonnell professional judgement and does not constitute an approved jurisdictional determination from the USACE. S404 = Feature is an RPW or directly connected to an RPW, and potentially subject to jurisdiction under Section 404 of the CWA. Potential S404= Not directly connected, but potentially subject to jurisdiction under S404 of the CWA.



## **Appendix C – Threatened and Endangered Species Report**

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ARKANSAS ELECTRIC COOPERATIVE  
CORPORATION

# NAPLES POWER PLANT

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THREATENED AND ENDANGERED  
SPECIES REPORT  
PROJECT NO. 164180

REVISION 0  
APRIL 2024

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## List of Abbreviations

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Abbreviation	Term/Phrase/Name
AECC	Arkansas Electric Cooperative Corporation
BGEPA	Bald and Golden Eagle Protection Act
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
ESA	Endangered Species Act
GPS	Global Positioning System
IPaC	Information Planning and Consultation
MBTA	Migratory Bird Treaty Act
NDD	Natural Diversity Database
Project	Naples Power Plant
Project Area	100-acre Project Area
T&E	Threatened and Endangered
TPWD	Texas Parks and Wildlife Department
USC	United States Code
USFWS	U.S Fish and Wildlife Service

## **Naples Power Plant T&E Species Report**

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**Arkansas Electric Cooperative Corporation  
Naples Power Plant  
Project No. 164180**

**Field Investigators:**

**Randall Erwin (Lead) and Kelli Mahmoud**

**Prepared by:**

**Kelli Mahmoud, Jared Jorgensen, and Mike Dyke**

**Burns & McDonnell Engineering Company, Inc.**

**Fort Worth, Texas**

## Executive Summary

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Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), on behalf of Arkansas Electric Cooperative Corporation, conducted a Threatened and Endangered Species survey of the proposed Naples Power Plant (Project) in Morris County, Texas. The Project consists of the construction of two simple cycle combustion turbines within a 100-acre area. The survey area is defined as the entire 100-acre Project area.

Fourteen federal- and state-listed species were identified as potentially occurring in Morris County. (USFWS, 2024a; TPWD, 2024a). Federally listed threatened or endangered species are unlikely to occur within the Project Area. A determination of “No Effect” is recommended for federally listed species at this time. The tricolored bat is proposed endangered, and the monarch butterfly is a federal candidate for listing as threatened or endangered that may occur in the project area.

The Project Area is within the general range of the bald eagle; however, there are no documented occurrences, and no eagles or eagle nests were observed within the Project Area; therefore, the Project will have no impact on the bald eagle. Habitat for golden eagles was generally absent within the Project Area. Impacts to bald or golden eagles are not anticipated for the proposed Project. Migratory Birds may be present within the Project Area for the proposed Project during the migratory bird nesting season.

Suitable habitats for state-listed threatened or endangered species are present with varying potential for occurrence. Bachman’s sparrow and the northern scarlet snake are state-listed threatened species that may occur in the Project Area.

## 1.0 Introduction

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Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by Arkansas Electric Cooperative Corporation (AECC) to provide a threatened and endangered species review for the proposed Naples Power Plant Project (Project) in Morris County, Texas (Figure A-1, Appendix A). The Project consists of the construction of two simple cycle combustion turbines within a 100-acre area. The project is located approximately 2 miles northwest of Naples, Texas, encompassing approximately 100 acres of land along the north side of highway 77 referred to herein as the Project Area. The Project is centrally located at 33.224435°, -94.704303° (datum WGS1984).

The Endangered Species Act (ESA) provides protection for plants and animals on the Secretary of the Interior's list of Threatened and Endangered (T&E) species by prohibiting the take of the listed species (16 United States Code [USC] § 1531–1543). Protection under the ESA may also include protection of habitat designated as critical habitat for supporting a listed species.

The ESA defines take as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct” (16 USC § 1532). Section 7 of the ESA states that it is the responsibility of federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence, or result in the destruction or adverse modification of habitat determined to be critical to the conservation of any such species.

Additional federal protections are placed upon the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) under the Bald and Golden Eagle Protection Act (BGEPA). Migratory Birds are protected under the Migratory Bird Treaty Act (MBTA).

Texas Parks and Wildlife Department (TPWD) provides protection for species that are indigenous to Texas that are listed as threatened or endangered by the ESA or the list of species threatened with statewide extinction as filed by the director of TPWD (5 TPWD Code § 68.002). State law states, “No person may capture, trap, take, or kill, or attempt to capture, trap, take, or kill, endangered fish or wildlife (5 TPWD Code § 68.015).

## 2.0 Methods

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### 2.1 Pre-Field Assessment

Burns & McDonnell biologists reviewed the U.S. Fish and Wildlife Service (USFWS) and Texas Parks and Wildlife Department (TPWD) official lists of threatened, endangered, and candidate species for Morris County, Texas and within the Project Area. A literature review was also conducted for each species to gather pertinent information regarding the species' distinct physical characteristics, diet, mobility, habitat and home range requirements, reproductive needs, and sensitivity to anthropogenic disturbances. Aerial imagery and topographic maps of the Project Area were reviewed to determine if potentially suitable habitat is present and if there is potential for protected species to occur. The information obtained during the desktop review was used to conduct a reconnaissance-level field investigation within the Project Area in February 2024.

### 2.2 Field Assessment

After the baseline data reviews were concluded, field investigations were conducted utilizing species-specific information to evaluate various habitat/vegetation communities encountered within the proposed Project Area that may potentially support federal and state listed species. If initial field investigations indicated the potential presence of a species' preferred habitat, Burns & McDonnell biologists conducted an in-depth review to identify and record pertinent species-specific information within the area. If potential habitat was present, the habitat boundary was recorded, and the area was photo documented. In addition to the potential habitat investigations, individual species occurrences were documented when positively identified. Where identified, if applicable, individual species occurrences and their habitats were recorded using a global positioning system (GPS) and photo documented.

### 3.0 Federally and State Listed Threatened and Endangered Species

The USFWS Information, Planning, and Conservation System (IPaC) (USFWS, 2024a) and TPWD species list for Morris County (TPWD, 2024a) and TPWD's Natural Diversity Database (NDD) (TPWD, 2024b) were reviewed to determine the potential occurrence of species listed by the USFWS or TPWD as threatened, endangered, or candidate species within the Project Area. It should be noted that inclusion in this table does not necessarily mean that a species is known to occur in the Project Area, but only acknowledges the potential for its occurrence, based on historic records, known ranges, and presence of potential habitat. Fourteen federal- and state-listed species were identified as potentially occurring in Morris County (Table 3-1), TPWD's NDD did not identify any threatened, endangered, or sensitive species within 1 mile of the Project Area (TPWD, 2024b).

**Table 3-1: Federally and State Listed T&E Species for The Survey Area**

Common Name	Scientific Name <sup>b</sup>	Species Status <sup>a</sup>		Potential for Occurrence in the Project Area	Recommended Effects Determination
		USFWS	TPWD		
Mammals					
Black bear	<i>Ursus americanus</i>	N/A	T	Unlikely to occur <sup>c</sup>	N/A
Tricolored bat	<i>Perimyotis subflavus</i>	PE	N/A	May occur	Not Required <sup>f</sup>
Birds					
Bachman's sparrow	<i>Peucaea aestivalis</i>	N/A	T	May occur	N/A
Piping plover	<i>Charadrius melodus</i>	T	T	Unlikely to occur <sup>c</sup>	No Effect
Red knot	<i>Calidris canutus rufa</i>	T	N/A	Unlikely to occur <sup>c</sup>	No Effect
Swallow-tailed kite	<i>Elanoides forficatus</i>	N/A	T	Unlikely to occur <sup>c</sup>	N/A
White-faced ibis	<i>Plegadis chihi</i>	N/A	T	Unlikely to occur <sup>c</sup>	N/A
Wood stork	<i>Mycteria americana</i>	N/A	T	Unlikely to occur <sup>c</sup>	N/A
Reptiles					
Alligator snapping turtle	<i>Macrochelys temminckii</i>	PT	T	Does not occur	Not Required <sup>g</sup>
Northern scarlet snake	<i>Cemophora coccinea</i>	N/A	T	May occur	N/A
Fish					
Paddlefish	<i>Polyodon spathula</i>	N/A	T	Does not occur	N/A
Mollusks					
Louisiana pigtoe	<i>Pleurobema riddellii</i>	N/A	T	Does not occur	N/A
Southern hickorynut	<i>Obovaria arkansasensis</i>	N/A	T	Does not occur	N/A
Insects					
Monarch butterfly	<i>Danaus plexippus</i>	C	N/A	May occur	Not Required <sup>h</sup>

(a) Species listings are as designated by USFWS (2024a) TPWD (2024a, 2024b)

(b) Nomenclature follows Manning et al. (2008), Crother et al. (2017), Chesser et al. (2018), USFWS (2024a), and TPWD (2024a)

(c) Only expected to occur as a migrant, transient, or rare vagrant within the Project Area

(d) Federal Listings: T = Threatened, PE = Proposed Endangered, PT = Proposed Threatened, C = Candidate

(f) The tricolored bat is currently proposed endangered, if future listing occurs before completion of Project activities, then a determination of May Affect, but Not Likely to Adversely Affect is appropriate.



(g) The alligator snapping turtle is currently proposed threatened with 4(d) rule. If future listing occurs Project activities may continue under the guidance of the 4(d) rule.

(h) The monarch butterfly is a candidate for listing; therefore, an effects determination is not required. In the event of an official listing, a determination of May Affect, but Not Likely to Adversely Affect is appropriate.

### 3.1 Federally-Listed Species Descriptions and Findings

#### ***Tricolored Bat***

The tricolored bat is one of the smallest bats in eastern North America and is distinguished by its unique tricolored fur that appears dark at the base, lighter in the middle, and dark at the tip (Barbour and Davis 1969, p. 115). During the winter, tricolored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage along forest edges and over ponds and waterways during warm nights. During the spring, summer, and fall (i.e., non-hibernating seasons), the tricolored bats primarily roost among leaf clusters of high trees and hollows of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures (USFWS, 2021a, TPWD, 2024c). Tricolored bats face extinction due primarily to the range wide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. The Project Area is surrounded by deciduous and pine forests where the tricolored bat could utilize dead or dying trees as roost and contains ponds and waterways that could be sufficient for foraging. Figure A-2 identifies areas that are potentially suitable bat habitat. The tricolored bat is currently proposed for listing as endangered, and an effects determination is not required at this time; however, listing is anticipated sometime in spring 2024 with habitat clearing restrictions during critical portions of the year for bats. Tree clearing for the North Texas area (Hibernating Range) should be avoided from May 15-July 31 (clearing window of August 1-May 14). There will be year-round restrictions near known hibernacula. The optimal acoustic survey timeframe is June 1-July 30. Upon listing as endangered based on the results of literature, desktop reviews, and field investigation, a determination of “May Affect, Not Likely to Adversely Affect” would be appropriate for this species. USFWS consultation may be required for this species.

#### ***Piping Plover***

The piping plover is a small shorebird that inhabits sandy beaches and alkali flats (Cornell Lab of Ornithology, 2021). Approximately 35 percent of the known global population of piping plovers' winter along the Texas Gulf Coast, where they spend 60 to 70 percent of the year (Campbell, 2003). The piping plover population that winters in Texas breeds on the northern Great Plains and around the Great Lakes. The species is an uncommon to locally common winter resident along the coastal areas of Texas and can linger through the summer on very rare occasions (Lockwood and Freeman, 2014). TPWD (2024b) and eBird (2024) show no documented records of the piping plover in the Project Area, and it would not be expected within the Project Area due to the general absence of appropriate habitat. Additionally, potential effects for this species only need to be considered for wind energy projects (USFWS, 2024a); therefore, a determination of “No Effect” is appropriate for this species.

#### ***Red Knot***

The red knot is a medium-sized, stocky, short-necked sandpiper with a rather short straight bill. The rufa subspecies, one of three subspecies occurring in North America, has one of the longest distance migrations known, travelling between its breeding grounds in the central Canadian Arctic to wintering areas that are primarily in South America (USFWS, 2011). During migration and winter in Texas, red knots may be found feeding in small groups, on sandy, shell-lined beaches, and to a lesser degree, on flats of bays and lagoons (Oberholser, 1974). It is an uncommon migrant along the coast, especially the Upper Texas coast, and very rare to casual inland, primarily in the eastern half of the state. Red knots are very rare summer visitors and are rare and local winter residents on the coast (Lockwood and Freeman, 2014). TPWD (2024b) and eBird (2024) show no documented records of the red knot in the Project Area,

and it would not be expected within the Project Area due to the general absence of appropriate habitat. Additionally, potential effects for this species only need to be considered for wind energy projects (USFWS, 2024a); therefore, a determination of “No Effect” is appropriate for this species.

### **Alligator Snapping Turtle**

The alligator snapping turtle is one of the heaviest freshwater turtles in the world and is the largest freshwater turtle in North America with adult males weighing up to 249 pounds with females being much smaller. They are named for their large, powerful jaws and shells that resemble the rough, ridged skin of an alligator (USFWS, 2021b). The alligator snapping turtle is native to the United States and is known from 14 different states across the Southeast, Midwest, and Southwest including Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Missouri, Mississippi, Oklahoma, Tennessee, and Texas. They are considered rare in Kansas and Indiana and may be functionally extirpated from those states. The range in Texas occurs within the northeastern portion of the State (USFWS, 2021b). Alligator snapping turtles occur in freshwater and periodically in brackish systems (Dixon, 2013) with only adult females venturing onto open land during nesting. They are generally found in large rivers and major tributaries; however, they are also found in a variety of small streams, bayous, canals, swamps, lakes, reservoirs, and ponds (USFWS, 2024c). The alligator snapping turtle does not occur within the Project area due to the lack of suitable habitat. The alligator snapping turtle is currently proposed threatened; therefore, an effects determination is not required at this time. Should the alligator snapping turtle be listed at a future date, a finding of “No Effect” would be appropriate for this species.

### **Monarch Butterfly**

Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. The bright coloring of a monarch serves as a warning to predators that eating them can be toxic. Texas is an important state in monarch migration because it is situated between the principal breeding grounds in the north and the overwintering areas in Mexico. Monarchs funnel through Texas both in the fall (September to November) and the spring (March). Early each March, overwintering monarchs begin arriving from their overwintering grounds in Mexico. Seeking emerging milkweeds (*Asclepias* spp.), they move through Texas laying eggs before dying. Their offspring continue heading north, leaving most of Texas behind, the first of several new generations of monarchs that repopulate the eastern half of the U.S. and southern Canada. Most adult butterflies live approximately 2 to 5 weeks; overwintering adults, however, enter into reproductive diapause (suspended reproduction) and live 6 to 9 months (TPWD, 2024b; TPWD, 2024d). Monarch butterflies may occur in the Project Area during fall and spring migration; however, any impacts on the species from the Project would be expected to be discountable and insignificant. The monarch butterfly is currently a candidate for listing as threatened or endangered; therefore, an effects determination is not required at this time. Should the butterfly be listed at a future date, a finding of “May Affect, Not Likely to Adversely Affect” would be appropriate, and coordination with USFWS may be necessary to determine conservation requirements associated with this species.

## **3.2 Critical Habitat**

The USFWS, in Section 3(5)(A) of the ESA, defines critical habitat as:

*“(i) the specific areas within the geographical area occupied by the species, at the time that it is listed in accordance with the ESA, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination by the Secretary of the Interior that such areas are essential for the conservation of the species.” (USFWS, 1973)*

No critical habitat has been designated in the Project Area for any species included under the ESA.

### 3.3 Bald and Golden Eagles

The bald eagle is present year-round in Texas, and individuals may include breeding, wintering, migrating, and post-breeding dispersing birds (Lockwood and Freeman, 2014). Bald eagles prefer large bodies of water surrounded by tall trees or cliffs, which they use as nesting sites. In 2007, the USFWS removed the bald eagle from the list of endangered and threatened wildlife species (72 Federal Register 130:37345–37372, July 9, 2007); however, the bald eagle continues to receive Federal protection under the BGEPA. The Project Area is within the general range of the bald eagle; however, there are no documented occurrences, and no eagles or eagle nests were observed within the Project Area; therefore, the Project will have no impact on the bald eagle (TPWD, 2024b).

Like the bald eagle, the golden eagle is protected under the BGEPA. In Texas, the golden eagle is a rare to locally uncommon year-round resident in the Panhandle and western and central Trans-Pecos regions. They are rare to uncommon winter residents from the Panhandle through the South Plains and Trans-Pecos, Rolling Plains, and western Edwards Plateau, and very rare to common throughout the remainder of the State (Lockwood and Freeman, 2014). The Project lies outside of the general breeding range of the golden eagle and the species would only be present within the Project Area as a very rare to casual vagrant; therefore, the Project will have no impact on the golden eagle.

### 3.4 Migratory Bird Treaty Act

Migratory birds are defined as a group native to the United States and listed in 50 CFR 10.13. A variety of migratory birds have the potential to occur in the Project Area. The peak nesting season for migratory birds in Texas occurs from March to September (TPWD, 2024e). The background review did not reveal any known concentrations of nesting migratory birds or rookeries.

### 3.5 State-Listed Threatened and Endangered Species Review

The TPWD lists the Bachman's Sparrow, piping plover, swallow-tailed kite, wood stork, white-faced ibis, paddlefish, black bear, Louisiana pigtoe, southern hickorynut, alligator snapping turtle, and northern scarlet snake as threatened in Morris County, Texas.

Suitable habitats for Bachman's sparrow are present in the form of overgrown fields with thickets and overgrown grassy hillsides throughout the Project Area; therefore, this species may occur. Land clearing can avoid impacts to nesting Bachman's sparrows by timing clearing outside of the nesting window, generally from March through September.

The swallow-tailed kite, piping plover, wood stork, and white-faced ibis are migratory bird species that may pass through the Project Area during their annual migration; however, they would only be expected to occur temporarily as a migrant, transient, or rare vagrant. These species are unlikely to occur within the Project Area.

The black bear does not have established populations in Northeast Texas and are only expected to occur as a migrant, transient, or rare vagrant within the Project Area. This species is unlikely to occur within the Project Area.

The paddlefish, Louisiana pigtoe, and southern hickorynut are restricted to the Red River Basin, Caddo Lake, and major rivers 4 feet in depth or greater in the Northeast Texas Region (Hubbs et al. 2008). These elements are absent from the Project Area; therefore, these species do not occur.

The alligator snapping turtle is closely associated with perennial aquatic habitats, rivers, and large tributaries. These elements are absent from the Project Area; therefore, this species does not occur.

Suitable habitats for the northern scarlet snake are present in the form of well drained soils with pine and hardwood scrub and grassland habitats.

The TPWD lists no other species as endangered, prohibited, or restricted in Morris County, Texas (TPWD, 2024a).

## 4.0 Summary of Findings

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Burns & McDonnell conducted a review of T&E species with potential to occur within the Project Area. Fourteen federal- and state-listed species were identified as potentially occurring in Morris County. (USFWS, 2024a; TPWD, 2024a). TPWD's NDD did not identify any threatened, endangered, or sensitive species within 1 mile of the Project Area (TPWD, 2024b). No designated critical habitat for any species is present within the Project Area. Based on the analyses of federally listed species conducted from February 26-27, 2024, the piping plover and red knot are unlikely to occur except as a migrant, transient, or rare vagrant within the Project Area. The tricolored bat is proposed endangered, and the monarch butterfly is a federal candidate for listing as threatened or endangered that may occur in the project area.

The tricolored bat listing is anticipated sometime in spring 2024. Should this species be officially listed, tree clearing for the North Texas area (Hibernating Range) should be avoided from May 15-July 31 (clearing window of August 1-May 14). There will be year-round restrictions near known hibernacula. The optimal acoustic survey timeframe is June 1-July 30.

The Project Area is within the general range of the bald eagle; however, there are no documented occurrences, and no eagles or eagle nests were observed within the Project Area; therefore, the Project will have no impact on the bald eagle. Habitat for golden eagles was generally absent within the Project Area. Impacts to bald or golden eagles are not anticipated for the proposed Project. Migratory Birds may be present within the Project Area for the proposed Project during the migratory bird nesting season; therefore, Burns & McDonnell recommends that clearing activities occur outside the nesting season (March–September), if possible.

Suitable habitats for state-listed threatened or endangered species are present with varying potential for occurrence. Bachman's sparrow and the northern scarlet snake are state-listed threatened species that may occur in the Project Area.

## 5.0 Literature Cited

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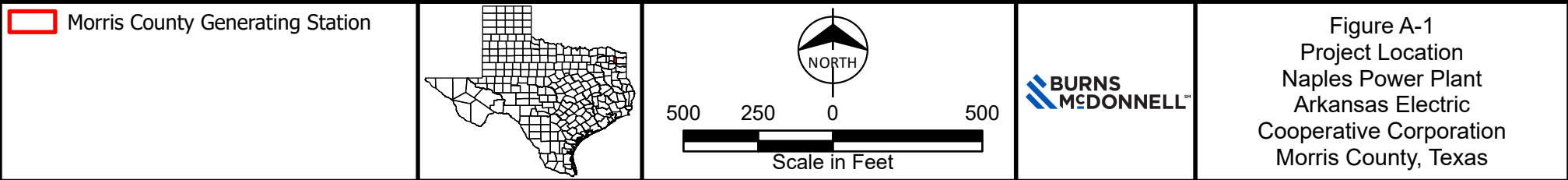
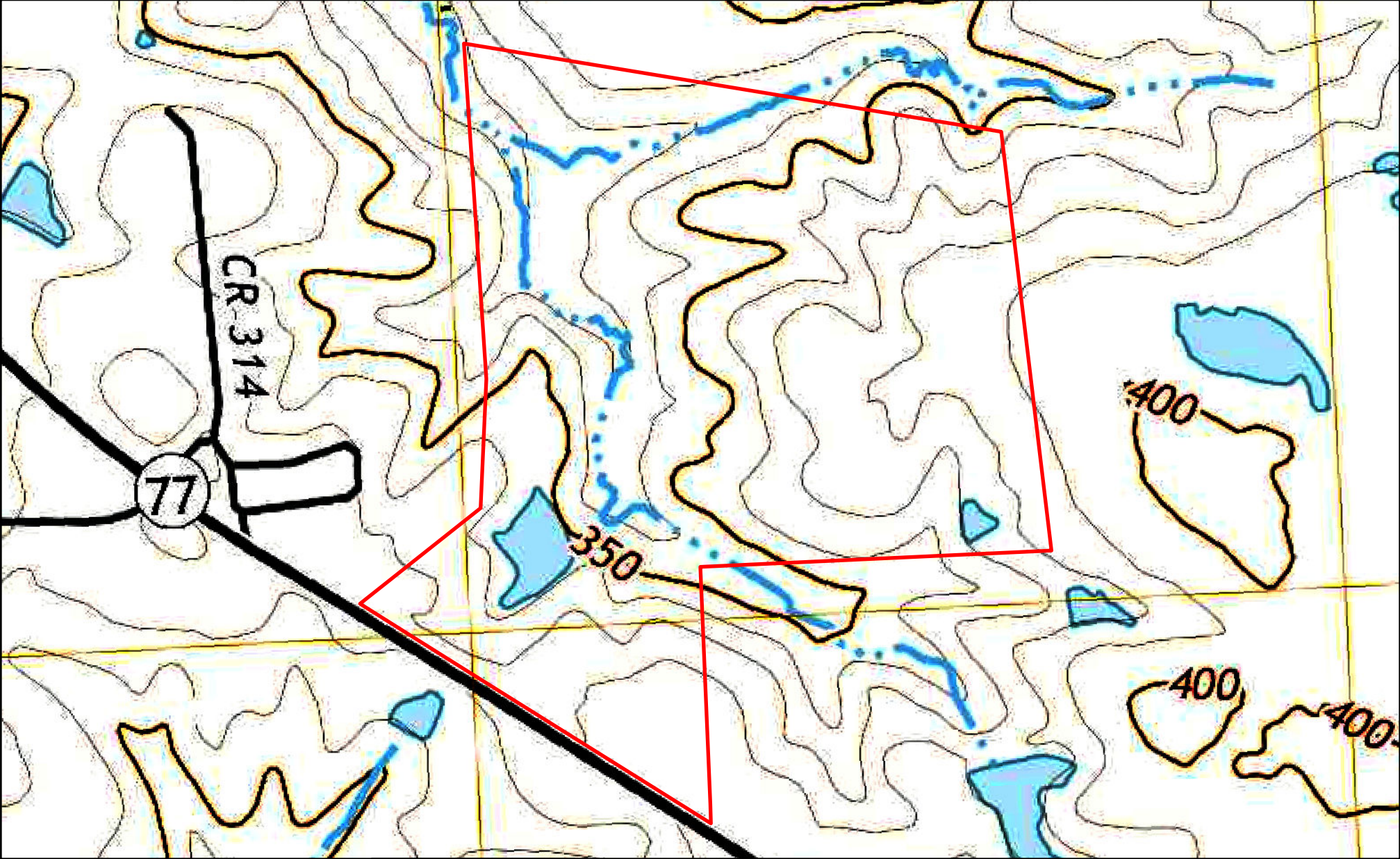
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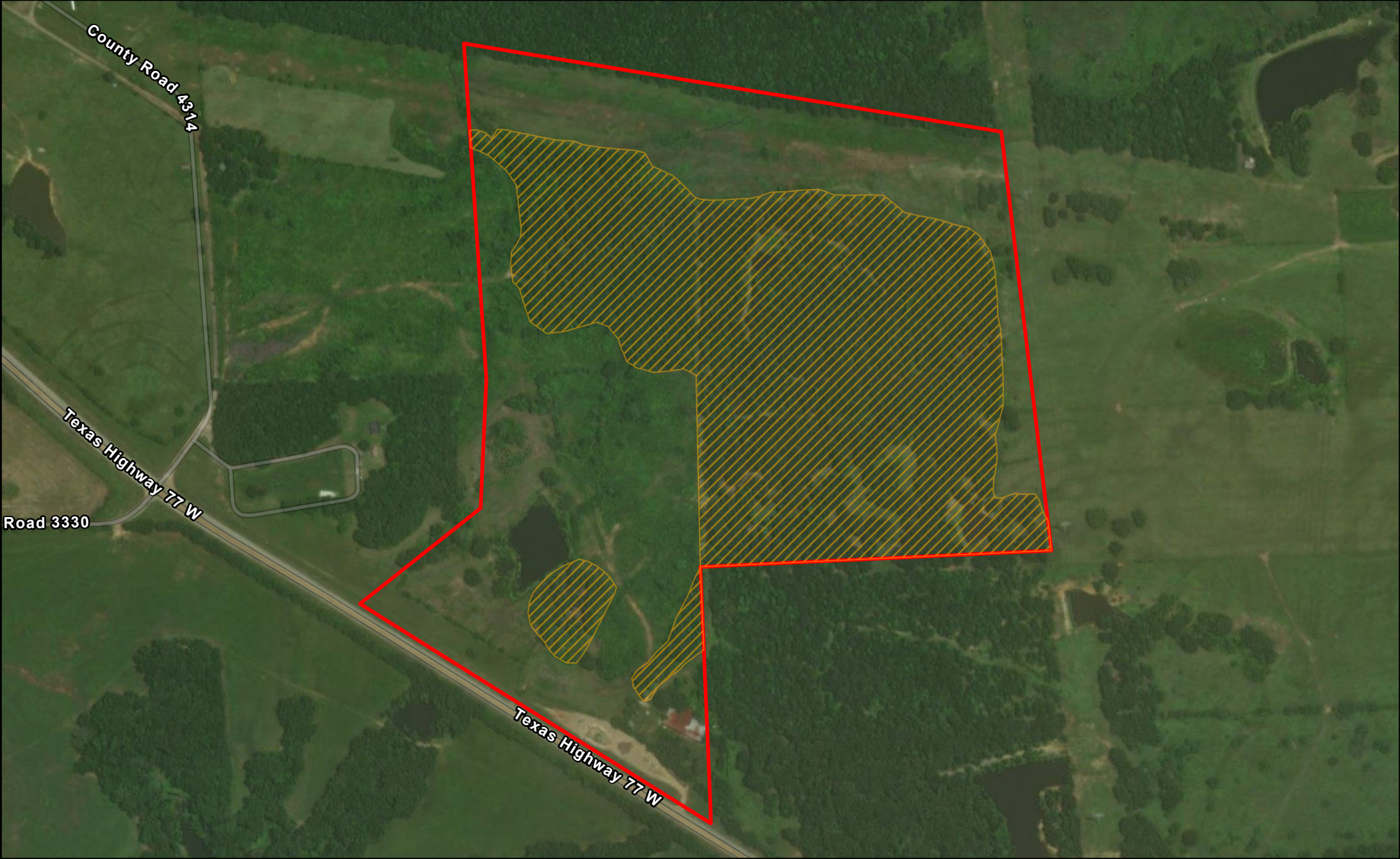
## APPENDIX A – FIGURES




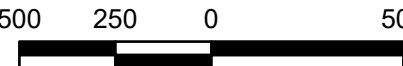

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<p> Morris County Generating Station</p> <p> Bat Habitat</p>	 <p>NORTH</p>  <p>500 250 0 500</p> <p>Scale in Feet</p>		<p>Figure A-2 Bat Habitat Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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**APPENDIX B – IPAC OFFICIAL SPECIES LIST/  
TPWD ANNOTATED COUNTY LIST OF RARE SPECIES**

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Arlington Ecological Services Field Office  
501 West Felix Street  
Suite 1105  
Fort Worth, TX 76115-3410  
Phone: (817) 277-1100 Fax: (817) 277-1129  
Email Address: [arles@fws.gov](mailto:arles@fws.gov)

In Reply Refer To:  
Project Code: 2024-0058931  
Project Name: Morris County Project

March 06, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, which may occur within the boundary of your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under section 7(a)(1) of the Act, Federal agencies are directed to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Under and 7(a)(2) and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether their actions may affect threatened and endangered species and/or designated critical habitat. A Federal action is an activity or program authorized, funded, or carried out, in whole or in part, by a Federal agency (50 CFR 402.02).

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For Federal actions other than major construction activities, the Service suggests that a biological evaluation (similar to a Biological Assessment) be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

After evaluating the potential effects of a proposed action on federally listed species, one of the following determinations should be made by the Federal agency:

1. *No effect* - the appropriate determination when a project, as proposed, is anticipated to have no effects to listed species or critical habitat. A "no effect" determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, the action agency should maintain a complete record of their evaluation, including the steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information.
2. *May affect, but is not likely to adversely affect* - the appropriate determination when a proposed action's anticipated effects to listed species or critical habitat are insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur. This determination requires written concurrence from the Service. A biological evaluation or other supporting information justifying this determination should be submitted with a request for written concurrence.
3. *May affect, is likely to adversely affect* - the appropriate determination if any adverse effect to listed species or critical habitat may occur as a consequence of the proposed action, and the effect is not discountable or insignificant. This determination requires formal section 7 consultation.

The Service has performed up-front analysis for certain project types and species in your project area. These analyses have been compiled into *determination keys*, which allows an action agency, or its designated non-federal representative, to initiate a streamlined process for determining a proposed project's potential effects on federally listed species. The determination keys can be accessed through IPaC.

The Service recommends that candidate species, proposed species, and proposed critical habitat be addressed should consultation be necessary. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at: <https://www.fws.gov/service/section-7-consultations>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>). Additionally, wind energy projects should follow the wind energy guidelines (<https://www.fws.gov/media/land-based-wind-energy-guidelines>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>. The Federal Aviation Administration (FAA) released specifications for and made mandatory flashing L-810 lights on new towers 150-350 feet AGL, and the elimination of L-810 steady-burning side lights on towers above 350 feet AGL. While the FAA made these changes to reduce the number of migratory bird collisions (by as much as 70%), extinguishing steady-burning side lights also reduces maintenance costs to tower owners. For additional information concerning migratory birds and eagle conservation plans, please contact the Service's Migratory Bird Office at 505-248-7882.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

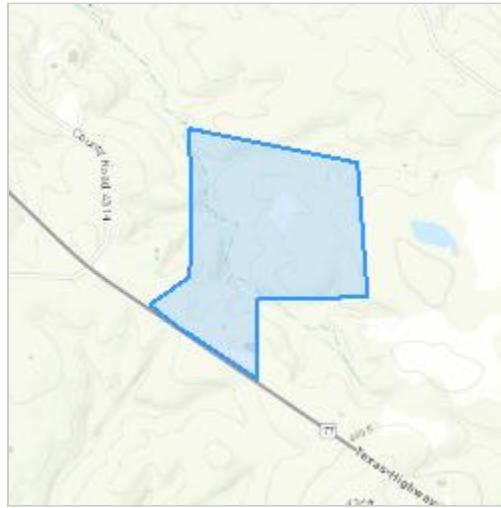
This species list is provided by:

**Arlington Ecological Services Field Office**  
501 West Felix Street  
Suite 1105  
Fort Worth, TX 76115-3410  
(817) 277-1100

## PROJECT SUMMARY

Project Code: 2024-0058931  
Project Name: Morris County Project  
Project Type: Power Gen - Other  
Project Description: Morris County Project  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.22224985,-94.70259666412082,14z>



Counties: Morris County, Texas



## ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## BIRDS

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"><li>▪ Wind Energy Projects</li></ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"><li>▪ Wind Energy Projects</li></ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened



## REPTILES

NAME	STATUS
Alligator Snapping Turtle <i>Macrochelys temminckii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4658">https://ecos.fws.gov/ecp/species/4658</a>	Proposed Threatened

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

- 
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
  2. The [Migratory Birds Treaty Act](#) of 1918.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

# MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a>	Breeds Mar 15 to Aug 25
Little Blue Heron <i>Egretta caerulea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9477">https://ecos.fws.gov/ecp/species/9477</a>	Breeds Mar 10 to Oct 15

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

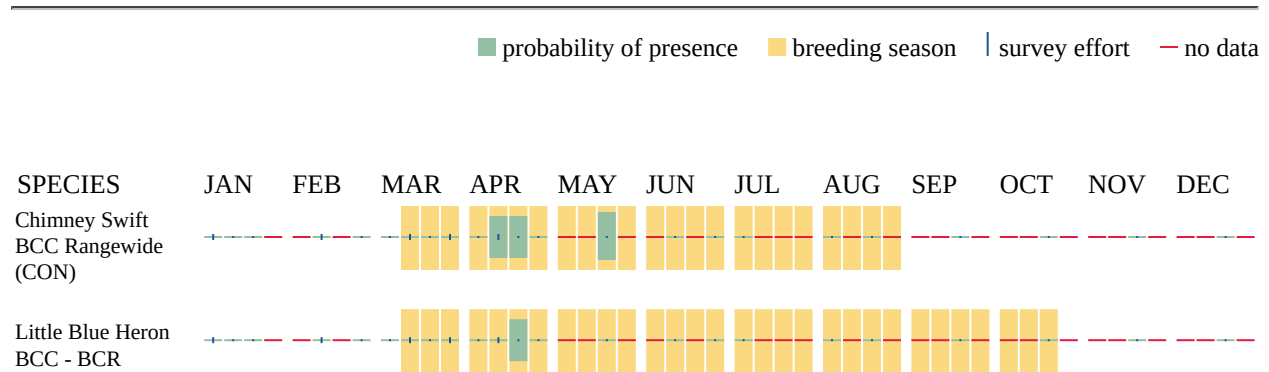
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

**Survey Effort (!)**

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data (-)**

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

**FRESHWATER POND**

- PUBFx
- PUBHh

RIVERINE

- R4SBC

## IPAC USER CONTACT INFORMATION

Agency: Burns & McDonnell  
Name: Kelli Mahmoud  
Address: 777 Main Street  
Address Line 2: Suite 2500  
City: Fort Worth  
State: TX  
Zip: 76102  
Email: kdmahmoud@burnsmcd.com  
Phone: 8322141216

Last Update: 9/1/2023

## MORRIS COUNTY

### AMPHIBIANS

**southern crawfish frog** *Lithobates areolatus areolatus*

Terrestrial and aquatic: The terrestrial habitat is primarily grassland and can vary from pasture to intact prairie; it can also include small prairies in the middle of large forested areas. Aquatic habitat is any body of water but preferred habitat is ephemeral wetlands.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4T4	State Rank: S3

**spotted dusky salamander** *Desmognathus conanti*

This species occurs in association with aquatic habitats in forested areas. Small, clear, spring fed streams with sandy substrate bordered with ferns and moss as well as murky, stagnant water bodies in cypress swamps, baygalls, and flood plains in bottomland forests support populations of this species.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S1

**Strecker's chorus frog** *Pseudacris streckeri*

Terrestrial and aquatic: Wooded floodplains and flats, prairies, cultivated fields and marshes. Likes sandy substrates.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

**Woodhouse's toad** *Anaxyrus woodhousii*

Terrestrial and aquatic: A wide variety of terrestrial habitats are used by this species, including forests, grasslands, and barrier island sand dunes. Aquatic habitats are equally varied.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: SU

### BIRDS

**Bachman's sparrow** *Peucaea aestivalis*

Open pine woods with scattered bushes and grassy understory in Pineywoods region, brushy or overgrown grassy hillsides, overgrown fields with thickets and brambles, grassy orchards; remnant grasslands in Post Oak Savannah region; nests on ground against grass tuft or under low shrub

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S1B

**bald eagle** *Haliaeetus leucocephalus*

Found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3B,S3N

#### DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

## MORRIS COUNTY

### BIRDS

#### Franklin's gull

*Leucophaeus pipixcan*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. This species is only a spring and fall migrant throughout Texas. It does not breed in or near Texas. Winter records are unusual consisting of one or a few individuals at a given site (especially along the Gulf coastline). During migration, these gulls fly during daylight hours but often come down to wetlands, lake shore, or islands to roost for the night.

Federal Status:

State Status:

SGCN: Y

Endemic: N

Global Rank: G5

State Rank: S2N

#### piping plover

*Charadrius melodus*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Beaches, sandflats, and dunes along Gulf Coast beaches and adjacent offshore islands. Also spoil islands in the Intracoastal Waterway. Based on the November 30, 1992 Section 6 Job No. 9.1, Piping Plover and Snowy Plover Winter Habitat Status Survey, algal flats appear to be the highest quality habitat. Some of the most important aspects of algal flats are their relative inaccessibility and their continuous availability throughout all tidal conditions. Sand flats often appear to be preferred over algal flats when both are available, but large portions of sand flats along the Texas coast are available only during low-very low tides and are often completely unavailable during extreme high tides or strong north winds. Beaches appear to serve as a secondary habitat to the flats associated with the primary bays, lagoons, and inter-island passes. Beaches are rarely used on the southern Texas coast, where bayside habitat is always available, and are abandoned as bayside habitats become available on the central and northern coast. However, beaches are probably a vital habitat along the central and northern coast (i.e. north of Padre Island) during periods of extreme high tides that cover the flats. Optimal site characteristics appear to be large in area, sparsely vegetated, continuously available or in close proximity to secondary habitat, and with limited human disturbance.

Federal Status: LT

State Status: T

SGCN: Y

Endemic: N

Global Rank: G3

State Rank: S2N

#### Sprague's pipit

*Anthus spragueii*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Habitat during migration and in winter consists of pastures and weedy fields (AOU 1983), including grasslands with dense herbaceous vegetation or grassy agricultural fields.

Federal Status:

State Status:

SGCN: Y

Endemic: N

Global Rank: G3G4

State Rank: S3N

#### swallow-tailed kite

*Elanoides forficatus*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Lowland forested regions, especially swampy areas, ranging into open woodland; marshes, along rivers, lakes, and ponds; nests high in tall tree in clearing or on forest woodland edge, usually in pine, cypress, or various deciduous trees.

Federal Status:

State Status: T

SGCN: Y

Endemic: N

Global Rank: G5

State Rank: S2B

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## MORRIS COUNTY

### BIRDS

**white-faced ibis** *Plegadis chihi*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; currently confined to near-coastal rookeries in so-called hog-wallow prairies. Nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S4B

**wood stork** *Mycteria americana*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Prefers to nest in large tracts of baldcypress (*Taxodium distichum*) or red mangrove (*Rhizophora mangle*); forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: SHB,S2N

### FISH

**Mississippi silvery minnow** *Hybognathus nuchalis*

Found in eastern Texas streams, from the Brazos River eastward and northward to the Red River; found in moderate current; silty, muddy, or rocky substrate. In Texas, adults likely to inhabit smaller tributary streams.

Federal Status:	State Status:	SGCN: Y
Endemic:	Global Rank: G5	State Rank: S4

**paddlefish** *Polyodon spathula*

Species occurred in every major river drainage from the Trinity Basin eastward, but its numbers and range had been substantially reduced by the 1950's; recently reintroduced into Big Cypress drainage upstream of Caddo Lake. Prefers large, free-flowing rivers but will frequent impoundments with access to spawning sites.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S3

**taillight shiner** *Notropis maculatus*

Restricted to the Sulphur and Cypress drainages in northeast Texas; Quiet, usually vegetated oxbow lakes, ponds, or backwaters.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S1

### MAMMALS

**black bear** *Ursus americanus*

Generalist. Historically found throughout Texas. In Chisos, prefers higher elevations where pinyon-oaks predominate; also occasionally sighted in desert scrub of Trans-Pecos (Black Gap Wildlife Management Area) and Edwards Plateau in juniper-oak habitat. For ssp. *luteolus*, bottomland hardwoods, floodplain forests, upland hardwoods with mixed pine; marsh. Bottomland hardwoods and large tracts of inaccessible forested areas.

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## MORRIS COUNTY

### MAMMALS

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

**eastern red bat** *Lasiurus borealis*

Red bats are migratory bats that are common across Texas. They are most common in the eastern and central parts of the state, due to their requirement of forests for foliage roosting. West Texas specimens are associated with forested areas (cottonwoods). Also common along the coastline. These bats are highly mobile, seasonally migratory, and practice a type of "wandering migration". Associations with specific habitat is difficult unless specific migratory stopover sites or wintering grounds are found. Likely associated with any forested area in East, Central, and North Texas but can occur statewide.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S4

**eastern spotted skunk** *Spilogale putorius*

Generalist; open fields prairies, croplands, fence rows, farmyards, forest edges & woodlands. Prefer wooded, brushy areas & tallgrass prairies. S.p. ssp. interrupta found in wooded areas and tallgrass prairies, preferring rocky canyons and outcrops when such sites are available.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S1S3

**hoary bat** *Lasiurus cinereus*

Hoary bats are highly migratory, high-flying bats that have been noted throughout the state. Females are known to migrate to Mexico in the winter, males tend to remain further north and may stay in Texas year-round. Commonly associated with forests (foliage roosting species) but are found in unforested parts of the state and lowland deserts. Tend to be captured over water and large, open flyways.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S3

**long-tailed weasel** *Mustela frenata*

Includes brushlands, fence rows, upland woods and bottomland hardwoods, forest edges & rocky desert scrub. Usually live close to water.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5

**mountain lion** *Puma concolor*

Generalist; found in a wide range of habitats statewide. Found most frequently in rugged mountains & riparian zones.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S2S3

**muskrat** *Ondatra zibethicus*

Found in fresh or brackish marshes, lakes, ponds, swamps, and other bodies of slow-moving water. Most abundant in areas with cattail. Dens in bank burrow or conical house of vegetation in shallow vegetated water. It is primarily found in the Rio Grande near El Paso and in SE Texas in the Houston area.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5

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## MORRIS COUNTY

### MAMMALS

**southeastern myotis bat** *Myotis austroriparius*

Caves are rare in Texas portion of range; buildings, hollow trees are probably important. Historically, lowland pine and hardwood forests with large hollow trees; associated with ecological communities near water. Roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S3?

**swamp rabbit** *Sylvilagus aquaticus*

Primarily found in lowland areas near water including: cypress bogs and marshes, floodplains, creeks and rivers.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5

**tricolored bat** *Perimyotis subflavus*

Forest, woodland and riparian areas are important. Caves are very important to this species.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S2

### MOLLUSKS

**Louisiana pigtoe** *Pleurobema riddellii*

Occurs in small streams to large rivers in slow to moderate currents in substrates of clay, mud, sand, and gravel. Not known from impoundments (Howells 2010f; Randklev et al. 2013b; Troia et al. 2015). [Mussels of Texas 2019]

Federal Status: PT	State Status: T	SGCN: Y
Endemic: N	Global Rank: G1G2	State Rank: S1

**southern hickorynut** *Obovaria arkansasensis*

Clay, sand, and medium sized gravel substrates with low to moderate current; Neches, Sabine, and Cypress river basins

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: GNR	State Rank: S1

### REPTILES

**alligator snapping turtle** *Macrochelys temminckii*

Aquatic: Perennial water bodies; rivers, canals, lakes, and oxbows; also swamps, bayous, and ponds near running water; sometimes enters brackish coastal waters. Females emerge to lay eggs close to the waters edge.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S2

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## MORRIS COUNTY

### REPTILES

**eastern box turtle** *Terrapene carolina*

Terrestrial: Eastern box turtles inhabit forests, fields, forest-brush, and forest-field ecotones. In some areas they move seasonally from fields in spring to forest in summer. They commonly enters pools of shallow water in summer. For shelter, they burrow into loose soil, debris, mud, old stump holes, or under leaf litter. They can successfully hibernate in sites that may experience subfreezing temperatures.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

**northern scarlet snake** *Cemophora coccinea*

Terrestrial: Prefers well drained soils with pine, hardwood, or mixed hardwood scrub in addition to open grassland habitats with appropriate soils.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S4

**prairie skink** *Plestiodon septentrionalis*

The prairie skink can occur in any native grassland habitat across the Rolling Plains, Blackland Prairie, Post Oak Savanna and Pineywoods ecoregions.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S2

**pygmy rattlesnake** *Sistrurus miliarius*

The pygmy rattlesnake occurs in a variety of wooded habitats from bottomland coastal hardwood forests to upland savannas. The species is frequently found in association with standing water.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S2S3

**slender glass lizard** *Ophisaurus attenuatus*

Terrestrial: Habitats include open grassland, prairie, woodland edge, open woodland, oak savannas, longleaf pine flatwoods, scrubby areas, fallow fields, and areas near streams and ponds, often in habitats with sandy soil.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

**timber (canebrake) rattlesnake** *Crotalus horridus*

Terrestrial: Swamps, floodplains, upland pine and deciduous woodland, riparian zones, abandoned farmland. Limestone bluffs, sandy soil or black clay. Prefers dense ground cover, i.e. grapevines, palmetto.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S4

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## MORRIS COUNTY

### PLANTS

#### **goldenwave tickseed**

*Coreopsis intermedia*

In deep sandy soils of sandhills in openings in or along margins of post oak woodlands and pine-oak forests of east Texas; Perennial; Flowering/Fruiting May-Aug

Federal Status:

State Status:

SGCN: Y

Endemic: N

Global Rank: G3

State Rank: S3

#### **panicled indigobush**

*Amorpha paniculata*

A stout shrub, 3 m (9 ft) tall that grows in acid seep forests, peat bogs, wet floodplain forests, and seasonal wetlands on the edge of Saline Prairies in East Texas. It is distinguished from other *Amorpha* species by its fuzzy leaflets with prominent raised veins underneath, and the flower panicles, which are 8 to 16 inches long and slender, held above the foliage. Perennial; Flowering May-August.

Federal Status:

State Status:

SGCN: Y

Endemic: N

Global Rank: G3

State Rank: S3

#### **smooth indigobush**

*Amorpha laevigata*

Prairies, open woods and creek banks; Perennial; Flowering May-July

Federal Status:

State Status:

SGCN: Y

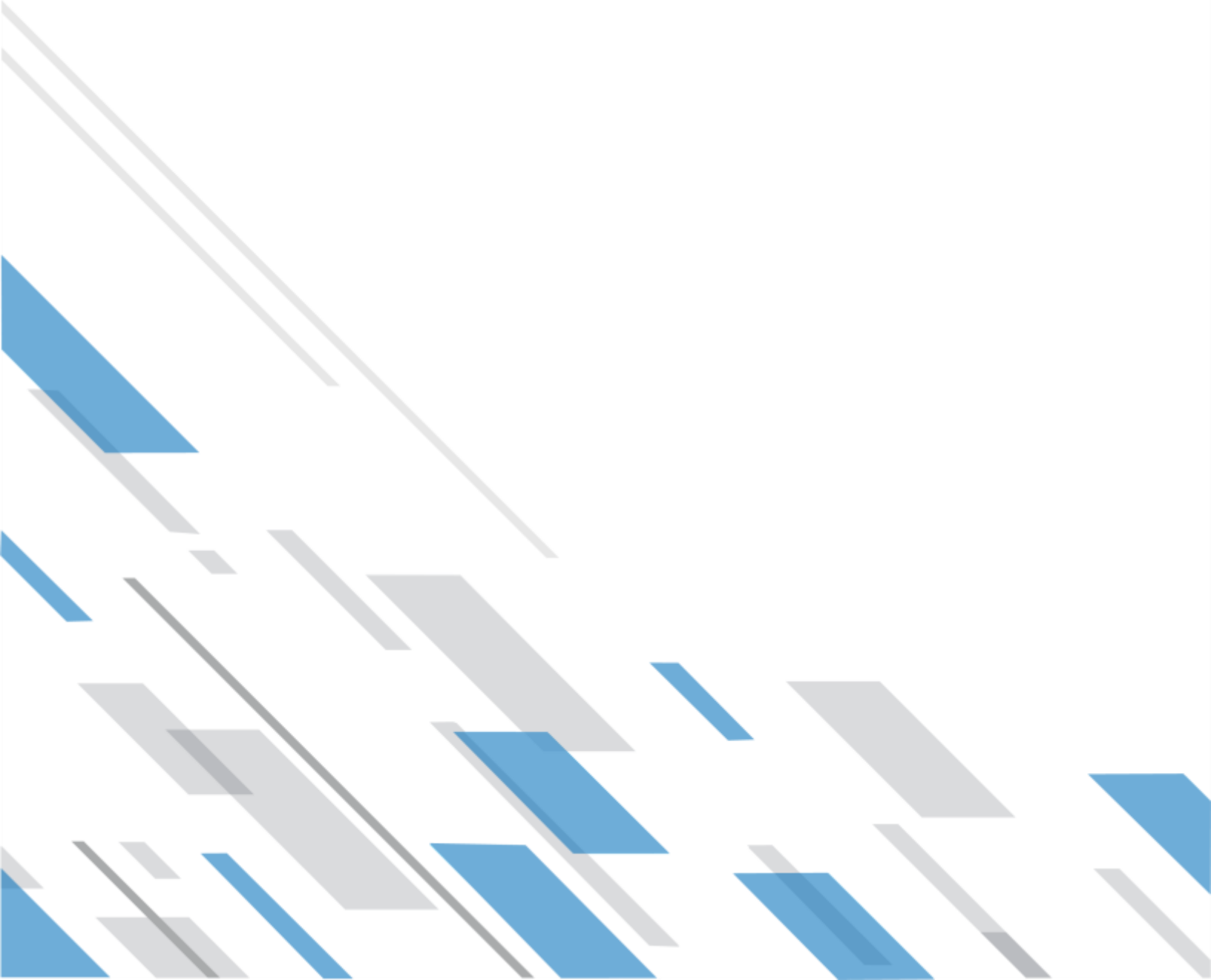
Endemic: N

Global Rank: G3?

State Rank: S1

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## Appendix D - Correspondence

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December 13, 2024

Madam or Sir  
U.S. Army Corp of Engineers - Fort Worth District  
819 Taylor Street  
Fort Worth, Texas 76102-0300

Re: Naples Power Plant, Morris County, Texas

Dear Madam or Sir,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

The Proposed Action would generally provide a new generation source in the area which would help meet anticipated future demands, specifically ramping/voltage support for new renewable energy projects, using technology that reduces water usage and air emissions compared to conventional natural gas turbines and combustion turbines. AECC would ultimately be responsible for the plant design, permitting, construction, start-up testing, and operations and maintenance.

The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-Cass owned transmission line, located outside both the 100- and 500-year flood plains.

Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing. An Approved Jurisdictional Determination (AJD) request was submitted on August 4, 2024, with a revision submitted on October 15, 2024, under Project SWF-2024-00393.

**Table 1. Site Assessment Summary**

Parameter	Site Assessment Summary
Location	Morris County, TX
Site Latitude / Longitude	33°13'19.5"N / 94°42'07.9"W (approximate center point of Project)
Total Project Boundary	100 acres
Public Lands and Conservation Easements	0 acres
Cultural Resources	No archeological sites have been recorded within the Project Boundary. No effects to historic properties listed or eligible for listing in the NRHP are anticipated in association with the proposed Project.
Wetlands	1.4 acres of emergent marsh, fen or wet meadow (PEM) and approximately 0.6 acres of shrub swamp (PSS).
Waterbodies	Mary Lees Branch intercepts the northeastern corner of the proposed Project Boundary's perimeter.
Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
Land Use	Twelve land use types, 30% Deciduous Forest (approximately 30 acres), No Prime Farmland
Soils	No hydric soils within the Project Boundary.



Parameter	Site Assessment Summary
Rare, Threatened, and Endangered Species	One candidate and one federally proposed endangered ESA listed species were determined to have potential to occur in the Project Area. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.
Air Quality	Area is unclassified/in attainment. All emissions will be limited such that the facility will comply with EPA and state requirements. The project will be permitted as a major Prevention of Significant Deterioration project. A construction permit and operating permit will be required. Current estimates for greenhouse gas emissions indicate that the facility would not exceed 1,550,000 metric tons of CO <sub>2</sub> e. <sup>1</sup>
Environmental Justice	EJScreen 2.0 results indicate low – average percentile for minority populations, but is an area of environmental justice for low income populations.

<sup>1</sup> Based on the facility being limited by NSPS TTTTa to around 40% capacity per year.

Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



**Contact Information**

U.S. Postal Service	9450 Ward Parkway Kansas City, MO. 64114
Email	<a href="mailto:chowell@burnsmcd.com">chowell@burnsmcd.com</a>
Telephone Hotline	(816) 822-4243

Sincerely,

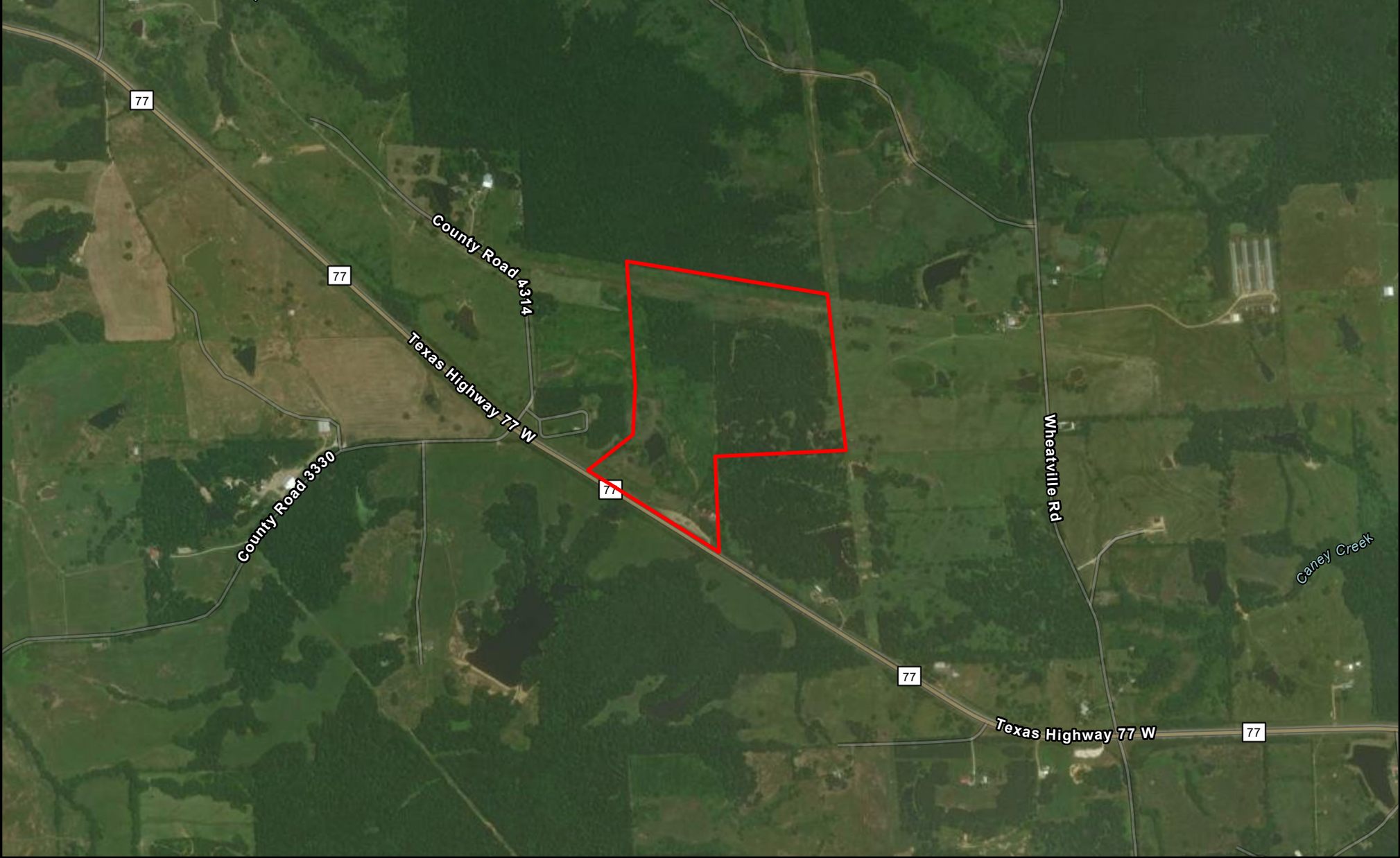
A handwritten signature in black ink that reads "Chris Howell". The signature is written in a cursive, flowing style.




Chris Howell  
Project Manager

Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC



 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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August 5, 2024

Regulatory Branch  
U.S. Army Corps of Engineers, Fort Worth District  
Fort Worth Regulatory Office  
P.O. Box 17300  
Fort Worth, Texas 76102-0300

Re: Approved Jurisdictional Determination Request for the Naples Power Plant

Dear Regulatory Manager:

On behalf of Arkansas Electric Cooperative Corporation, Burns & McDonnell respectfully requests an approved jurisdictional determination (AJD) of an approximately 36-acre (Project Area) portion of the proposed Naples Power Plant (Project) in Morris County, Texas. The proposed Project would include construction of two simple cycle combustion turbines. The entire Project is approximately 100 acres; however, this request is regarding the Project Area shown in the attached figure. This request is in advance of a detailed design, and final development of the Project.

To support this request for an AJD, the following documents are attached:

1. Request for Corps Jurisdictional Determination form (Form RGL 16-01)
2. ORM Table Amended to the 2023 Rule
3. Project Area Figure
4. Wetland Delineation Report of the Project

Your response is most appreciated. If you have any questions or need additional information, please contact Christa Wisniewski by phone at 816-652-2970 or by email at [cfwisniewski@burnsmcd.com](mailto:cfwisniewski@burnsmcd.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Christa Wisniewski', written over a light blue horizontal line.

Christa Wisniewski  
Natural Resource Section Manager

## **Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)**

To: Tulsa District

- I am requesting a JD on property located at: 2 miles northwest of Naples, Texas  
(Street Address)  
City/Township/Parish: Naples County: Morris State: TX  
Acreage of Parcel/Review Area for JD: 36  
Section: N/A Township: N/A Range: N/A  
Latitude (decimal degrees): 33.22324 Longitude (decimal degrees): -94.70207  
(For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ☐ I currently own this property. ☐ I plan to purchase this property.  
☒ I am an agent/consultant acting on behalf of the requestor.  
☐ Other (please explain): \_\_\_\_\_.
- Reason for request: (check as many as applicable)  
☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.  
☒ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.  
☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.  
☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.  
☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.  
☐ A Corps JD is required in order to obtain my local/state authorization.  
☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.  
☐ I believe that the site may be comprised entirely of dry land.  
☐ Other: \_\_\_\_\_
- Type of determination being requested:  
☒ I am requesting an approved JD.  
☐ I am requesting a preliminary JD.  
☐ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.  
☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

\*Signature: Christa Wisniewski

Digitally signed by Christa Wisniewski  
DN: cn=Christa Wisniewski, o=Burns & McDonnell, ou=Christa Wisniewski  
Date: 2024.05.05 13:22:29 -0500

Date: 8/5/2024

- Typed or printed name: Christa Wisniewski

Company name: Burns & McDonnell Engineering Company, Inc.

Address: 9450 Ward Parkway, Kansas City, MO 64114

Daytime phone no.: 816-652-2970

Email address: cfwisniewski@burnsmcd.com

**\*Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

**Principal Purpose:** The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

**Routine Uses:** This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

**Disclosure:** Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.





October 15, 2024

Valerie Sewell  
U.S. Army Corps of Engineers, Fort Worth District  
Fort Worth Regulatory Office  
P.O. Box 17300  
Fort Worth, Texas 76102-0300

Re: Revised Wetland Delineation Report for the Naples Power Plant, SWF-2024-00393

Dear Ms. Sewell:

On behalf of Arkansas Electric Cooperative Corporation, Burns & McDonnell respectfully submits a revised wetland delineation report for a 40-acre (Project Area) portion of the proposed Naples Power Plant (Project) in Morris County, Texas. The proposed Project would include construction of two simple cycle combustion turbines. The entire Project is approximately 100 acres; however, this request is regarding the Project Area shown in the attached report. This report is being submitted as part of the request to withdraw the previously submitted Approved Jurisdictional Determination, which is under Project SWF-2024-00393.

Your response is most appreciated. If you have any questions or need additional information, please contact Christa Wisniewski by phone at 816-652-2970 or by email at [cfwisniewski@burnsmcd.com](mailto:cfwisniewski@burnsmcd.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Christa Wisniewski".

Christa Wisniewski  
Natural Resource Section Manager



February 27, 2025

Valerie Sewell  
Project Manager  
U.S. Army Corps of Engineers, Fort Worth District  
Fort Worth Regulatory Office  
P.O. Box 17300  
Fort Worth, Texas 76102-0300

Re: Approved Jurisdictional Determination Request for the Naples Power Plant, SWF-2024-00393

Dear Regulatory Manager:

On behalf of Arkansas Electric Cooperative Corporation, Burns & McDonnell respectfully submits this Pre-Construction Notification (PCN) for authorization under Nationwide Permit (NWP) 14 for Linear Transportation Projects for one temporary and one permanent access road for the proposed Naples Power Plant (Project) in Morris County, Texas. The proposed Project would include construction of two simple cycle combustion turbines. The entire Project is approximately 100 acres; however, this request is regarding the access road crossings shown in the attached Design Drawings.

To support this request for an AJD, the following documents are attached:

1. USACE NWP 14 Application Form
2. Design Drawings
3. Cultural Resources Report for the Project
4. Protected Species Report for the Project

Your response is most appreciated. If you have any questions or need additional information, please contact Christa Wisniewski by phone at 816-652-2970 or by email at [cfwisniewski@burnsmcd.com](mailto:cfwisniewski@burnsmcd.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Christa Wisniewski".

Christa Wisniewski  
Natural Resource Section Manager

# U.S. Army Corps of Engineers (USACE) Fort Worth District



## Nationwide Permit (NWP) Pre-Construction Notification (PCN) Form

This form integrates requirements of the Nationwide Permit Program within the Fort Worth District, including General and Regional Conditions. Please consult instructions included at the end prior to completing this form.

### Contents

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### DESCRIPTION OF NWP 14 – LINEAR TRANSPORTATION PROJECTS

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States (U.S.). For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the U.S. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the U.S. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

### Part I: NWP Conditions and Requirements Checklist

**To ensure compliance with the General Conditions (GC), in order for an authorization by a NWP to be valid, please answer the following questions:**

1. **Navigation (Applies to Section 10 waters [i.e. navigable waters of the U.S.], see instruction 4 for link to list):**
  - a. Does the project cause more than a minimal adverse effect on navigation?  
☐ Yes    ☒ No    ☐ N/A



- b. Does the project require the installation and maintenance of any safety lights and signals prescribed by the U.S. Coast Guard on authorized facilities in navigable waters of the U.S.? ☐ Yes ☒ No ☐ N/A
- c. Does the Applicant understand and agree that if future operations by the U.S. require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Applicant will be required, upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S.; and no claim shall be made against the U.S. on account of any such removal or alteration? ☐ Yes ☐ No ☒ N/A

If you answered yes to question a. or b. above, or if you answered no to question c. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**2. Aquatic Life Movements:**

- a. Does the project substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area? ☐ Yes ☒ No
- b. Is the project's primary purpose to impound water? ☐ Yes ☒ No
- c. Will culverts placed in streams be installed to maintain low flow conditions to sustain the movement of those aquatic species? ☒ Yes ☐ No ☐ N/A

If you answered yes to question a. or b. above, or if you answered no to question c. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**3. Spawning Areas:**

- a. Does the project avoid spawning areas during the spawning season to the maximum extent practicable? ☐ Yes ☒ No ☐ N/A
- b. Does the project result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area? ☐ Yes ☒ No ☐ N/A

If you answered no to question a. above, or if you answered yes to question b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**4. Migratory Bird Breeding Areas:**

- a. Does the project avoid waters of the U.S. that serve as breeding areas for migratory birds to the maximum extent practicable? ☒ Yes ☐ No ☐ N/A

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**5. Shellfish Beds:**

- a. Does the project occur in areas of concentrated shellfish populations? ☐ Yes ☒ No

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**6. Suitable Material:**

- a. Does the project use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.)?  
☐ Yes ☒ No
- b. Is the material used for construction or discharged in a water of the U.S. free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act)? ☒ Yes ☐ No

If you answered yes to question a. above, or if you answered no to question b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**7. Water Supply Intakes:**

- a. Does the project occur in the proximity of a public water supply intake? ☐ Yes ☒ No

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**8. Adverse Effects From Impoundments:**

- a. Does the project create an impoundment of water? ☐ Yes ☒ No
- b. If you answered yes to question a. above, are the adverse effects (to the aquatic system due to accelerating the passage of water, and/or restricting its flow) minimized to the maximum extent practicable? ☐ Yes ☐ No ☒ N/A

If you answered no to question b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**9. Management of Water Flows:**

- a. Does the project maintain the pre-construction course, condition, capacity, and location of open waters to the maximum extent practicable, for each activity, including stream channelization and storm water management activities? ☒ Yes ☐ No
- b. Will the project be constructed to withstand expected high flows? ☒ Yes ☐ No
- c. Will the project restrict or impede the passage of normal or high flows? ☐ Yes ☒ No

If you answered no to question a. or b. above, or if you answered yes to question c. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**10. Fills Within 100-Year Floodplains:**

- a. Does the project comply with applicable FEMA-approved state or local floodplain management requirements? ☐ Yes ☐ No ☒ N/A

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**11. Equipment:**

- a. Will heavy equipment working in wetlands or mudflats be placed on mats, or other measures be taken to minimize soil disturbance? ☐ Yes ☐ No ☒ N/A

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:  
No jurisdictional wetlands will be impacted by the project.

**12. Soil Erosion and Sediment Controls:**

- a. Will the project use appropriate soil erosion and sediment controls and maintain them in effective operating condition throughout construction? ☒ Yes ☐ No
- b. Will all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, be permanently stabilized at the earliest practicable date? ☒ Yes ☐ No
- c. Be aware that if work will be conducted within waters of the U.S., Applicants are encouraged to perform that work during periods of low-flow or no-flow.

If you answered no to question a. or b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**13. Removal of Temporary Fills:**

- a. Will temporary fills be removed in their entirety and the affected areas returned to pre-construction elevations? ☒ Yes ☐ No ☐ N/A
- b. Will the affected areas be revegetated, as appropriate? ☒ Yes ☐ No ☐ N/A

If you answered no to question a. or b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**14. Proper Maintenance:**

- a. Will any authorized structure or fill be properly maintained, including maintenance to ensure public safety? ☒ Yes ☐ No

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**15. Single and Complete Project:**

- a. Does the Applicant certify that the project is a "single and complete project" as defined below? ☒ Yes ☐ No

**Single and complete project:**

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

**Independent utility:** Defined as a test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility

if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**16. Wild and Scenic River:**

There are no Wild and Scenic Rivers within the geographic boundaries of the Fort Worth District. Therefore, this GC does not apply.

**17. Tribal Rights:**

a. Will the project or its operation impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights? ☐ Yes ☒ No ☐ N/A

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**18. Endangered Species (see also Box 8 in Part III):**

a. Is the project likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or will the project directly or indirectly destroy or adversely modify the critical habitat of such species? ☐ Yes ☒ No

b. Might the project affect any listed species or designated critical habitat? ☐ Yes ☒ No

c. Is any listed species or designated critical habitat in the vicinity of the project?  
☐ Yes ☒ No

d. If the project "may affect" a listed species or critical habitat, has Section 7 consultation addressing the effects of the proposed activity been completed? ☐ Yes ☐ No ☒ N/A

If you answered yes to question a. or b. or c. above, or if you answered no to question d. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**19. Migratory Birds and Bald and Golden Eagles:**

a. Does the project have the potential to impact nests, nesting sites, or rookeries of migratory birds, bald or golden eagles? ☐ Yes ☒ No ☐ N/A

If you answered yes to question a. above, you are responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to obtain any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act.

**20. Historic Properties (see also Box 9 in Part III):**

a. Does the project have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties?  
☐ Yes ☒ No ☐ N/A

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

**21. Discovery of Previously Unknown Remains and Artifacts:**

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, *you must immediately notify the*

*district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed.* The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

**22. Designated Critical Resource Waters:**

- a. Will the project impact critical resource waters, which include NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment? ☐ Yes ☒ No

If you answered yes to question a. above, be aware that discharges of dredged or fill material into waters of the U.S. are not authorized by NWP 14 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

**23. Mitigation (see also Box 10 in Part III):**

- a. Will the project include appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal? ☒ Yes ☐ No

If you answered no to question a. above, please include an explanation in Box 10 of why no mitigation would be necessary in order to be in compliance with this GC or be aware that the project would require an individual permit application.

**24. Safety of Impoundment Structures:**

- a. Has the impoundment structure been safely designed to comply with established state dam safety criteria or has it been designed by qualified persons?? ☐ Yes ☐ No ☒ N/A

If you answered yes to question a. above, non-federal applicants may be required to provide documentation that the design has been independently reviewed by similarly qualified persons with appropriate modifications to ensure safety. If you answered no, please include an explanation in Box 10 of why the structure is exempt from state dam safety criteria or be aware that the project may require an individual permit application.

**25. Water Quality (see also Box 11 in Part III):**

- a. If in Texas, does the project comply with the conditions of the TCEQ water quality certification for NWP 14? ☒ Yes ☐ No ☐ N/A
- b. If in "Indian Country," does the project comply with the conditions of the EPA water quality certification for NWPs? ☐ Yes ☐ No ☒ N/A
- c. If in Louisiana, does the project comply with the conditions of the LADEQ water quality certification for NWP 14? ☐ Yes ☐ No ☒ N/A

If you answered no to question a. or b. above, please be aware that the project would require an individual permit application.

**26. Coastal Zone Management:**

The Fort Worth District does not cover any Coastal Zone; therefore, this GC does not apply.

**27. Regional and Case-By-Case Conditions:**

See the attached Regional Conditions checklist to ensure compliance with this GC.

**28. Use of Multiple Nationwide Permits:**

- a. Does the project use more than one NWP for a single and complete project? ☐ Yes ☒ No
- b. If you answered yes to question a. above, be aware that unless the project's acreage loss of waters of the U.S. authorized by the NWPs is below the acreage limit of the NWP with the highest specified acreage limit, no NWP can be issued and the project would require an individual permit application.

If you answered yes to question a. above, please explain how the project would be in compliance with this GC and what additional NWP number you intend to use:

**29. Transfer of Nationwide Permit Verifications:**

- a. Does the Applicant agree that if he or she sells the property associated with the nationwide permit verification, the Applicant may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate USACE district office to validate the transfer?  
☒ Yes ☐ No

**30. Compliance Certification:**

- a. Does the Applicant agree that if he or she receives the NWP verification from the USACE, they must submit a signed certification regarding the completed work and any required mitigation (the certification form will be sent by the USACE with the NWP verification letter)?  
☒ Yes ☐ No

**31. Activities Affecting Structure or Works Built by the United States**

- a. Does the project temporarily or permanently alter and/or occupy a USACE federally authorized Civil Works project? ☐ Yes ☒ No

If you answered yes to question a. above, notification is required in accordance with general condition 32, for any activity that requires permission from the Corps. The district engineer may authorize activities under these NWPs only after a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

**32. Notification:**

- a. Reason for notification:
- ☐ involves discharges into special aquatic sites; or
  - ☐ is in excess of 500 feet in length; or
  - ☒ will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or high tide line.
- b. Does the Applicant agree that he or she will not begin the project until either:
- 1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
  - 2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. ☒ Yes ☐ No

- c. Does the Applicant agree that if the district or division engineer notifies the Applicant in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the Applicant cannot begin the activity until an individual permit has been obtained?  
☒ Yes   ☐ No

### **NWP 14-specific requirements checklist:**

1. Does the project involve the construction, expansion, modification, or improvement of a linear transportation project? ☒ Yes   ☐ No

If you answered no to question 1. above, be aware that the project would not be authorized by a NWP 14 and may require an individual permit application.

2. Does the project cause the loss of greater than 1/2-acre non-tidal waters of the U.S. at any crossing considered a single and complete project? ☐ Yes   ☒ No

If you answered yes to question 2. above, be aware that the project would not be authorized by a NWP 14 and would require an individual permit application.

3. If the project involves any stream channel modification, including bank stabilization, is it limited to the minimum necessary to construct or protect the linear transportation project, and are such modifications in the immediate vicinity of the project? ☒ Yes   ☐ No   ☐ N/A

If you answered no to question 3. above, be aware that the project would not be authorized by a NWP 14 and may require an individual permit application.

4. If the project involves non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars, would it use this NWP to authorize these features? ☐ Yes   ☒ No

If you answered yes to question 4. above, be aware that the non-linear features of the project would not be authorized by a NWP 14 and may require an individual permit application.

5. Does each activity/crossing considered a single and complete project have independent utility? ☒ Yes   ☐ No   ☐ N/A

If you answered no to question 5. above, be aware that the project may require an individual permit application.

6. a. Will any temporary structures, fills, and work necessary to construct the project meet the criteria for maintaining flows, minimizing flooding, and withstanding high flows?

☒ Yes   ☐ No   ☐ N/A

b. Will temporary structures and fills be removed in their entirety, and the affected areas be returned to pre-construction elevations and revegetated, as appropriate?

☒ Yes   ☐ No   ☐ N/A

If you answered no to question 6a. or 6b. above, be aware that the project would not be authorized by a NWP 14 and may require an individual permit application.

## **REGIONAL CONDITIONS CHECKLIST**

**To ensure compliance with the Regional Conditions within the Fort Worth District, in the State of Texas, in order for an authorization by a NWP to be valid, please answer the following questions (for projects in Texas only):**

- 1.** Does the project involve a discharge into habitat types that are wetlands (typically referred to as pitcher plant bogs) that are characterized by an organic surface soil layer and include vegetation such as pitcher plants (*Sarracenia* sp.), sundews (*Drosera* sp.), and sphagnum moss (*Sphagnum* sp.) or wetlands (typically referred to as bald cypress-tupelo swamps) comprised predominantly of bald cypress trees (*Taxodium distichum*), and/or water tupelo (*Nyssa aquatica*)?  
☐ Yes ☒ No

If you answered yes to question 1. above, notification of the District Engineer is required in accordance with NWP GC 32, and the USACE will coordinate with other resource agencies as specified in NWP GC 32(d).

- 2.** Will the project include required compensatory mitigation at a minimum one-for-one ratio for all special aquatic sites that exceed 1/10 acre and require pre-construction notification, and for all losses to streams that exceed 300 linear feet and require pre-construction notification (unless the appropriate District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement)?  
☐ Yes ☐ No ☒ N/A

If you answered no to question 2. above, be aware that the project would not be authorized by a NWP and would require an individual permit application.

- 3.** Is the project in the area of Caddo Lake within Texas that is designated as a "Wetland of International Importance" under the Ramsar Convention? ☐ Yes ☒ No

If you answered yes to question 3. above, notification of the District Engineer is required in accordance with NWP GC 32(d).

- 4.** Is there is the risk of transferring invasive plants to or from your project site? ☐ Yes ☒ No

If you answered yes to question 4. above, information concerning state specific lists of invasive species and threats can be found at: <http://www.invasivespeciesinfo.gov/unitedstates/tx.shtml>. Best management practices can be found at Information concerning state specific lists and threats can be found at: <http://www.invasivespeciesinfo.gov/unitedstates/tx.shtml>. Known zebra mussel waters within can be found at: <http://nas.er.usgs.gov/queries/zmbyst.asp>.

- 5.** Would your project meet the scope of work and conditions of NWPs 51 or 52? ☐ Yes ☒ No

If you answered yes to question 5. above, the Corps will provide the PCN to the US Fish and Wildlife Service as specified in NWP General Condition 32(d)(2) for its review and comments.



**To ensure compliance with the Regional Conditions within the Fort Worth District, in the State of Louisiana, in order for an authorization by a NWP to be valid, please answer the following questions (for projects in Louisiana only):**

- 1.** Does the activity cause the permanent loss of greater than 1/2 acre of seasonally inundated cypress swamp and/or cypress-tupelo swamp? ☐ Yes ☒ No

If you answered yes to question 1. above, be aware that the project would not be authorized by a NWP 14 and would require an individual permit application.

- 2.** Does the activity cause the permanent loss of greater than 1/2 acre of pine savanna, pine flatwoods, and/or pitcher plant bogs? ☐ Yes ☒ No

If you answered yes to question 2. above, be aware that the project would not be authorized by a NWP 14 and would require an individual permit application.

- 3.** Has the activity been determined to have an adverse impact upon a federal or state designated rookery and/or bird sanctuary? ☐ Yes ☒ No

If you answered yes to question 3. above, be aware that the project would not be authorized by a NWP 14 and would require an individual permit application.

- 4.** While Endangered Species Act Section 7 consultation is no longer required for the Louisiana black bear (which has been delisted due to recovery), permittees are advised that the Louisiana black bear is still protected under State of Louisiana law, and the Louisiana Department of Wildlife and Fisheries (LDWF) will continue to actively manage this subspecies. To learn more about State law requirements for Louisiana black bear protection and habitat conservation, permittees shall contact Maria Davidson (Louisiana Department of Wildlife and Fisheries - Large Carnivore Program Manager) at (337) 948-0255.

- 5.** Does the project involve instream activities in the following waterways: Abita River and tributaries; Amite River (LA Highway 37 at Grangeville to Port Vincent); Bayou Bartholomew in Morehouse Parish; Bayou Boeuf and Bayou Rapides Tributaries in Rapides Parish: (Bayou Clear, Brown Creek, Burney Branch, Castor Creek, Clear Creek, Haikey's Creek, Little Bayou Clear, Little Brushy Creek, Loving Creek, Little Loving Creek, Long Branch, Mack Branch, Patterson Branch, Valentine Creek, and Williamson Branch), Bayou Rigolette tributaries in Grant Parish (Beaver Creek, Black Creek, Chandler Creek, Clear Branch, Coleman Branch, Cress Creek, Cypress Creek, Gladly Hollow, Gray Creek, Hudson Creek, James Branch, Jordon Creek, Moccasin Branch, and Swafford Creek); Bogue Falaya River and Tributaries, Bogue Chitto River and Tributaries, Lake Borgne, Lake Pontchartrain and its tributaries, Lake Saint Catherine, Little Lake, Tchefuncta River, Little Tchefuncta River, the Rigolets and West Pearl River? ☐ Yes ☒ No

If you answered yes to question 5. above, notification of the District Engineer is required in accordance with NWP GC 32 due to the occurrence of threatened or endangered species.

- 6.** To the best of the applicant's knowledge, is any excavated and/or fill material to be placed within wetlands free of contaminants? ☐ Yes ☐ No ☒ N/A

If you answered no to question 6. above, be aware that the project would not be authorized by a NWP 14 and would require an individual permit application.

- 7.** Regional Condition 7 applies to work within the Louisiana Coastal Zone and/or the Outer Continental Shelf off Louisiana, and therefore does not apply in the USACE Fort Worth District. Work in these areas may require coordination with the USACE Galveston or New Orleans districts.

8. Does the activity adversely affect greater than 1/10 acre of wetlands, and/or adversely impact a designated Natural and Scenic River, a state or federal wildlife management area, and/or refuge?  
☐ Yes ☒ No

If you answered yes to question 8. above, notification of the District Engineer is required in accordance with NWP GC 32.

9. For activities involving the installation of a culvert, is twenty percent (20%) of the culvert diameter (20 percent of the height of elliptical culverts) installed below the natural grade of the stream. ☒ Yes ☐ No

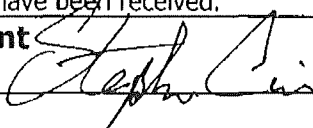
If you answered no to question 9. above, be aware that the project would not be authorized by a NWP 13 and would require an individual permit application.

10. Regional Condition 10 requires all linear transportation crossings to submit a PCN regardless of impact acreage, as defined in NWP GC 32. The U.S. Fish and Wildlife Service and National Marine Fisheries Service will be forwarded a copy of the PCN.

### **Additional Discussion:**

Jurisdictional wetlands will not be impacted by the Project, only one stream will be temporarily and permanently impacted by the Project.

## Part II: Project Information

<b>Box 1 Project Name:</b> Naples Power Plant		<b>Applicant Name</b> Stephen Dobson Cain	
<b>Applicant Title</b> Manager of Environmental Compliance		<b>Applicant Company, Agency, etc.</b> Arkansas Electric Cooperative Corporation	
<b>Mailing Address</b> 1 Cooperative Way, Little Rock, AR		<b>Applicant's internal tracking number (if any)</b>	
<b>Work Phone</b> with area code 501-570-2420	<b>Home Phone</b> with area code	<b>Fax #</b>	<b>E-mail Address</b>
<b>Relationship of applicant to property:</b> <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input type="checkbox"/> Lessee <input type="checkbox"/> Other:			
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a USACE nationwide permit or permits as described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made the right to enter the above-described location to inspect the proposed, in-progress, or completed work. I agree to start work <u>only</u> after all necessary permits have been received.			
<b>Signature of applicant</b> 			<b>Date (mm/dd/yyyy)</b> 02/24/2025

<b>Box 2 Authorized Agent/Operator Name and Signature:</b> <i>(If an agent is acting for the applicant during the permit process)</i> Christa Wisniewski			
<b>Agent/Operator Title</b> Natural Resource Section Manager		<b>Agent/Operator Company, Agency, etc.</b> Burns & McDonnell	
<b>Mailing Address</b> 9400 Ward Parkway Kansas City, MO 64114			
<b>E-mail Address</b> cfwisniewski@burnsmcd.com			
<b>Work Phone</b> with area code 816-652-2970	<b>Home Phone</b> with area code	<b>Fax #</b>	<b>Cell Phone #</b>
I hereby authorize the above-named agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent, and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
<b>Signature of applicant</b> 			<b>Date (mm/dd/yyyy)</b> 02/24/2025
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
<b>Signature of authorized agent</b> 			<b>Date (mm/dd/yyyy)</b> 02/27/2025

<b>Box 3 Name of property owner, if other than applicant:</b>	
<input type="checkbox"/> Multiple Current Owners <i>(If multiple current property owners, check here and include a list as an attachment)</i>	
<b>Owner Title</b>	<b>Owner Company, Agency, etc.</b>
<b>Mailing Address</b>	

Work Phone with area code	Home Phone with area code
---------------------------	---------------------------

**Box 4 Project location, including street address, city, county, state, and zip code where proposed activity will occur:**

33.220971, -94.703425, City of Naples, Morris County, Texas, 75568

**Nature of Activity** (Description of project; include all features; see instructions):

Installation of concrete culverts and rock riprap for a temporary construction access and a permanent access road to a new simple cycle gas turbine facility.

**Project Purpose** (Description of the reason or purpose of the project; see instructions):

A permanent culvert will be installed for a main access road for a simple cycle gas turbine facility. A temporary culvert will be installed for construction activities. The Project facility will help improve the reliability of the electric grid in the area.

Has a delineation of waters of the U.S., including wetlands, been completed? (see instructions)

☒ Yes, Attached ☐ No

If a delineation has been completed, has it been verified in writing by the USACE?

☒ Yes, Date of approved or preliminary jurisdictional determination (mm/dd/yyyy): USACE Project: SWF-2024-00393

☐ No

Are color photographs of the existing conditions available? ☒ Yes, Attached ☐ No

Are aerial photographs available? ☒ Yes, Attached ☐ No

☒ **Multiple Single and Complete Crossings** (If multiple single and complete crossings, check here and complete the table in Attachment D)

**Waterbody(ies)** (if known; otherwise enter "an unnamed tributary to"): Mary Lees Branch

Tributary(ies) to what known, downstream waterbody(ies): White Oak Creek

Latitude & longitude (Decimal Degrees):

33.220971, -94.703425

USGS Quad map name(s):

2022 Naples, TX

Watershed(s) and other location descriptions, if known:

White Oak Bayou, 11140303

Directions to the project location:

From the Fort Worth District USACE Headquarters at 819 Taylor Street, Dallas, TX 76102:

1. Head north on Taylor St towards W 7<sup>th</sup> Street for 436 feet.
2. Turn right onto W 7<sup>th</sup> Street and go 0.4 miles
3. Continue onto TX-280 Spur, and go 1.4 miles
4. Take Exit on the left onto I-30 East toward Dallas, and go 12 miles.
5. Keep right to stay on I-30E and continue for 25.4 miles
6. Continue on to US-80 East and go 344ft
7. Keep left to continue on I-30 East, and go 125 miles
8. Take exit 178 for US-259, toward DeKalb/Dalingerfield
9. Turn right onto US-259 S and head for 4 miles
10. Turn left onto TX-77 East and go for 2.8 miles, until the following coordinates are reached: 33°13'6.23"N, 94°42'13.47"W
11. At the driveway off of TX-77 East, at 33°13'6.23"N, 94°42'13.47"W, head approximately 966 linear feet north to the Impact Location: 33.220971, -94.703425

### Part III: Project Impacts and Mitigation

#### Box 5 Reason(s) for Discharge into waters of the U.S.:

Installation of a temporary culvert for construction access and a permanent culvert for an access road to a new gas simple cycle plant.

Type(s) of material being discharged and the amount of each type in cubic yards:  
two concrete culverts and rock riprap

Total surface area (in acres) of wetlands or other waters of the U.S. to be filled:  
0.024 acre of permanent fill and 0.019 acre of temporary fill

Indicate the proposed impacts to **waters of the U.S.** in ACRES (for wetlands and impoundments) and LINEAR FEET (for rivers and streams), and identify the impact(s) as permanent and/or temporary for each waterbody type listed below. For projects with multiple single and complete crossings, the table below should indicate the cumulative totals of those single and complete crossings that require notification as outlined in Part I, GC question 32, and would not determine the threshold for whether a project qualifies for a NWP. The table below is intended as a tool to summarize impacts by resource type for planning compensatory mitigation and does not replace the summary table of single and complete crossings in Attachment D for those projects with multiple single and complete crossings.

Waterbody Type	Permanent		Temporary	
	Acres	Linear feet	Acres	Linear feet
Non-forested wetland				
Forested wetland				
Perennial stream				
Intermittent stream	0.024	147	0.019	135
Ephemeral stream				
Impoundment				
Other:				
Total:				

Potential indirect and/or cumulative impacts of proposed discharge (if any):

A temporary culvert crossing will be installed for construction activities and then removed once it has been completed. A permanent culvert will be installed for access to the site. Both culverts will be designed to continue current flow of stream so there are no changes in the streamflow that would impact upstream or downstream flows.

Required drawings (see instructions):

Vicinity map: ☒ Attached

To-scale plan view drawing(s): ☒ Attached

To-scale elevation and/or cross section drawing(s): ☒ Attached

Is any portion of the work already complete? ☐ Yes ☒ No

If yes, describe the work:

#### Box 6 Authority: (see instructions)

Is Section 10 of the Rivers and Harbors Act for projects affecting navigable waters applicable?

☐ Yes ☒ No (see Fort Worth District Navigable Waters list)

Is Section 404 of the Clean Water Act applicable? ☒ Yes ☐ No

**Box 7 Larger Plan of Development:**

Is the discharge of fill or dredged material for which Section 10/404 authorization is sought intended for a linear transportation project which is part of a larger plan of development?

☐ Yes ☒ No (If yes, please provide the information in the remainder of Box 7)

Does the linear transportation project have independent utility in addition to the larger plan of development (e.g., major arterial, through connection, etc.)? ☐ Yes ☒ No

If yes, explain:

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):

Naples Power Plant

Location of larger development (If discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail for the entire project site should be included):

Approximately 50 linear feet of bank along the eastern side of SA007 will be reinforced with riprap for stabilization purposes. This is approximately 0.007 acre of impact.

Total area in acres of entire project area (including larger plan of development, where applicable):

Approximately 45 acres

**Box 8 Federally Threatened or Endangered Species** (see instructions)

**Please list any federally-listed (or proposed) threatened or endangered species or critical habitat potentially affected by the project (use scientific names (i.e., genus species), if known):**

Charadrius melodus (Piping Plover), Threatened, no affect from project

Calidris canutus rufa (Red knot), Threatened, no affect from project

Perimyotis subflavus (Tricolored bat), Proposed Endangered, may be affected if tree clearing is within roosting season

Danaus plexippus (Monarch Butterfly), Candidate, may be affected

Have surveys, using U.S. Fish and Wildlife Service (USFWS) protocols, been conducted?

☒ Yes, Report attached ☐ No (explain):

If a federally-listed species would potentially be affected, please provide a description and a biological evaluation.

☒ Yes, Report attached ☐ Not attached

Has Section 7 consultation been initiated by another federal agency?

☐ Yes, Initiation letter attached ☒ No

Has Section 10 consultation been initiated for the proposed project?

☐ Yes, Initiation letter attached ☒ No

Has the USFWS issued a Biological Opinion?

☐ Yes, Report attached ☒ No

If yes, list date Opinion was issued (mm/dd/yyyy):

**Box 9 Historic properties and cultural resources**

**Please list any historic properties listed (or eligible to be listed) on the National Register of Historic Places which the project has the potential to affect:**

There are no historic properties in the Project

Has an archaeological records search been conducted?

☒ Yes, Report attached ☐ No (explain):

Are any cultural resources of any type known to exist on-site?

☐ Yes ☒ No

Has an archaeological pedestrian survey been conducted for the site?  
☒ Yes, Report attached    ☐ No (explain):

Has Section 106 or SHPO consultation been initiated by another federal or state agency?  
☒ Yes, Initiation letter attached    ☐ No

Has a Section 106 MOA been signed by another federal agency and the SHPO?  
☐ Yes, Attached    ☒ No  
 If yes, list date MOA was signed (mm/dd/yyyy):

**Box 10 Proposed Conceptual Mitigation Plan Summary** (see instructions)

Measures taken to avoid and minimize impacts to waters of the U.S. (if any):  
 No mitigation would be required because the total permanent impact is under 0.03 acre.

Applicant proposes combination of one or more of the following mitigation types:  
☐ Mitigation Bank    ☐ On-site    ☐ Off-site (Number of sites:    )    ☒ None

Applicant proposes to purchase mitigation bank credits: ☐ Yes    ☒ No  
 Mitigation Bank Name: N/A  
 Number of Credits: N/A

Indicate in ACRES (for wetlands and impoundments) and LINEAR FEET (for rivers and streams) the total quantity of waters of the U.S. proposed to be created, restored, enhanced, and/or preserved for purposes of providing compensatory mitigation. Indicate mitigation site type (on- or off-site) and number. Indicate waterbody type (non-forested wetland, forested wetland, perennial stream, intermittent stream, ephemeral stream, impoundment, other) or non-jurisdictional (uplands<sup>1</sup>).

Mitigation Site Type and Number	Waterbody Type	Created	Restored	Enhanced	Preserved
<i>e.g., On-site 1</i>	<i>Non-forested wetland</i>	<i>0.5 acre</i>			
<i>e.g., Off-site 1</i>	<i>Intermittent stream</i>		<i>500 LF</i>	<i>1000 LF</i>	
	Totals:				

<sup>1</sup> For uplands, please indicate if designed as an upland buffer.

Summary of Mitigation Work Plan (Describe the mitigation activities listed in the table above):  
 N/A

If no mitigation is proposed, provide a detailed explanation of why no mitigation would be necessary to ensure that adverse effects on the aquatic environment are minimal:  
 No mitigation would be required because total permanent impact is under 0.03 acre.

Has a conceptual mitigation plan been prepared in accordance with the USACE regulations and guidelines?  
☐ Yes, Attached    ☒ No (explain): Total permanent impact is under 0.03 acres

Mitigation site(s) latitude & longitude (Decimal Degrees): N/A    USGS Quad map name(s): N/A

Other location descriptions, if known:  
 N/A

Directions to the mitigation location(s):

N/A

**Box 11 Water Quality Certification** (see instructions):

For Texas:

Does the project meet the conditions of the Texas Commission on Environmental Quality (TCEQ) Clean Water Act Section 401 certification for NWP 14? ☒ Yes ☐ No

Does the project include soil erosion control and sediment control Best Management Practices (BMPs)? ☒ Yes ☐ No

Does the project include BMPs for post-construction total suspended solids control?  
☒ Yes ☐ No

For Louisiana:

LDEQ has issued water quality certification for NWP 14 without conditions.

For Tribal Lands ("Indian Country"):

Does the project meet the conditions of the EPA water quality certification for NWPs?  
☒ Yes ☐ No

**Box 12 List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:**

Agency	Approval Type <sup>2</sup>	Identification No.	Date Applied	Date Approved	Date Denied

<sup>2</sup> Would include but is not restricted to zoning, building, and floodplain permits



## Part IV: Attachments

	Included
A. List of Property Owners	<input type="checkbox"/>
B. Delineation of Waters of the U.S., Including Wetlands	<input checked="" type="checkbox"/>
C. Color Photographs	<input checked="" type="checkbox"/>
D. Summary Table of Single and Complete Crossings	<input checked="" type="checkbox"/>
E. Required Drawings/Figures	<input checked="" type="checkbox"/>
F. Threatened or Endangered Species Reports and/or Letters	<input checked="" type="checkbox"/>
G. Historic Properties and Cultural Resources Reports and/or Letters	<input checked="" type="checkbox"/>
H. Conceptual Mitigation Plan	<input type="checkbox"/>
I. Other:	<input type="checkbox"/>

**End of Form**

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## Attachment D: Summary Table of Single and Complete Crossings

Waterbody ID <sup>1</sup>	Latitude and Longitude (Decimal Degrees)	Resource Type <sup>2</sup>	Linear Feet in Project Area	Acres in Project Area	Impact Type <sup>3</sup>	Linear Feet of Impact	Average Width and Length of Impact	Acres of Impact	Cubic Yards of Material to be Discharged	PCN Required	Reason <sup>4</sup>
<i>e.g., W-1</i>	<i>32.755°N, -97.755°W</i>	<i>NFW</i>	-	<i>0.25</i>	<i>D/P</i>	-	-	<i>0.15</i>	<i>1210</i>	<i>Yes</i>	<i>A, B</i>
SA007	33.221, -94.703	IS	135	0.019	D/T	135	6 ft wide	0.019	90	No	H
SA007	33.223, -94.705	IS	147	0.024	D/P	147	6 ft wide	0.024	98	Yes	B

<sup>1</sup> Waterbody ID may be the name of a feature or an assigned label such as "W-1" for a wetland.

<sup>2</sup> Resource Types: NFW – Non-forested wetland, FW – Forested wetland, PS – Perennial Stream, IS – Intermittent Stream, ES – Ephemeral Stream, I – Impoundment

<sup>3</sup> Impact Types: D/P – Direct\* and Permanent, D/T – Direct and Temporary, I/P – Indirect\*\* and Permanent, I/T – Indirect and Temporary

\* Direct impacts are here defined as those adverse affects caused by the proposed activity, such as discharge or excavation.

\*\* Indirect impacts are here defined as those adverse affects caused subsequent to the proposed activity, such as flooding or effects of drainage on adjacent waters of the U.S.

<sup>4</sup> Reasons for PCN requirement:

A – The loss of waters of the U.S. exceeds 1/10 acre

B – There is a discharge in a special aquatic site (e.g., wetlands)

C – Potential endangered species

D – Potential historic properties

E – Discharge into pitcher plant bog or bald cypress-tupelo swamp

F – Discharge into the area of Caddo Lake within Texas that is designated as a "Wetland of International Importance" under the Ramsar Convention

G – Required by Louisiana Regional Conditions

H – Other



December 13, 2024

Mr. Alan Stahnke  
Texas State Soil Scientist  
Natural Resource Conservation Service Texas  
101 S Main Street  
Temple, Texas 76501-7602

Re: Naples Power Plant, Morris County, Texas

Dear Mr. Stahnke,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

The Proposed Action would generally provide a new generation source in the area which would help meet anticipated future demands, specifically ramping/voltage support for new renewable energy projects, using technology that reduces water usage and air emissions compared to conventional natural gas turbines and combustion turbines. AECC would ultimately be responsible for the plant design, permitting, construction, start-up testing, and operations and maintenance.

The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-

Cass owned transmission line, located outside both the 100- and 500-year flood plains. Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing.

**Table 1. Site Assessment Summary**

Parameter	Site Assessment Summary
Location	Morris County, TX
Site Latitude / Longitude	33°13'19.5"N / 94°42'07.9"W (approximate center point of Project)
Total Project Boundary	100 acres
Public Lands and Conservation Easements	0 acres
Cultural Resources	No archeological sites have been recorded within the Project Boundary. No effects to historic properties listed or eligible for listing in the NRHP are anticipated in association with the proposed Project.
Wetlands	1.4 acres of emergent marsh, fen or wet meadow (PEM) and approximately 0.6 acres of shrub swamp (PSS).
Waterbodies	Mary Lees Branch intercepts the northeastern corner of the proposed Project Boundary's perimeter.
Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
Land Use	Twelve land use types, 30% Deciduous Forest (approximately 30 acres), No Prime Farmland
Soils	No hydric soils within the Project Boundary.

Parameter	Site Assessment Summary
Rare, Threatened, and Endangered Species	One candidate and one federally proposed endangered ESA listed species were determined to have potential to occur in the Project Area. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.
Air Quality	Area is unclassified/in attainment. All emissions will be limited such that the facility will comply with EPA and state requirements. The project will be permitted as a major Prevention of Significant Deterioration project. A construction permit and operating permit will be required. Current estimates for greenhouse gas emissions indicate that the facility would not exceed 1,550,000 metric tons of CO <sub>2</sub> e. <sup>1</sup>
Environmental Justice	EJScreen 2.0 results indicate low – average percentile for minority populations, but is an area of environmental justice for low income populations.

<sup>1</sup> Based on the facility being limited by NSPS TTTTa to around 40% capacity per year.

Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



**Contact Information**

U.S. Postal Service	9450 Ward Parkway Kansas City, MO. 64114
Email	<a href="mailto:chowell@burnsmcd.com">chowell@burnsmcd.com</a>
Telephone Hotline	(816) 822-4243

Sincerely,

A handwritten signature in black ink that reads "Chris Howell". The signature is written in a cursive, flowing style.

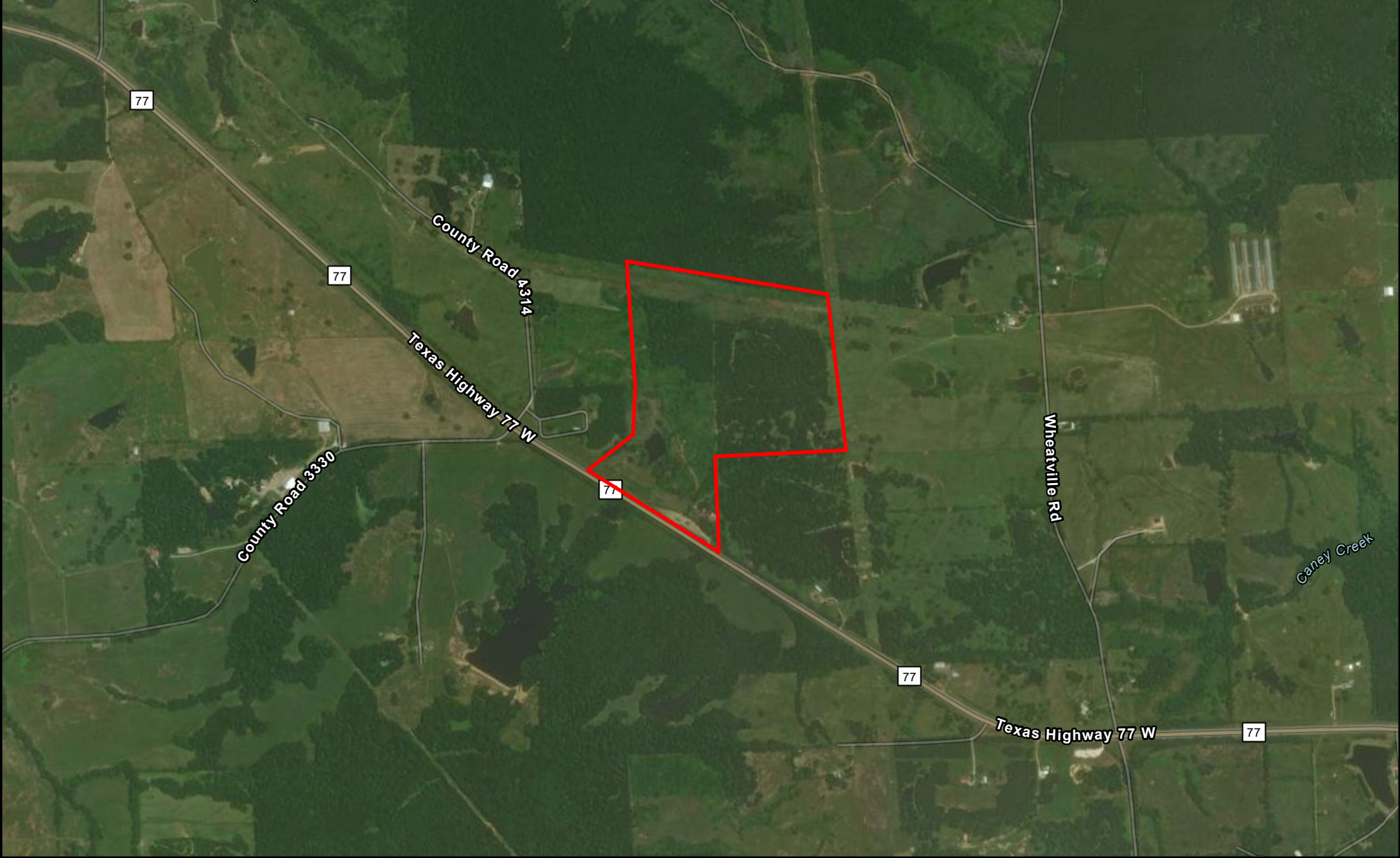
Chris Howell  
Project Manager




Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC





 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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**Texas State Office**

101 S. Main Street  
Temple, TX, 76501

February 4, 2025

Burns & McDonnell  
9450 Ward Parkway  
Kansas City, MO 64114

Attention: Chris Howell, Project Manager

Subject: Proposed Naples Power Plant Project in Morris County, Texas

We have reviewed the information provided in your correspondence dated December 13, 2024 concerning the Proposed Naples Power Plant Project in Morris County, Texas. This review is part of the National Environmental Policy Act (NEPA) evaluation for the United States Department of Agriculture, Rural Development (RD), Rural Utilities Service (RUS). We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed project area does not contain Prime Farmland, therefore it is exempt for that reason. Due to this reason, the project area has been determined to be exempt from FPPA provisions. We urge the use of accepted erosion control methods during construction and to place topsoil back as the surface layer when backfilling trenches.

If you have further questions, please contact me at (254) 742-9951 or by email at [chris.holle@usda.gov](mailto:chris.holle@usda.gov).

Sincerely,



**Chris Holle**  
USDA/NRCS



December 13, 2024

U.S. Fish and Wildlife Service  
Texas Coastal and Central Plains Ecological Services Field Office, Fort Worth Sub-office  
3233 Curtis Drive  
Forth Worth, Texas 76116

Re: Naples Power Plant, Morris County, Texas

Dear FWS Field Office Staff,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

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The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-Cass owned transmission line, located outside both the 100- and 500-year flood plains.

Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing.

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Telephone Hotline	(816) 822-4243

Sincerely,

A handwritten signature in black ink that reads "Chris Howell". The signature is written in a cursive, flowing style.

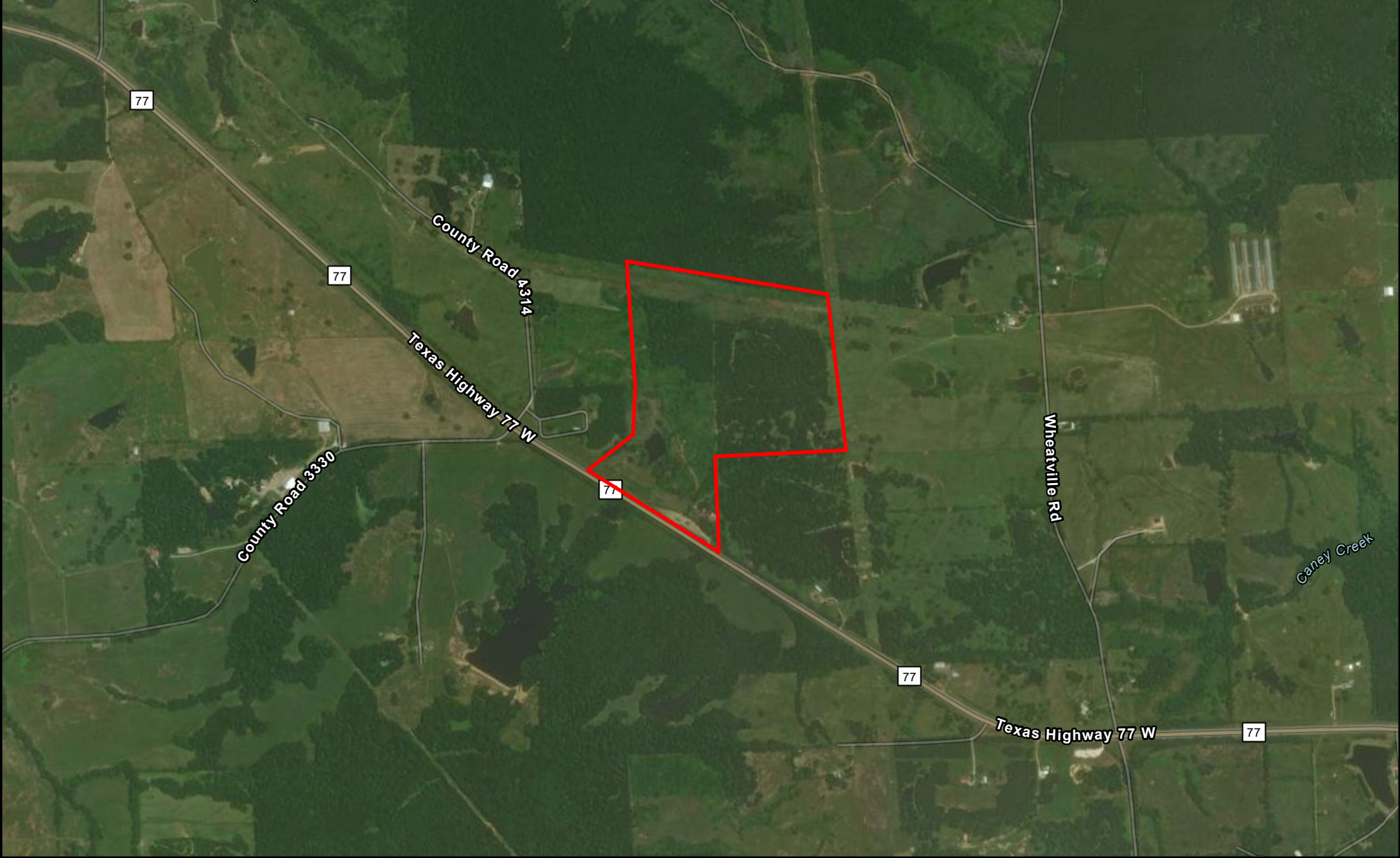
Chris Howell  
Project Manager




Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC





 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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United States Department of Agriculture

Rural Development

Rural Utilities Service  
1400 Independence  
Ave SW,  
Washington, DC  
20250

December 12, 2024

U.S. Fish and Wildlife Service  
Texas Coastal and Central Plains Ecological Services Field Office Fort Worth Sub-office  
3233 Curtis Drive  
Fort Worth, Texas 76116

RE: USDA RUS Improvement Project AECC Naples Power Plant:  
Designation of Nonfederal Representative

Dear FWS Field Office Staff,

USDA Rural Utilities Service (RUS) is in receipt of or pending an application for financial assistance submitted by Arkansas Electric Cooperative Corporation (AECC) for the purpose of providing electricity, located in Morris County, Texas. This project may affect listed or proposed species and/or designated or proposed critical habitat. Species or habitat potentially present in the action area include Piping Plover, Rufa Red Knot, Alligator Snapping Turtle, and Tricolored Bat.

To facilitate Section 7 consultation, we are designating Arkansas Electric Cooperative Corporation, and its consultant, Burns and McDonnell, as our nonfederal representative for the purpose of initiating informal consultation with FWS. The role of the nonfederal representative includes conducting studies, attending meetings, participating in telephone and email contact, developing draft biological assessments, etc., in support of our eventual Endangered Species Act determination. The authority for making Endangered Species Act determinations remains with USDA-RUS. The USDA-RUS contact for this project is Terry Czerwien. Terry Czerwien can be reached at [terry.czerwien@usda.gov](mailto:terry.czerwien@usda.gov) and (254) 742-9704 / (254) 721-8169.

Sincerely,

**TERRY CZERWIEN**

Digitally signed by TERRY  
CZERWIEN  
Date: 2024.12.12 11:12:39 -06'00'

Terry Czerwien, Environmental Protection Specialist

cc: Arkansas Electric Cooperative Corporation  
Burns and McDonnell  
Staff Director

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**Re: [EXTERNAL] Request for Information – Naples Power Plant, Morris County, TX**

---

**From** Arlington ES, FW2 <arles@fws.gov>

**Date** Thu 12/19/2024 4:24 PM

**To** McCaslin, Audra L <almccaslin@burnsmcd.com>

**Cc** Howell, Chris <chowell@burnsmcd.com>; Stephen Cain <stephen.cain@aecc.com>; Mallott, Chris <ckmallott@burnsmcd.com>; Terry Czerwien <terry.czerwien@usda.gov>; Buckingham, Matthew A <matthew\_buckingham@fws.gov>

Adding Matt Buckingham as noted. Thanks.

---

U.S. Fish and Wildlife Service  
Texas Coastal and Central Plains Ecological Services Field Office  
Fort Worth Sub-office  
3233 Curtis Drive  
Fort Worth, Texas 76116  
817-277-1100

<https://www.fws.gov/office/arlington-ecological-services>

---

**From:** Arlington ES, FW2 <arles@fws.gov>

**Sent:** Monday, December 16, 2024 1:31 PM

**To:** McCaslin, Audra L <almccaslin@burnsmcd.com>

**Cc:** Howell, Chris <chowell@burnsmcd.com>; Stephen Cain <stephen.cain@aecc.com>; Mallott, Chris <ckmallott@burnsmcd.com>; Terry Czerwien <terry.czerwien@usda.gov>

**Subject:** Re: [EXTERNAL] Request for Information – Naples Power Plant, Morris County, TX

Hello - thank you for submitting the proposed project for review. Based on the location of the project, we recommend you start by using the Service's Determination Key in the IPaC system where you received the species list letter. A determination key is a questionnaire that provides a pre-determined outcome based on the answers to the questions. The determination is provided through a downloadable letter specific to the project. To access the determination key, log back into the project site in IPaC and look for the "Start Review" button. You can navigate to the determination key from there. Note that there are two determination keys available for this area. After completing one, you can start the other if applicable. If you have any questions, or need further assistance, please contact Matt Buckingham, included on this email.

---

U.S. Fish and Wildlife Service  
Texas Coastal and Central Plains Ecological Services Field Office  
Fort Worth Sub-office



3233 Curtis Drive  
Fort Worth, Texas 76116  
817-277-1100

<https://www.fws.gov/office/arlington-ecological-services>

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**From:** McCaslin, Audra L <almccaslin@burnsmcd.com>  
**Sent:** Friday, December 13, 2024 3:14 PM  
**To:** Arlington ES, FW2 <arles@fws.gov>  
**Cc:** Howell, Chris <chowell@burnsmcd.com>; Stephen Cain <stephen.cain@aecc.com>; Mallott, Chris <ckmallott@burnsmcd.com>; Terry Czerwien <terry.czerwien@usda.gov>  
**Subject:** [EXTERNAL] Request for Information – Naples Power Plant, Morris County, TX

<p><b>This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.</b></p>
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Dear FWS Field Office Staff,

Arkansas Electric Cooperative Corporation (AECC) is proposing to develop a new simple-cycle gas turbine (SCGT) project in Morris County, Texas on approximately 100 acres of land. AECC is seeking USDA Rural Utilities Services (RUS) financing for the project. Burns & McDonnell is assisting RUS and AECC with preparation of an Environmental Assessment to satisfy RUS's National Environmental Policy Act requirements.

Attached is the official request for information which includes the proposed project description and facility location map.

If you have any questions regarding the project or need additional information, please contact Chris Howell at [chowell@burnsmcd.com](mailto:chowell@burnsmcd.com) or (816) 822-4243.

Thank you for your time and assistance,

**Audra McCaslin** \ Burns & McDonnell  
Staff Environmental Scientist  
O 816-605-7928 \ M 531-310-7082  
[almccaslin@burnsmcd.com](mailto:almccaslin@burnsmcd.com) \ burnsmcd.com  
9450 Ward Parkway, Kansas City, MO 64114



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Arlington Ecological Services Field Office  
17629 El Camino Real, Suite 211  
Houston, TX 77058-3051  
Phone: (817) 277-1100 Fax: (817) 277-1129  
Email Address: [arles@fws.gov](mailto:arles@fws.gov)

In Reply Refer To:  
Project Code: 2025-0064842  
Project Name: Naples Power Plant

03/06/2025 12:59:20 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, which may occur within the boundary of your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under section 7(a)(1) of the Act, Federal agencies are directed to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Under and 7(a)(2) and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether their actions may affect threatened and endangered species and/or designated critical habitat. A Federal action is an activity or program authorized, funded, or carried out, in whole or in part, by a Federal agency (50 CFR 402.02).

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For Federal actions other than major construction activities, the Service suggests that a biological evaluation (similar to a Biological Assessment) be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

After evaluating the potential effects of a proposed action on federally listed species, one of the following determinations should be made by the Federal agency:

1. *No effect* - the appropriate determination when a project, as proposed, is anticipated to have no effects to listed species or critical habitat. A "no effect" determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, the action agency should maintain a complete record of their evaluation, including the steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information.
2. *May affect, but is not likely to adversely affect* - the appropriate determination when a proposed action's anticipated effects to listed species or critical habitat are insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur. This determination requires written concurrence from the Service. A biological evaluation or other supporting information justifying this determination should be submitted with a request for written concurrence.
3. *May affect, is likely to adversely affect* - the appropriate determination if any adverse effect to listed species or critical habitat may occur as a consequence of the proposed action, and

the effect is not discountable or insignificant. This determination requires formal section 7 consultation.

The Service has performed up-front analysis for certain project types and species in your project area. These analyses have been compiled into *determination keys*, which allows an action agency, or its designated non-federal representative, to initiate a streamlined process for determining a proposed project's potential effects on federally listed species. The determination keys can be accessed through IPaC.

The Service recommends that candidate species, proposed species, and proposed critical habitat be addressed should consultation be necessary. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at: <https://www.fws.gov/service/section-7-consultations>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>). Additionally, wind energy projects should follow the wind energy guidelines (<https://www.fws.gov/media/land-based-wind-energy-guidelines>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>. The Federal Aviation Administration (FAA) released specifications for and made mandatory flashing L-810 lights on new towers 150-350 feet AGL, and the elimination of L-810 steady-burning side lights on towers above 350 feet AGL. While the FAA made these changes to reduce the number of migratory bird collisions (by as much as 70%), extinguishing steady-burning side lights also reduces maintenance costs to tower owners. For additional information concerning migratory birds and eagle conservation plans, please contact the Service's Migratory Bird Office at 505-248-7882.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in

the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Arlington Ecological Services Field Office**

17629 El Camino Real, Suite 211

Houston, TX 77058-3051

(817) 277-1100

## PROJECT SUMMARY

Project Code: 2025-0064842

Project Name: Naples Power Plant

Project Type: Power Gen - Natural Gas

Project Description: This is a copy of the previous project - need an updated IPaC and Dkey and the previous project is not functional with the 'Define Project' glitch.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.223079,-94.70184891608582,14z>



Counties: Morris County, Texas

## ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## BIRDS

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ Wind Energy Projects</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ Wind Energy Projects</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

## REPTILES

NAME	STATUS
Alligator Snapping Turtle <i>Macrochelys temminckii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4658">https://ecos.fws.gov/ecp/species/4658</a>	Proposed Threatened

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.



# USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

- 
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
  2. The [Migratory Birds Treaty Act](#) of 1918.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA). Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

## MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the

Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a>	Breeds Mar 15 to Aug 25
Little Blue Heron <i>Egretta caerulea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9477">https://ecos.fws.gov/ecp/species/9477</a>	Breeds Mar 10 to Oct 15
Prairie Loggerhead Shrike <i>Lanius ludovicianus excubitorides</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8833">https://ecos.fws.gov/ecp/species/8833</a>	Breeds Feb 1 to Jul 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

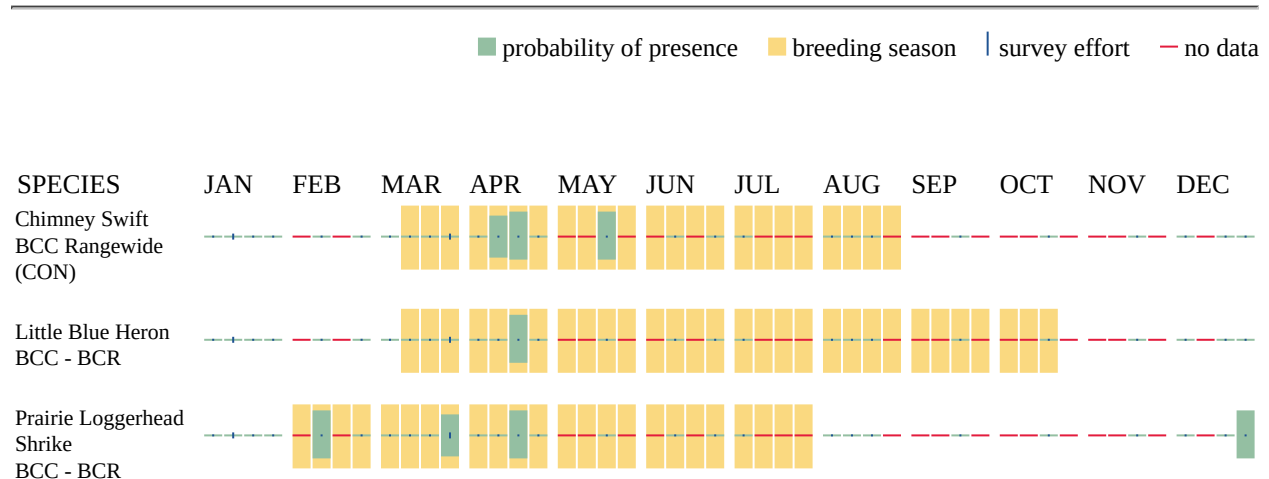
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (l)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

### FRESHWATER POND

- PUBF<sub>x</sub>

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Cara Rogers  
Address: 9450 Ward Parkway  
City: Kansas City  
State: MO  
Zip: 64114  
Email: crogers@burnsmcd.com  
Phone: 9808751271



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Arlington Ecological Services Field Office  
17629 El Camino Real, Suite 211  
Houston, TX 77058-3051  
Phone: (817) 277-1100 Fax: (817) 277-1129  
Email Address: [arles@fws.gov](mailto:arles@fws.gov)

In Reply Refer To:  
Project code: 2025-0028368  
Project Name: Naples Power Plant

01/29/2025 14:42:58 UTC

Federal Nexus: yes  
Federal Action Agency (if applicable): Rural Utilities Service

**Subject:** Technical assistance for 'Naples Power Plant'

Dear Cara Rogers:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on January 29, 2025, for 'Naples Power Plant' (here forward, Project). This project has been assigned Project Code 2025-0028368 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

### Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey), invalidates this letter.**

### Determination for the Northern Long-Eared Bat and Tricolored Bat

Based on your IPaC submission and a standing analysis completed by the Service, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Tricolored Bat ( <i>Perimyotis subflavus</i> )	Proposed	May affect
	Endangered	

### Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Piping Plover *Charadrius melodus* Threatened
- Rufa Red Knot *Calidris canutus rufa* Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

## Conclusion

Consultation with the Service is not complete. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of “May Affect.” A “May Affect” determination in this key indicates that the project, as entered, is not consistent with the questions in the key. Not all projects that reach a “May Affect” determination are anticipated to result in adverse impacts to listed species. These projects may result in a “No Effect”, “May Affect, Not Likely to Adversely Affect”, or “May Affect, Likely to Adversely Affect” determination depending on the details of the project. Please contact our Arlington Ecological Services Field Office to discuss methods to avoid or minimize potential adverse effects to those species or designated critical habitats.

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate. Projects that receive a may affect determination for tricolored bat through the key, should contact the appropriate Ecological Services Field Office if they want to conference on this species.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

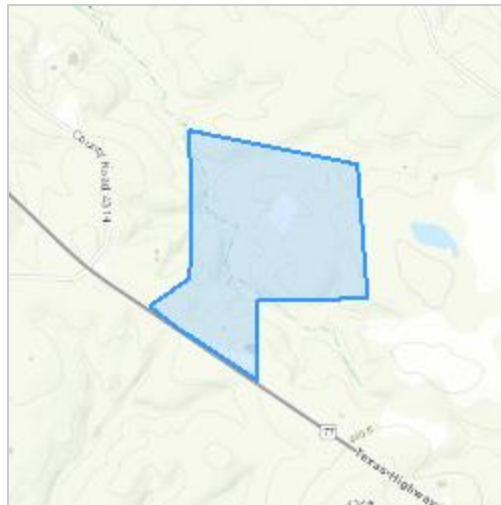
Naples Power Plant

**2. Description**

The following description was provided for the project 'Naples Power Plant':

AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.22224985,-94.70259666412082,14z>



## DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for a least one species covered by this determination key.

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

**Automatically answered**

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

**Automatically answered**

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

**Note:** For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No



7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

**Note:** This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Will the action cause effects to a bridge?

**Note:** Covered bridges should be considered as bridges in this question.

No

13. Will the action result in effects to a culvert or tunnel at any time of year?

No

14. Are trees present within 1000 feet of the action area?

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

15. Does the action include the intentional exclusion of bats from a building or structure?

**Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

No

17. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic permanently or temporarily on one or more existing roads?

**Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

Yes

19. Will the increased vehicle traffic occur on any road that lies between any two areas of contiguous forest that are each greater than or equal to 10 acres in extent and are separated by less than 1,000 feet? Bats may cross a road by flying between forest patches that are up to 1,000 feet apart.

**Note:** "Contiguous forest" of 10 acres or more may include areas where multiple forest patches are separated by less than 1,000 feet of non-forested area if the forested patches, added together, comprise at least 10 acres.

Yes

20. For every 1,000 feet of road where increased traffic is expected, will there be at least one place where bats could cross the road corridor by flying less than 33 feet (10 meters) between trees whose tops are at least 66 feet (20 meters) higher than the road surface?

No

21. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

**Note:** For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

No

22. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

23. Will the action include drilling or blasting?

Yes

24. Will the drilling or blasting produce noise or vibrations above existing background levels that will affect suitable summer habitat for northern long-eared bats and/or tricolored bats?

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and/or tricolored bat, can be found in Appendix A in the USFWS' Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>

Yes

25. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

No

26. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

No

27. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

28. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

29. Will the action cause an increase in the extent of suitable forested habitat exposed to artificial lighting?

Yes

30. Will the action use only downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting) when installing new or replacing existing permanent lights?

Or for those transportation agencies using the Backlight, Uplight, Glare (BUG) system developed by the Illuminating Engineering Society, will all three ratings (backlight, uplight, and glare) be as close to zero as is possible, with a priority of "uplight" of 0?

No

31. Does the action area intersect the tricolored bat species list area?

**Automatically answered**

Yes

32. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

No

33. Has a presence/probable absence bat survey targeting the [tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

34. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?

(If unsure, answer ""Yes."" )

**Note:** If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#).

Yes

35. Do you have any documents that you want to include with this submission?

*No*

## PROJECT QUESTIONNAIRE

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Cara Rogers  
Address: 9450 Ward Parkway  
City: Kansas City  
State: MO  
Zip: 64114  
Email: crogers@burnsmcd.com  
Phone: 9808751271

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Rural Utilities Service

March 26, 2025

U.S. Fish and Wildlife Service  
Arlington Ecological Services Field Office  
17629 El Camino Real, Suite 211  
Houston, Texas 77058-3051

RE: AECC Naples Power Plant Species

Dear USFWS – Arlington Ecological Services Field Office,

The Arkansas Electric Cooperative Corporation (AECC) is considering building the Naples Power Plant in Morris County, Texas. Burns & McDonnell has been named the non-federal representative for this Project, determined by the Rural Utilities Service. The Naples Power Plant will be a natural gas simple cycle turbine. This Project has received an official Information for Planning and Consultation (IPaC) key (Project Code 2025-0064842) which indicated potential for the tricolored bat (*Perimyotis subflavus*) to occur within the Project Area. The tricolored bat is proposed for listing by the U.S. Fish and Wildlife Service as endangered. A Determination Key was submitted for this Project using the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key, resulting in a may affect (Project Code 2025-0028368). This Project is not occurring within the vicinity of any known hibernaculum or maternity colonies and is not anticipated to be disturbing bats while the plant is in production. Additionally, this Project is occurring on an area that has been mostly cleared of trees by the previous landowner, and the remaining trees will be cleared outside of the tricolored bat pup season (May 1 through July 15). Finally, the North American Bat Monitoring Program does not indicate any tricolored bats being detected by mist-netting or acoustic surveys within Morris County, Texas (<https://www.sciencebase.gov/catalog/>).

Due to the Project being sited within an area that is mostly cleared of trees, the remaining trees being cleared outside of the tricolored bat pup season, and a lack of records within the area, the Project anticipates that it will Not Jeopardize the Continued Existence of the tricolored bat.

We look forward to hearing from you. If you have any questions, please contact me at [crogers@burnsmcd.com](mailto:crogers@burnsmcd.com)

Sincerely,

Burns & McDonnell

A handwritten signature in black ink that reads 'Cara Rogers' in a cursive script.

Cara Rogers  
Biologist  
[crogers@burnsmcd.com](mailto:crogers@burnsmcd.com)





---

**RE: [EXTERNAL] Naples Power Plant TCB**

---

**From** Dragon-Moore, Sydney R <sydney\_dragon-moore@fws.gov>

**Date** Fri 3/28/2025 2:06 PM

**To** Rogers, Cara <crogers@burnsmcd.com>

**Cc** Howell, Chris <chowell@burnsmcd.com>; terry.czerwien@usda.gov <terry.czerwien@usda.gov>; Stephen Cain <stephen.cain@aecc.com>; McCaslin, Audra L <almccaslin@burnsmcd.com>; Arlington ES, FW2 <arles@fws.gov>

Hi Cara,

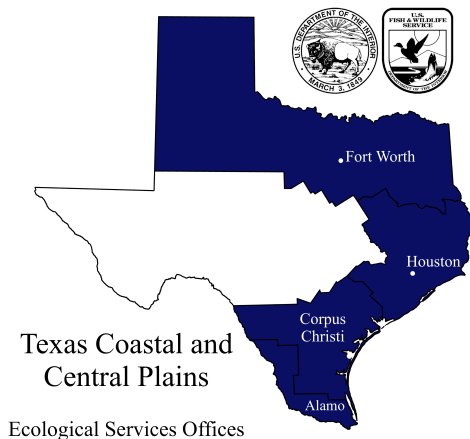
Thank you for submitting the information on the Naples Power Plant in Morris County, and the tricolored bat determination key results. The tricolored bat is not currently protected under the Endangered Species Act, so any measures included to avoid or minimize impacts to the species would be voluntary.

The dkey indicates that your project did not intersect any "buffered" areas (Questions 10 and 32). Your project is in the Texas Hibernating zone, and MCM-6 (pg 10 of [Final Consultation Guidance for Development Projects | FWS.gov](#)) recommends that if TCB presence is assumed, to avoid removing suitable roost trees during the pup season (May 1 through July 15). We believe that impacts to the TCB would be minimal with the implementation of the conservation measure in your letter. Please reach out to me if you have any questions, thanks!

-Sydney

**Sydney Dragon-Moore** (she/her)  
Fish & Wildlife Biologist  
Texas Coastal and Central Plains Ecological Services Field Office

U.S. Fish and Wildlife Service    
(682) 432-6290



**From:** Rogers, Cara <[crogers@burnsmcd.com](mailto:crogers@burnsmcd.com)>

**Sent:** Wednesday, March 26, 2025 2:54 PM

**To:** Arlington ES, FW2 <[arles@fws.gov](mailto:arles@fws.gov)>

**Cc:** Howell, Chris <[chowell@burnsmcd.com](mailto:chowell@burnsmcd.com)>; [terry.czerwien@usda.gov](mailto:terry.czerwien@usda.gov) <[terry.czerwien@usda.gov](mailto:terry.czerwien@usda.gov)>; Stephen Cain <[stephen.cain@aecc.com](mailto:stephen.cain@aecc.com)>; McCaslin, Audra L <[almccaslin@burnsmcd.com](mailto:almccaslin@burnsmcd.com)>

**Subject:** [EXTERNAL] Naples Power Plant TCB

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hello,

Please find the attached document as an effect determination on the tricolored bat at the proposed Naples Power Plant. I have also attached the Project's IPaC, designation of non-federal representative letter, and the Dkey for your reference.

Thank you!

**Cara Rogers**

Biologist

[ she | her | hers ] [Burns & McDonnell](#)

9400 Ward Parkway, Kansas City, MO 64114

| E [crogers@burnsmcd.com](mailto:crogers@burnsmcd.com)



December 13, 2024

Mr. Andrew Hollie  
Air Traffic Specialist  
Federal Aviation Administration - Air Traffic  
10101 Hillwood Parkway  
Fort Worth, Texas 76177-1524

Re: Naples Power Plant, Morris County, Texas

Dear Mr. Hollie,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

The Proposed Action would generally provide a new generation source in the area which would help meet anticipated future demands, specifically ramping/voltage support for new renewable energy projects, using technology that reduces water usage and air emissions compared to conventional natural gas turbines and combustion turbines. AECC would ultimately be responsible for the plant design, permitting, construction, start-up testing, and operations and maintenance.

The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-

Cass owned transmission line, located outside both the 100- and 500-year flood plains. Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing.

**Table 1. Site Assessment Summary**

Parameter	Site Assessment Summary
Location	Morris County, TX
Site Latitude / Longitude	33°13'19.5"N / 94°42'07.9"W (approximate center point of Project)
Total Project Boundary	100 acres
Public Lands and Conservation Easements	0 acres
Cultural Resources	No archeological sites have been recorded within the Project Boundary. No effects to historic properties listed or eligible for listing in the NRHP are anticipated in association with the proposed Project.
Wetlands	1.4 acres of emergent marsh, fen or wet meadow (PEM) and approximately 0.6 acres of shrub swamp (PSS).
Waterbodies	Mary Lees Branch intercepts the northeastern corner of the proposed Project Boundary's perimeter.
Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
Land Use	Twelve land use types, 30% Deciduous Forest (approximately 30 acres), No Prime Farmland
Soils	No hydric soils within the Project Boundary.

Parameter	Site Assessment Summary
Rare, Threatened, and Endangered Species	One candidate and one federally proposed endangered ESA listed species were determined to have potential to occur in the Project Area. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.
Air Quality	Area is unclassified/in attainment. All emissions will be limited such that the facility will comply with EPA and state requirements. The project will be permitted as a major Prevention of Significant Deterioration project. A construction permit and operating permit will be required. Current estimates for greenhouse gas emissions indicate that the facility would not exceed 1,550,000 metric tons of CO <sub>2</sub> e. <sup>1</sup>
Environmental Justice	EJScreen 2.0 results indicate low – average percentile for minority populations, but is an area of environmental justice for low income populations.

<sup>1</sup> Based on the facility being limited by NSPS TTTTa to around 40% capacity per year.

Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



**Contact Information**

U.S. Postal Service	9450 Ward Parkway Kansas City, MO. 64114
Email	<a href="mailto:chowell@burnsmcd.com">chowell@burnsmcd.com</a>
Telephone Hotline	(816) 822-4243

Sincerely,

A handwritten signature in black ink that reads "Chris Howell". The signature is written in a cursive, flowing style.

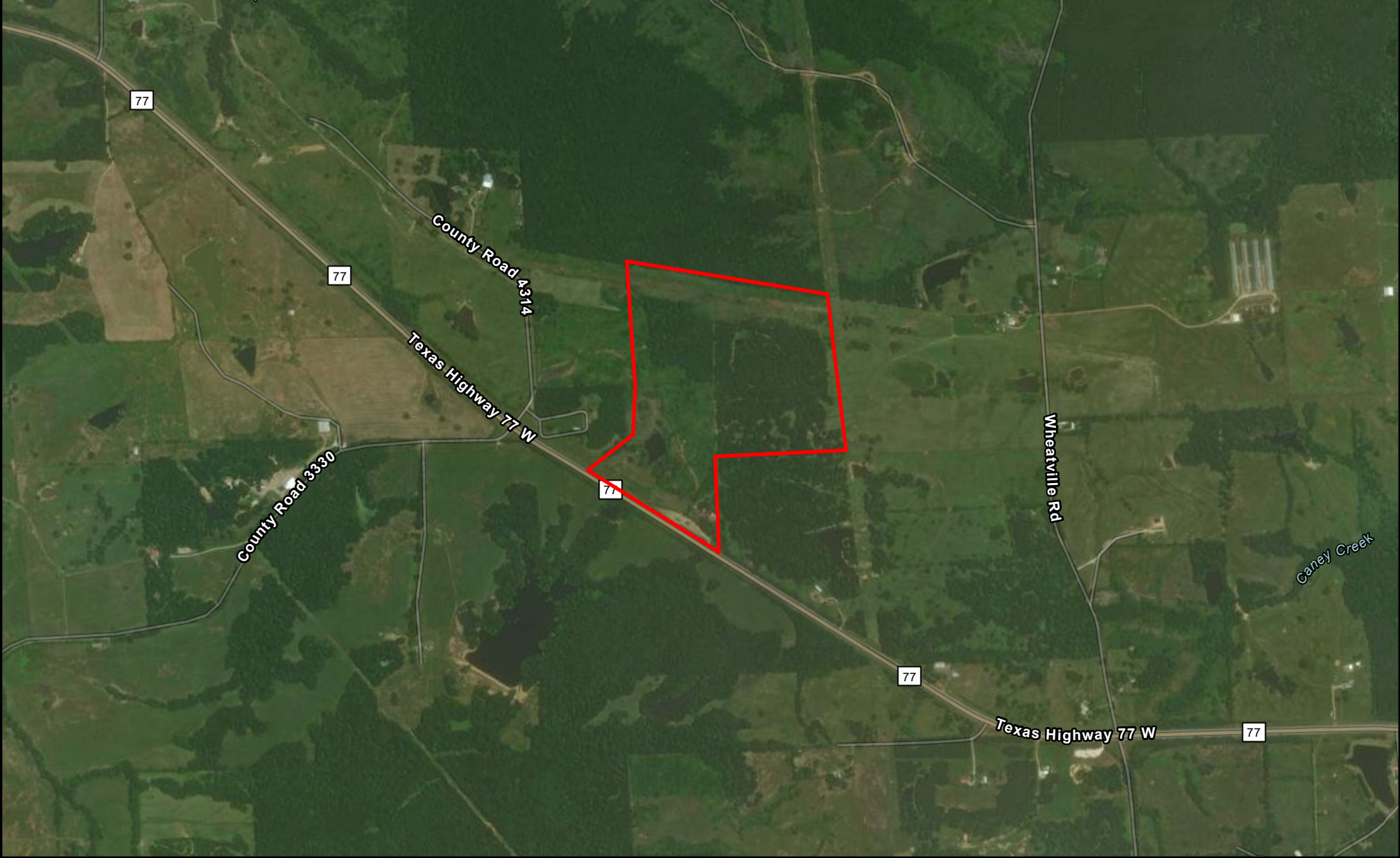
Chris Howell  
Project Manager





Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC





 Naples Power Plant		 500 250 0 500  Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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**RE: Request for Information – Naples Power Plant, Morris County, TX**

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**From** Hollie, Andrew (FAA) <Andrew.Hollie@faa.gov>

**Date** Thu 1/23/2025 3:56 PM

**To** Mallott, Chris <ckmallott@burnsmcd.com>; McCaslin, Audra L <almccaslin@burnsmcd.com>

**Cc** Howell, Chris <chowell@burnsmcd.com>; Stephen Cain <stephen.cain@aecc.com>; Terry Czerwien <terry.czerwien@usda.gov>; Cardenas, Debbie (FAA) <Debbie.Cardenas@faa.gov>

Glad to help.

Andrew Hollie  
FAA Specialist CO and TX  
Obstruction Evaluation Group, AJV-A520  
10101 Hillwood Pkwy  
Fort Worth, Texas 76177  
Phone: 817-222-5933

For more information, go to:  
<https://oeaaa.faa.gov>

---

**From:** Mallott, Chris <ckmallott@burnsmcd.com>

**Sent:** Thursday, January 23, 2025 3:48 PM

**To:** Hollie, Andrew (FAA) <Andrew.Hollie@faa.gov>; McCaslin, Audra L <almccaslin@burnsmcd.com>

**Cc:** Howell, Chris <chowell@burnsmcd.com>; Stephen Cain <stephen.cain@aecc.com>; Terry Czerwien <terry.czerwien@usda.gov>; Cardenas, Debbie (FAA) <Debbie.Cardenas@faa.gov>

**Subject:** Re: Request for Information – Naples Power Plant, Morris County, TX

**CAUTION:** This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hi Andrew,

I appreciate the response. We ran the FAA Notice Criteria Tool and filing is not required for stacks until 137 feet.

Thank you,  
Chris

**Christopher Mallott** \ Burns & McDonnell

Assistant Environmental Scientist

o 816-237-5485

[ckmallott@burnsmcd.com](mailto:ckmallott@burnsmcd.com) \ [burnsmcd.com](http://burnsmcd.com)

9450 Ward Parkway \ Kansas City, MO 64114



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*Please consider the environment before printing this email.*

---

**From:** Hollie, Andrew (FAA) <[Andrew.Hollie@faa.gov](mailto:Andrew.Hollie@faa.gov)>

**Sent:** Monday, December 16, 2024 7:42 AM

**To:** McCaslin, Audra L <[almccaslin@burnsmcd.com](mailto:almccaslin@burnsmcd.com)>

**Cc:** Howell, Chris <[chowell@burnsmcd.com](mailto:chowell@burnsmcd.com)>; Stephen Cain <[stephen.cain@aecc.com](mailto:stephen.cain@aecc.com)>; Mallott, Chris <[ckmallott@burnsmcd.com](mailto:ckmallott@burnsmcd.com)>; Terry Czerwien <[terry.czerwien@usda.gov](mailto:terry.czerwien@usda.gov)>; Cardenas, Debbie (FAA) <[Debbie.Cardenas@faa.gov](mailto:Debbie.Cardenas@faa.gov)>

**Subject:** RE: Request for Information – Naples Power Plant, Morris County, TX

Good morning,

The FAA will need something more than this. All the information about this program is on our website at [oeaaa.faa.gov](https://oeaaa.faa.gov). If you will have any structures that will be above 200 above ground level (AGL), then a study will need to be submitted. If the structures are going to be below 200 AGL, on the web site, there is a Notice Criteria Tool. That is our screening tool. If it states that you DO NOT exceed notice, then you are done with us. Print that out. When filled out, that is now a legal document showing that you contacted the FAA, and we need nothing further. If it states that you DO exceed notice, then please file a study. Attached are some instructions that will help. If you have any questions, please contact either Debbie Cardenas or me and we will be able to assist you further. Also, I have worked with Burns and McDonnell on lots of projects, so there should be people in the company that could also assist.

Thank you

Andrew Hollie  
FAA Specialist CO and TX  
Obstruction Evaluation Group, AJV-A520  
10101 Hillwood Pkwy  
Fort Worth, Texas 76177  
Phone: 817-222-5933

For more information, go to:

<https://oeaaa.faa.gov>

---

**From:** McCaslin, Audra L <[almccaslin@burnsmcd.com](mailto:almccaslin@burnsmcd.com)>

**Sent:** Friday, December 13, 2024 3:09 PM

**To:** Hollie, Andrew (FAA) <[Andrew.Hollie@faa.gov](mailto:Andrew.Hollie@faa.gov)>

**Cc:** Howell, Chris <[chowell@burnsmcd.com](mailto:chowell@burnsmcd.com)>; Stephen Cain <[stephen.cain@aecc.com](mailto:stephen.cain@aecc.com)>; Mallott, Chris <[ckmallott@burnsmcd.com](mailto:ckmallott@burnsmcd.com)>; Terry Czerwien <[terry.czerwien@usda.gov](mailto:terry.czerwien@usda.gov)>

**Subject:** Request for Information – Naples Power Plant, Morris County, TX

**CAUTION:** This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Hollie,

Arkansas Electric Cooperative Corporation (AECC) is proposing to develop a new simple-cycle gas turbine (SCGT) project in Morris County, Texas on approximately 100 acres of land. AECC is seeking USDA Rural Utilities Services (RUS) financing for the project. Burns & McDonnell is assisting RUS and AECC with preparation of an Environmental Assessment to satisfy RUS's National Environmental Policy Act requirements.

Attached is the official request for information which includes the proposed project description and facility location map.

If you have any questions regarding the project or need additional information, please contact Chris Howell at [chowell@burnsmcd.com](mailto:chowell@burnsmcd.com) or (816) 822-4243.

Thank you for your time and assistance,

**Audra McCaslin** \ Burns & McDonnell

Staff Environmental Scientist

o 816-605-7928 \ m 531-310-7082

[almccaslin@burnsmcd.com](mailto:almccaslin@burnsmcd.com) \ [burnsmcd.com](http://burnsmcd.com)

9450 Ward Parkway, Kansas City, MO 64114



December 13, 2024

Dr. Earthea Nance  
Region 6 Administrator  
EPA  
1201 Elm Street, Suite 500  
Dallas, Texas 75270

Re: Naples Power Plant, Morris County, Texas

Dear Administrator Nance,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

The Proposed Action would generally provide a new generation source in the area which would help meet anticipated future demands, specifically ramping/voltage support for new renewable energy projects, using technology that reduces water usage and air emissions compared to conventional natural gas turbines and combustion turbines. AECC would ultimately be responsible for the plant design, permitting, construction, start-up testing, and operations and maintenance.

The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-

Cass owned transmission line, located outside both the 100- and 500-year flood plains. Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing.

**Table 1. Site Assessment Summary**

Parameter	Site Assessment Summary
Location	Morris County, TX
Site Latitude / Longitude	33°13'19.5"N / 94°42'07.9"W (approximate center point of Project)
Total Project Boundary	100 acres
Public Lands and Conservation Easements	0 acres
Cultural Resources	No archeological sites have been recorded within the Project Boundary. No effects to historic properties listed or eligible for listing in the NRHP are anticipated in association with the proposed Project.
Wetlands	1.4 acres of emergent marsh, fen or wet meadow (PEM) and approximately 0.6 acres of shrub swamp (PSS).
Waterbodies	Mary Lees Branch intercepts the northeastern corner of the proposed Project Boundary's perimeter.
Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
Land Use	Twelve land use types, 30% Deciduous Forest (approximately 30 acres), No Prime Farmland
Soils	No hydric soils within the Project Boundary.

Parameter	Site Assessment Summary
Rare, Threatened, and Endangered Species	One candidate and one federally proposed endangered ESA listed species were determined to have potential to occur in the Project Area. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.
Air Quality	Area is unclassified/in attainment. All emissions will be limited such that the facility will comply with EPA and state requirements. The project will be permitted as a major Prevention of Significant Deterioration project. A construction permit and operating permit will be required. Current estimates for greenhouse gas emissions indicate that the facility would not exceed 1,550,000 metric tons of CO <sub>2</sub> e. <sup>1</sup>
Environmental Justice	EJScreen 2.0 results indicate low – average percentile for minority populations, but is an area of environmental justice for low income populations.

<sup>1</sup> Based on the facility being limited by NSPS TTTTa to around 40% capacity per year.

Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



**Contact Information**

U.S. Postal Service	9450 Ward Parkway Kansas City, MO. 64114
Email	<a href="mailto:chowell@burnsmcd.com">chowell@burnsmcd.com</a>
Telephone Hotline	(816) 822-4243

Sincerely,

A handwritten signature in black ink that reads "Chris Howell".

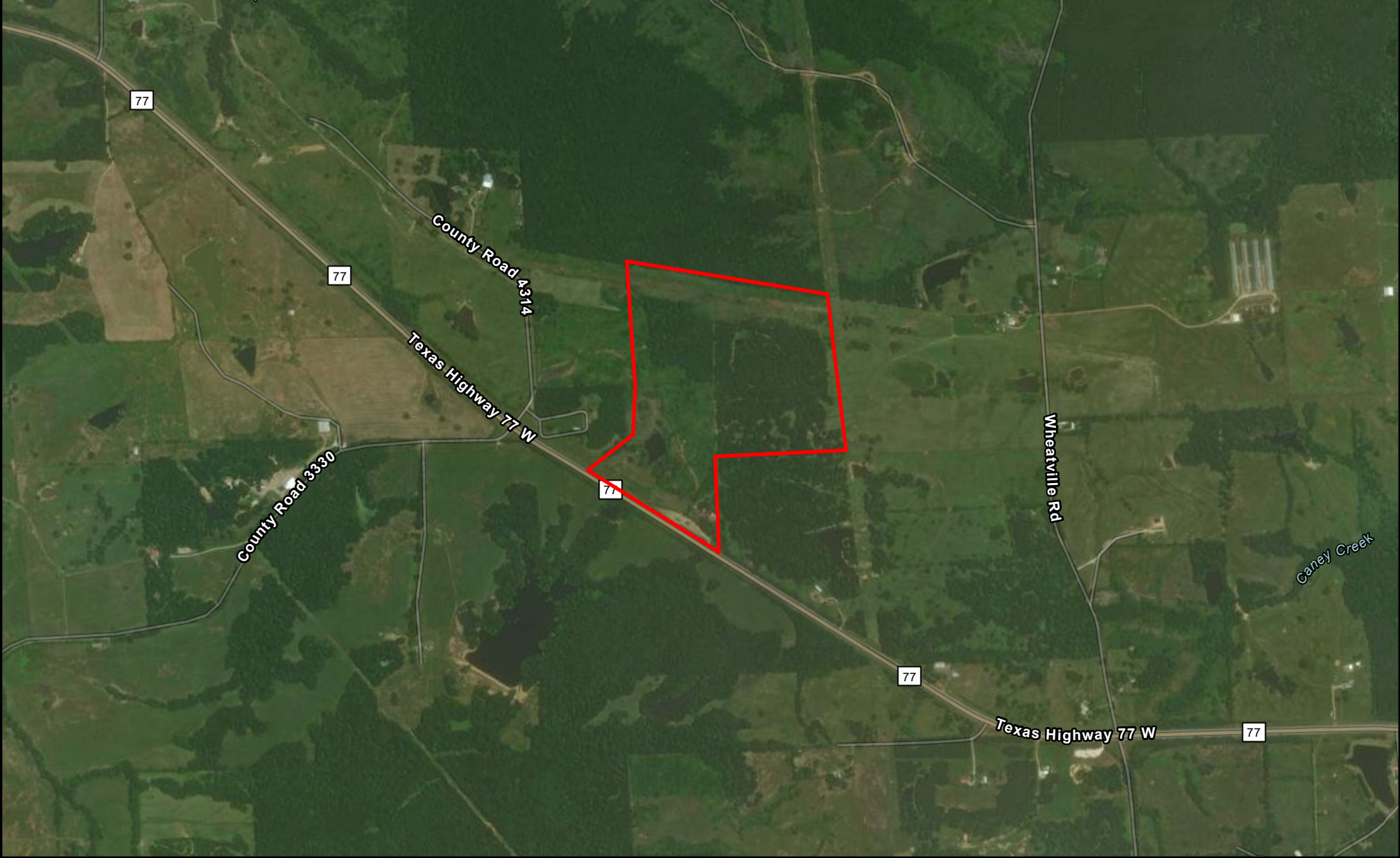
Chris Howell  
Project Manager




Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC





 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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December 13, 2024

Mr. Brian Costner  
Director

U.S. Dept of Energy Office of NEPA Policy and Compliance (GC-54)  
1000 Independence Avenue, S.W.  
Washington, DC 20585

Re: Naples Power Plant, Morris County, Texas

Dear Director Costner,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

The Proposed Action would generally provide a new generation source in the area which would help meet anticipated future demands, specifically ramping/voltage support for new renewable energy projects, using technology that reduces water usage and air emissions compared to conventional natural gas turbines and combustion turbines. AECC would ultimately be responsible for the plant design, permitting, construction, start-up testing, and operations and maintenance.

The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-



Cass owned transmission line, located outside both the 100- and 500-year flood plains. Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing.

**Table 1. Site Assessment Summary**

Parameter	Site Assessment Summary
Location	Morris County, TX
Site Latitude / Longitude	33°13'19.5"N / 94°42'07.9"W (approximate center point of Project)
Total Project Boundary	100 acres
Public Lands and Conservation Easements	0 acres
Cultural Resources	No archeological sites have been recorded within the Project Boundary. No effects to historic properties listed or eligible for listing in the NRHP are anticipated in association with the proposed Project.
Wetlands	1.4 acres of emergent marsh, fen or wet meadow (PEM) and approximately 0.6 acres of shrub swamp (PSS).
Waterbodies	Mary Lees Branch intercepts the northeastern corner of the proposed Project Boundary's perimeter.
Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
Land Use	Twelve land use types, 30% Deciduous Forest (approximately 30 acres), No Prime Farmland
Soils	No hydric soils within the Project Boundary.

Parameter	Site Assessment Summary
Rare, Threatened, and Endangered Species	One candidate and one federally proposed endangered ESA listed species were determined to have potential to occur in the Project Area. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.
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<sup>1</sup> Based on the facility being limited by NSPS TTTTa to around 40% capacity per year.

Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



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Sincerely,

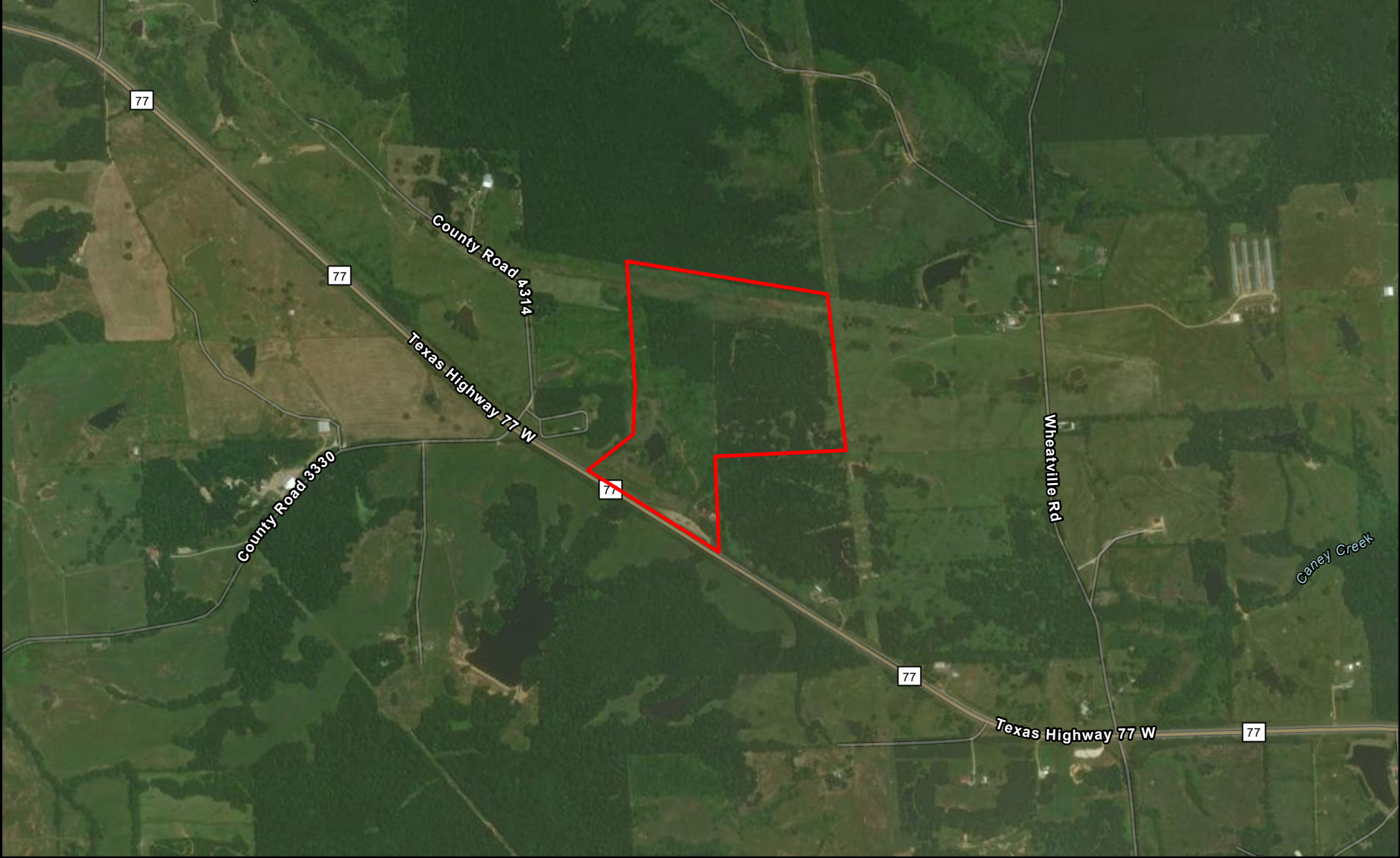
A handwritten signature in black ink that reads "Chris Howell". The signature is written in a cursive, flowing style.




Chris Howell  
Project Manager

Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC



 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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December 13, 2024

Ms. Laura Zebehazy  
Program Leader  
Texas Parks and Wildlife Department  
Wildlife Division: Wildlife Habitat Assessment Program  
4200 Smith School Road  
Austin, Texas 78744-3291

Re: Naples Power Plant, Morris County, Texas

Dear Ms. Zebehazy,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

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Email	<a href="mailto:chowell@burnsmcd.com">chowell@burnsmcd.com</a>
Telephone Hotline	(816) 822-4243

Sincerely,

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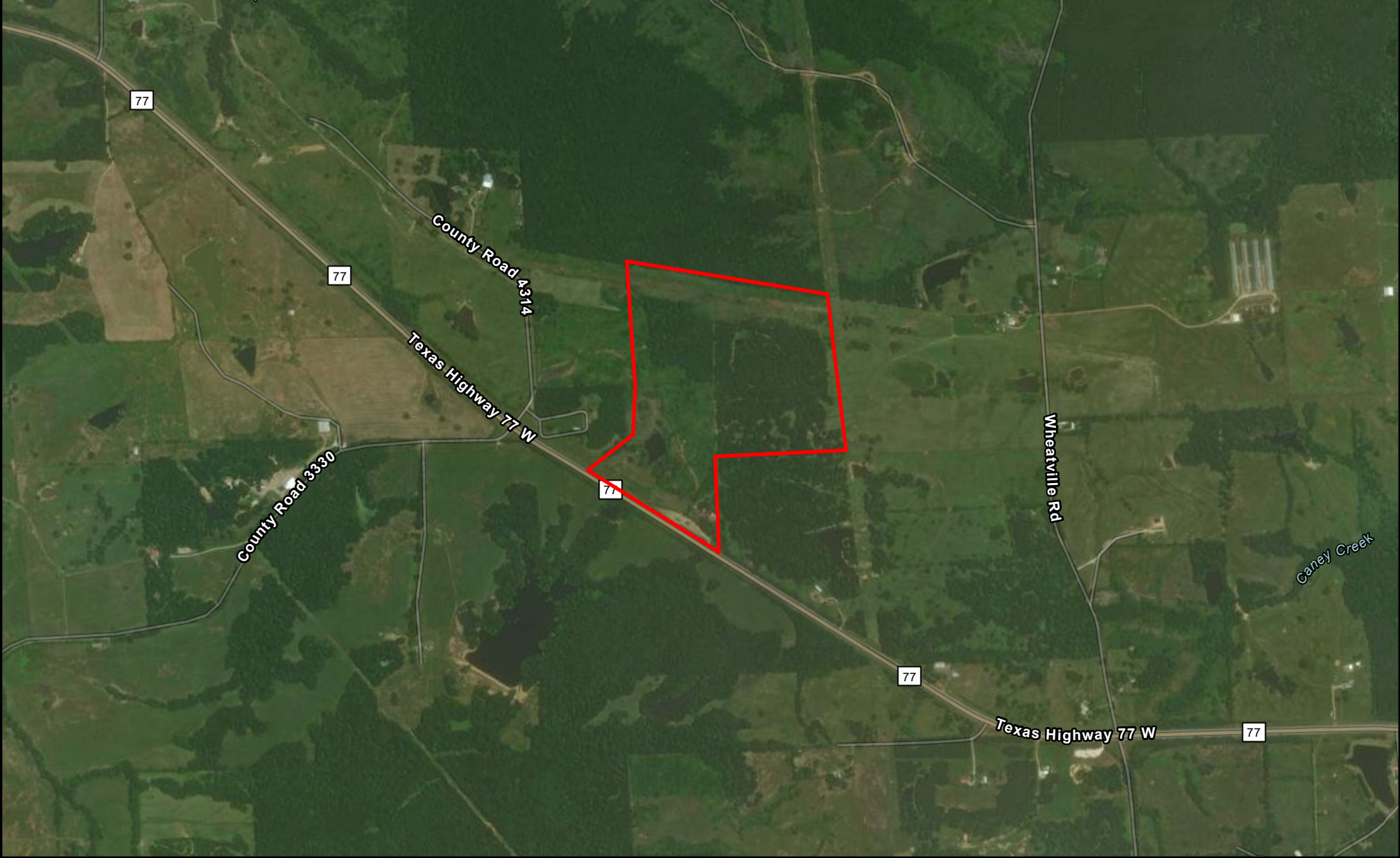
Chris Howell  
Project Manager




Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC





 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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January 10, 2025

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Vice-Chairman  
Cleveland

James E. Abell  
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Dallas

Dick Scott  
Wimberley

Lee M. Bass  
Chairman-Emeritus  
Fort Worth

T. Dan Friedkin  
Chairman-Emeritus  
Houston

---

David Yoskowitz, Ph.D.  
Executive Director

Mr. Chris Howell  
Burns & McDonnell  
9450 Ward Parkway  
Kansas City, MO 64114

RE: Naples Power Plant, Morris County

Dear Mr. Chris Howell:

On behalf of Arkansas Electric Cooperative Corporation (AECC), Burns & McDonnell is requesting input regarding the proposed Naples Power Plant in preparation of an environmental assessment to obtain financial assistance from the USDA Rural Development, Rural Utilities Service Electric Program. The project involves the construction of two simple-cycle gas turbines (SCGT) on approximately 100 acres located northwest of Naples, Texas. The project location was chosen to include onsite tie-in to an existing Natural Gas Pipeline Company gas line and an existing Bowie-Cass electric transmission line. Project review materials included a Threatened and Endangered Species Report and cover letter. Project materials indicate the site contains forest, grasslands, woody wetlands, a pond, and a barn/shed structure.

Under Texas Parks and Wildlife Code (PWC) section 12.0011(b)(2) and (b)(3), TPWD has the authority to provide recommendations and informational comments that will protect fish and wildlife resources to local, state, and federal agencies that approve, license, or construct developmental projects and to provide information on fish and wildlife resources to local, state, and federal agencies or private organizations that make decisions affecting those resources. Pursuant to PWC section 12.0011, TPWD offers the following comments and recommendations concerning this project.

**Federal Law**

*Federal Law: Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) prohibits taking, attempting to take, capturing, killing, selling, purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts, or nests, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species, including ground nesting species. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information.

Potential impacts to migratory birds may occur during disturbance of existing vegetation and bare ground that may harbor active bird nests, including nests that may occur in grass, shrubs, burrows, and trees and on gravel pads and roads.

**Recommendation:** TPWD concurs with the recommendation in Threatened and Endangered Species Report to exclude vegetation clearing activities during the general bird nesting season, March 15 through September 15, to avoid adverse impacts to breeding birds. If disturbing vegetation during the migratory bird nesting season is unavoidable, TPWD recommends surveying the area proposed for disturbance to ensure that no nests with eggs or young will be disturbed by construction. TPWD generally recommends a 100-foot buffer of vegetation remain around active nests until the eggs have hatched and the young have fledged; however, the size of the buffer zone depends on various factors and can be coordinated with the local or regional USFWS office.

**Recommendation:** TPWD recommends employing the USFWS *Nationwide Standard Conservation Measures* to reduce impacts on birds and their habitats.

Artificial light at night can have negative impacts on wildlife and ecosystems by disrupting natural diurnal and nocturnal behaviors such as migration, reproduction, nourishment, rest, and cover from predators. Careful selection of lighting technologies can reduce the Project's contribution to skyglow and light pollution.

**Recommendation:** As protection measures, TPWD recommends avoiding the use of permanent outdoor nighttime lighting. If outdoor lighting is required, TPWD recommends minimizing the Project's contribution to skyglow by focusing light downward with shields or cutoff luminaires and using dark-sky friendly lighting that is illuminated only when needed, as bright as needed, and minimizes blue light emissions. Appropriate lighting technologies, BMP, and other dark sky resources can be found at the International Dark-Sky Association and McDonald Observatory websites.

#### *Federal Law: Endangered Species Act*

Federally listed animal species and their habitat are protected from take on any property by the Endangered Species Act (ESA). Take of a federally listed species can be allowed if it is incidental to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Take of a federally listed species or its habitat without allowance from USFWS is a violation of the ESA.

TPWD concurs with the Threatened and Endangered Species Report that the project area contains suitable tree roosting habitat for the proposed endangered tricolored bat (*Perimyotis subflavus*) and suitable migration habitat for the monarch butterfly (*Danaus Plexippus*), which was recently changed from a candidate species to proposed threatened.

*Tricolored bat*: The tricolored bat roosts in trees, primarily among clusters of leaves of live or recently dead deciduous hardwood trees but may also be found in Spanish moss (*Tillandsia usneoides*) and clusters of dead pine needles. The sexes live separately during the summer, with males often solitary and females forming small maternity colonies primarily in foliage, but sometimes in buildings and rock crevices. The northern latitudes of Texas (including Morris County) are considered the hibernating range where pupping occurs May 15-July 31. During pupping the bats are less able to escape from tree clearing and are susceptible to mortality. Protection of hibernacula, avoiding tree removal during pupping, and minimizing overall tree removal are conservation practices for the species.

Woodland areas and the onsite barn/shed structure that would be cleared for construction may provide suitable maternity season habitat for tricolored bats.

**Recommendation:** Because the Project occurs in northern latitudes of Texas, TPWD recommends avoiding tree clearing during the pupping season May 15-July 31 and minimizing the tree clearing footprint to the extent feasible. TPWD recommends ensuring that the barn/shed structure is not occupied by bats prior to demolition. TPWD recommends utilizing these BMP in preparation for an anticipated listing decision. If tricolored bats become federally listed prior to construction, then the Project will need to conduct additional coordination with the USFWS— Texas Coastal and Central Plains Ecological Services – Fort Worth Sub-Office at [arles@fws.gov](mailto:arles@fws.gov) or (817) 277-1100, pursuant to the ESA.

*Monarch butterfly*: Potential impacts to the monarch butterfly may occur during clearing, herbicide treatment, or grading of the Project's herbaceous openings and grasslands during the active monarch season in Texas (approximately March 1 – October 31).

There is widespread concern regarding the decline of monarch butterflies and other native insect pollinator species due to reductions in native floral resources. To support pollinators and migrating monarchs, TPWD encourages the establishment of native wildflower habitats on private and public lands. To contribute to pollinator conservation, TPWD encourages the project proponent to revegetate and maintain undeveloped herbaceous areas with native vegetation for the benefit of wildlife, including pollinators. Resources to aid in pollinator establishment and plant lists include the Lady Bird Johnson Wildflower Center plant lists, Pollinator.org planting guides by zip code, Monarch Watch.org, the Xerces Society pollinator resource center, and TPWD Native Pollinators and Monarch Butterfly webpages.

**Recommendation:** Regarding the monarch butterfly, TPWD recommends that AECC consider development strategies that avoid or minimize loss to habitat for the monarch butterfly, namely areas of the Project site that contain the greatest amounts of floral resources or milkweed (*Asclepias* spp.). To supplement habitat that is lost due to construction of the proposed Project, TPWD recommends monarch and other pollinator habitat conservation or restoration either on-site



within the periphery, along roads, within power line or pipeline areas, and between site amenities, or at a nearby off-site location.

**Recommendation:** For areas of the site that already exhibit floral resources and for areas that are planted with floral resources, TPWD recommends incorporating pollinator conservation into maintenance plans for the site to promote and sustain the availability of flowers throughout the growing season. TPWD recommends avoiding herbicides that affect floral resources and scheduling vegetation maintenance to occur once the seed from wildflowers has been released, typically late summer, early fall.

### **State Law**

#### *State Law: Chapter 64, Birds*

PWC section 64.002, regarding protection of nongame birds, provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. PWC section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl.

**Recommendation:** Please review the *Migratory Bird Treaty Act* section above for recommendations as they are also applicable for compliance with PWC.

#### *State Law: Chapter 68, State-listed Species*

PWC regulates state listed threatened and endangered animal species. The capture, trap, take, or killing of state listed animal species is unlawful unless expressly authorized under authorization by USFWS or TPWD.

TPWD concurs with the Threatened and Endangered Species Report that the state listed threatened Bachman's sparrow (*Peucaea aestivalis*) and Northern scarlet snake (*Cemophora coccinea*) may occur in the project area due to the presence of suitable habitat. The Bachman's sparrow would be susceptible to loss due to vegetation disturbance during the nesting season. The Northern scarlet snake is semi-fossorial, spending much of its time underground and would be susceptible to compaction or disturbance by construction equipment.

**Recommendation:** To avoid or minimize potential impacts to state listed species and other SGCN, TPWD recommends adopting the BMPs presented in the *Federal Law: Migratory Bird Treaty Act* section above and the *Beneficial Management Practices* section below.

### **State Fish and Wildlife Resources**

In addition to federal and state listed species, TPWD tracks other Species of Greatest Conservation Need (SGCN) and actively promotes their conservation. TPWD

considers it important to evaluate and, if feasible, minimize impacts to SGCN and their habitat to reduce the likelihood of endangerment and preclude the need to list as threatened or endangered in the future.

The Partners in Amphibian and Reptile Conservation indicate that the project crosses a priority amphibian and reptile conservation area. Please refer to the TPWD *Rare, Threatened, and Endangered Species of Texas by County* (RTEST) list for Morris County for a complete list of SGCN with potential to occur in the County and for general habitat descriptions. Species on the Morris County list could be impacted in association with construction, operation, and maintenance activities if suitable habitat or the species occur at the project site.

**Recommendation:** Please refer to the *Beneficial Management Practices* section below for recommendations to avoid or minimize impacts to SGCN.

### **Beneficial Management Practices**

TPWD recommends implementing the following BMP to avoid or minimize impacts to wildlife and SGCN, including state listed SGCN, potentially occurring at the project site:

1. TPWD recommends designing the site to minimize removal of vegetation and retain native habitats. TPWD recommends that precautions be taken to avoid impacts on SGCN, natural plant communities, or special features if discovered in the project area during the site assessment or during construction, operation, and maintenance.
2. Waterways, floodplains, riparian corridors, swamps, ponds, and wetlands provide valuable wildlife habitat, and TPWD recommends protecting them to the maximum extent possible. TPWD recommends retaining riparian and stream bank vegetation where feasible. TPWD recommends implementing stream crossings using trenchless technology, avoiding unnecessary temporary or permanent access roads across streams, conducting open trench stream crossings when the streams are dry, retaining riparian and stream vegetation, avoiding dewatering to ensure protection of aquatic life, using mats to protect ground vegetation and roots from construction equipment. TPWD recommends avoiding disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, creek banks, pools, and gravel stream bottoms, as these provide habitat for a variety of fish and wildlife species and their food sources. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site-specific native vegetation.
3. If culverts are proposed within access roads, they should be installed in a manner that does not impede flow, over-widen the channel, or destabilize the banks. Culverts should allow for sediment transport and passage of aquatic dependent

organisms during low flow conditions and should not impound water, thus the bottom of culverts should match the natural low flow channel of the stream.

4. TPWD recommends avoiding the removal of trees that have hollows, as they provide suitable habitat for cavity dependent wildlife. If cavity trees would be removed, TPWD recommends inspecting them for bats or other wildlife prior to tree removal.
5. TPWD recommends informing employees and contractors of the potential state listed species and other SGCN to occur in the project area and to avoid impacts to all wildlife that are encountered. TPWD recommends a biological monitor be present during clearing and construction activities to assist in detecting state listed species, as well as other SGCN, in the ROW. Wildlife observed during construction, operation, and maintenance should be allowed to safely leave the site. Wildlife in danger from project activities that will not readily leave the site, can be translocated to a nearby area with similar habitat. TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100-200 yards from the initial encounter location. For purposes of relocation, surveys, monitoring, and research, terrestrial state listed species may only be handled by persons with the appropriate authorization obtained through the TPWD Wildlife Permits Program. For more information on obtaining this authorization, please contact the Wildlife Permits Office at (512) 389-4647.
6. Small vertebrates including snakes, lizards, toads, and small mammals can fall into trenches, become trapped, and are susceptible to loss from backfilling activities, starvation, dehydration, predation, and exposure to elements depending on trench and backfill methodologies. Where trenching or other excavation is involved in construction, TPWD recommends that contractors keep trenching, excavation, and backfilling crews close together to minimize the number of trenches or excavation areas left open at any given time during construction. Trenches or holes should be inspected for the presence of trapped wildlife prior to backfilling. TPWD recommends that any open trenches or excavation areas be covered overnight and inspected every morning to ensure no wildlife species have been trapped. If trenches and excavation areas cannot be backfilled the day of initial excavation or covered overnight, then escape ramps should be installed, if feasible, at least every 90 meters (approximately 295 feet). Escape ramps consist of short lateral trenches made of soil or wooden planks sloping to the surface at an angle less than 45 degrees (1:1). Project materials indicate that ERP recommends this BMP for the Project.
7. For soil stabilization and revegetation of disturbed areas within the proposed project area, TPWD recommends erosion control and seed and mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of

no-till drilling, hydromulching, or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

8. To aid in the scientific knowledge of a species' status and current range, TPWD encourages reporting encounters of SGCN to the TXNDD according to the data submittal instructions found at the *TPWD Texas Natural Diversity Database: Submit Data* webpage. An additional method for reporting observations of species is the iNaturalist community app in which plant and animal observations are uploaded from a smartphone. The observer adds the observation to specific TPWD Texas Nature Tracker Projects appropriate for the taxa observed, including Herps of Texas, Terrestrial Mollusks of Texas, Mammals of Texas, Birds of Texas, Rare Plants of Texas, Bees & Wasps of Texas, Texas Freshwater Mussels, Red-crowned Parrot Project, Fishes of Texas, Texas Milkweeds for Monarchs, Texas Whooper Watch, and Texas Eagle Nests.

Thank you for considering the fish and wildlife resources of Texas. If you have any questions, please contact me at Karen.Hardin@tpwd.texas.gov or (903) 322-5001.

Sincerely,

A handwritten signature in black ink that reads "Karen B. Hardin". The signature is fluid and cursive, with the first name "Karen" being more prominent than the last name "Hardin".

Karen B. Hardin  
Environmental Review Biologist  
Ecological and Environmental Planning Program  
Wildlife Division

kbh/53256





December 13, 2024

Mr. Ryan Vise  
Division Director, External Relations  
Texas Commission of Environmental Quality  
PO Box 13087 (MC 118)  
Austin, Texas 78711-3087

Re: Naples Power Plant, Morris County, Texas

Dear Director Vise,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

The Proposed Action would generally provide a new generation source in the area which would help meet anticipated future demands, specifically ramping/voltage support for new renewable energy projects, using technology that reduces water usage and air emissions compared to conventional natural gas turbines and combustion turbines. AECC would ultimately be responsible for the plant design, permitting, construction, start-up testing, and operations and maintenance.

The environmental conditions for the Project Site were reviewed extensively, providing onsite tie-in locations for the existing Natural Gas Pipeline Company (NGPL) owned gas line and Bowie-

Cass owned transmission line, located outside both the 100- and 500-year flood plains. Environmental justice concerns were evaluated using the EPA's EJScreen 2.0 tool. A 2-mile buffer was created around the site and a standard report containing environmental and socioeconomic indexes was generated. All reported indexes had average to low percentiles but is located in an area of environmental justice for low-income populations. As part of the design and environmental process, AECC will utilize a permitting matrix to identify any local, state, or Federal permits needed for project completion. Desktop-level studies and field surveys were performed to determine the need for further evaluation or permitting at the project location. Table 1, below, summarizes the screening-level findings from those studies. Identified permits needed for the Project currently include an air permit, wetland permit (Clean Water Act Section 404), and National Pollution Discharge Elimination Systems (NPDES) construction stormwater permits, as well as Federal Aviation Administration notifications and other appropriate local permitting and licensing.

**Table 1. Site Assessment Summary**

Parameter	Site Assessment Summary
Location	Morris County, TX
Site Latitude / Longitude	33°13'19.5"N / 94°42'07.9"W (approximate center point of Project)
Total Project Boundary	100 acres
Public Lands and Conservation Easements	0 acres
Cultural Resources	No archeological sites have been recorded within the Project Boundary. No effects to historic properties listed or eligible for listing in the NRHP are anticipated in association with the proposed Project.
Wetlands	1.4 acres of emergent marsh, fen or wet meadow (PEM) and approximately 0.6 acres of shrub swamp (PSS).
Waterbodies	Mary Lees Branch intercepts the northeastern corner of the proposed Project Boundary's perimeter.
Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
Land Use	Twelve land use types, 30% Deciduous Forest (approximately 30 acres), No Prime Farmland
Soils	No hydric soils within the Project Boundary.

Parameter	Site Assessment Summary
Rare, Threatened, and Endangered Species	One candidate and one federally proposed endangered ESA listed species were determined to have potential to occur in the Project Area. Final critical habitat for federally protected species has not been designated by the USFWS in the vicinity of the site.
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Environmental Justice	EJScreen 2.0 results indicate low – average percentile for minority populations, but is an area of environmental justice for low income populations.

<sup>1</sup> Based on the facility being limited by NSPS TTTTa to around 40% capacity per year.

Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



**Contact Information**

U.S. Postal Service	9450 Ward Parkway Kansas City, MO. 64114
Email	<a href="mailto:chowell@burnsmcd.com">chowell@burnsmcd.com</a>
Telephone Hotline	(816) 822-4243

Sincerely,

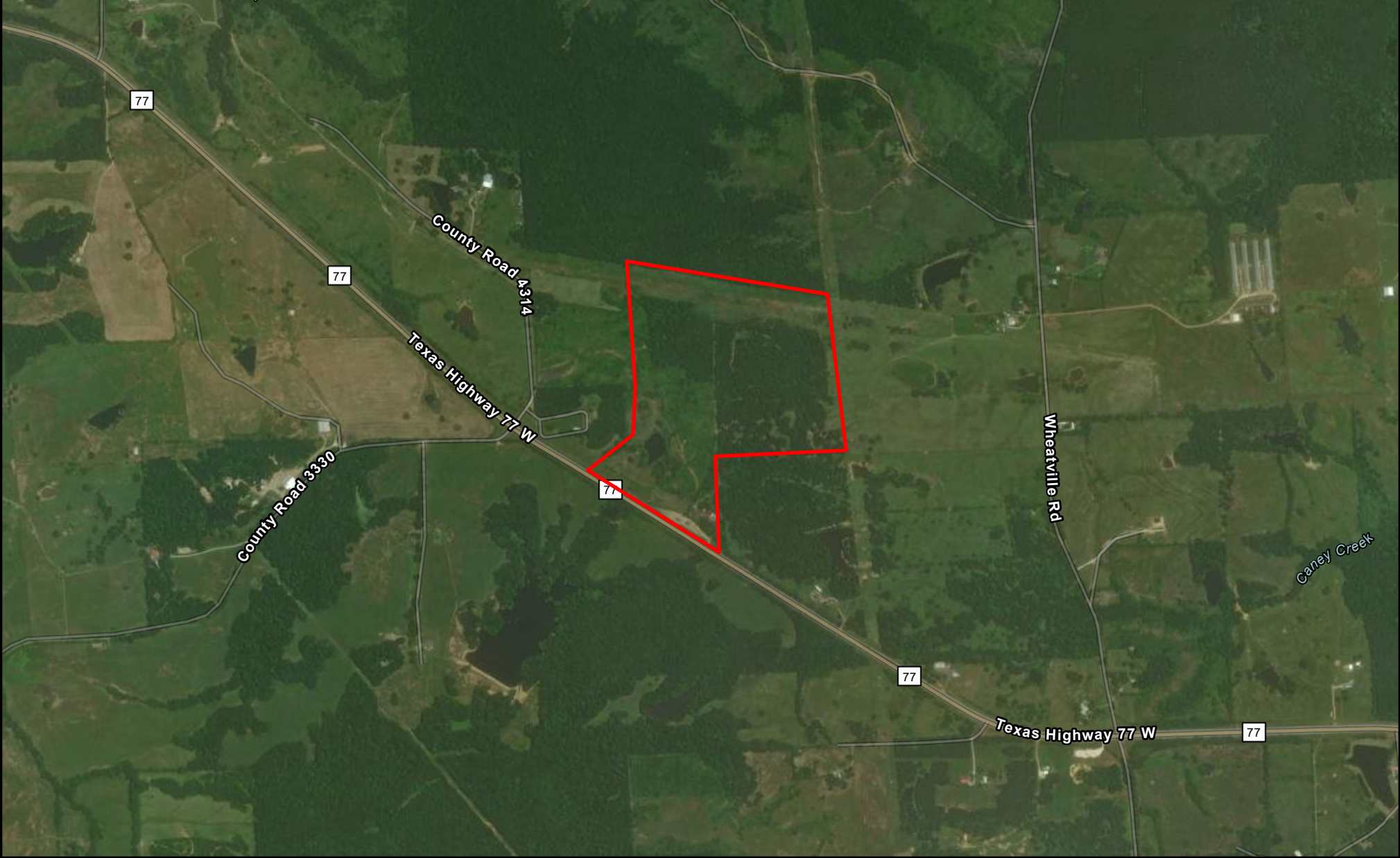
A handwritten signature in black ink that reads "Chris Howell". The signature is written in a cursive, flowing style.




Chris Howell  
Project Manager

Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC



 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

January 7, 2025

Audra McCaslin  
Staff Environmental Scientist  
Burns & McDonnell  
9450 Ward Parkway  
Kansas City, MO 64114

Via: **E-mail**

Re: **TCEQ NEPA Request #2025-067. NAPLES POWER PLANT PROJECT. Morris County.**

Dear Ms. McCaslin,

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers the following comments:

The proposed action is located in Morris County, which is currently designated attainment/unclassifiable for the National Ambient Air Quality Standards for all six criteria air pollutants. Federal Clean Air Act, §176(c) general conformity requirements do not apply for this action.

We recommend the environmental assessment address actions that will be taken to prevent surface and groundwater contamination.

Any debris or waste disposal should be at an appropriately authorized disposal facility.

Thank you for the opportunity to review this project. If you have any questions, please contact the agency NEPA coordinator at (512) 239-5538 or [NEPA@tceq.texas.gov](mailto:NEPA@tceq.texas.gov)

Sincerely,

A handwritten signature in black ink, appearing to read "R. Vise".

Ryan Vise,  
Division Director  
External Relations



December 13, 2024

Mr. Trey Watson  
Field Representative  
Texas State Soil and Water Conservation Board, Sulphur-Cypress District  
1809 W Ferguson Rd Ste D  
Mount Pleasant, Texas 75455-2960

Re: Naples Power Plant, Morris County, Texas

Dear Mr. Watson,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

As currently planned, construction of the Proposed Action ("Project") AECC proposes to build two simple-cycle gas turbines (SCGT) at a greenfield site in Morris County, Texas, as shown in Figure 1. As the Project Site is a greenfield site, general power plant infrastructure (internal roads, retention pond, etc.) will also be constructed. The facility will be fully constructed and operational in 2028. AECC would supply the electric power generated by the plant to its rural co-op member-owners via existing infrastructure that runs adjacent to the Project Site.

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Water Supply	Wells will provide water to the site.
FEMA Flood Zones	0 acres
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Burns & McDonnell requests your review of this Project and asks that you provide information on any concerns, resources, or potential impacts that you believe the forthcoming EA should address. We would appreciate any recommendations you may have to mitigate or avoid environmental impacts. Please share any information regarding additional review requirements that your agency may have. We would appreciate a response within 30 days of your receipt of this request. To send comments or request further information, please contact Chris Howell at Burns & McDonnell Engineering Company, Inc. using one of the methods listed below, mentioning the proposed Naples Power Plant.



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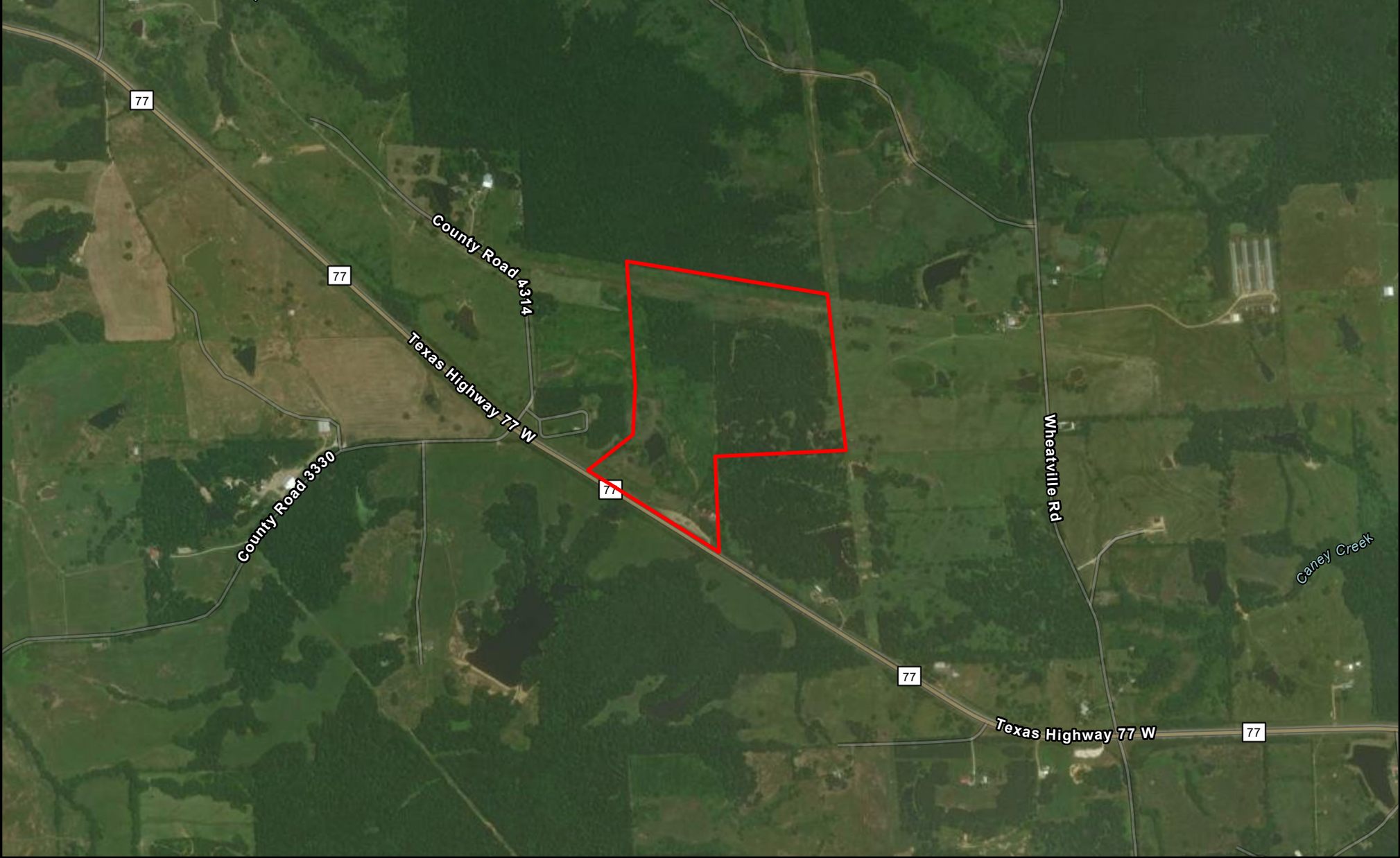
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Chris Howell  
Project Manager

Enclosure

Figure 1

CC: Terry Czerwien, RUS  
Stephen Cain, AECC



 Naples Power Plant		 500 250 0 500 Scale in Feet		<p>Figure 1 Project Location Naples Power Plant Arkansas Electric Cooperative Corporation Morris County, Texas</p>
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December 13, 2024

Ms. Rebecca Wells  
Atlanta District Engineer  
TxDOT  
701 E Main St  
Atlanta, Texas 75551

Re: Naples Power Plant, Morris County, Texas

Dear Ms. Wells,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

The Project would be located in Morris County, Texas (Project Site), and is approximately 100 acres. Figure 1 provides a map of the project area. The proposed Project Site is comprised primarily of forested, woody wetlands, or grasslands, with an existing barn/shed structure, and a pond. Based on preliminary designs, the proposed project site within the 100-acre Project Site could nominally produce up to 900 megawatts.

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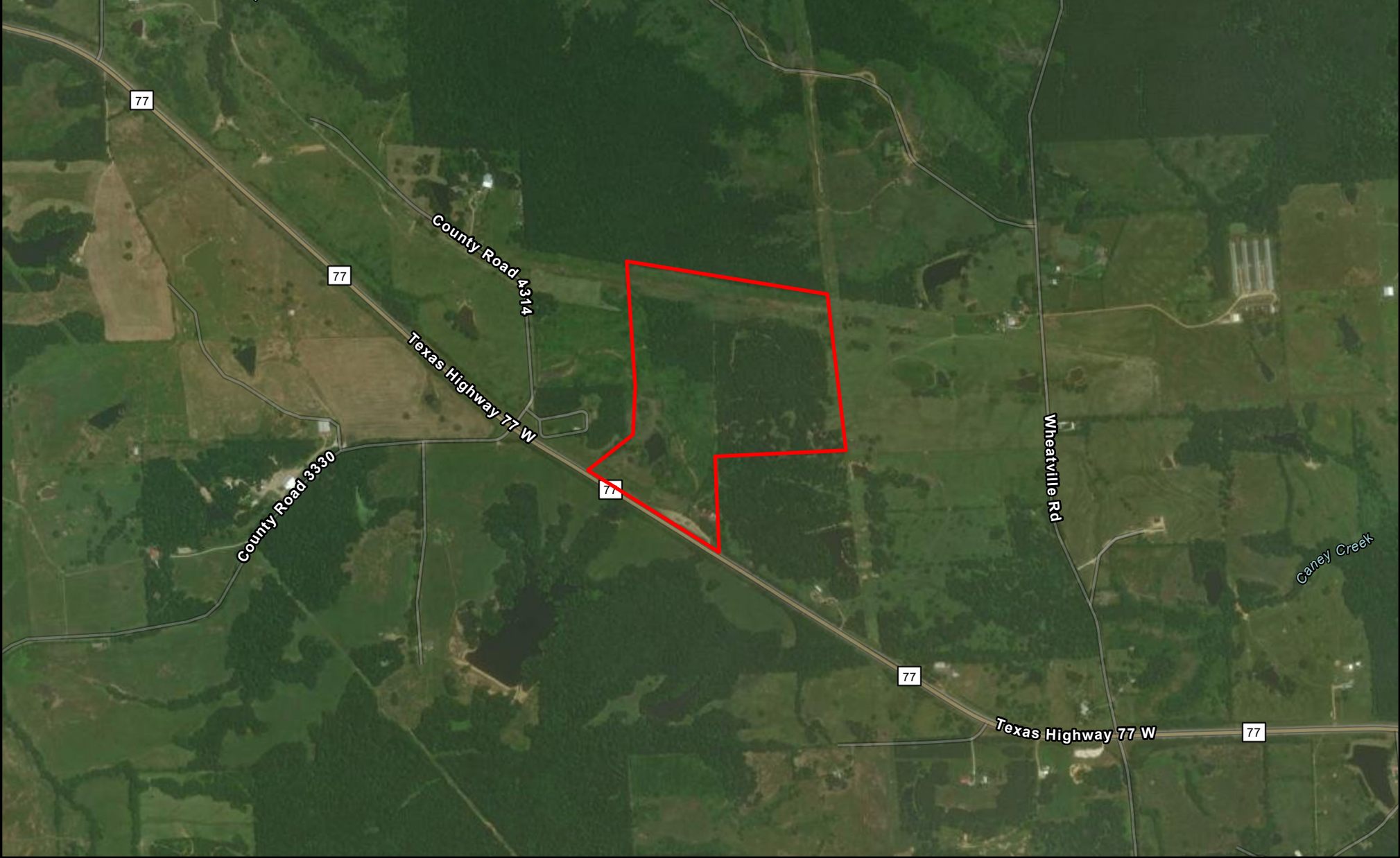
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Chris Howell  
Project Manager

Enclosure

Figure 1

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Stephen Cain, AECC



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December 13, 2024

Mr. Michael Clair  
Precinct 3 Commissioner  
Morris County, Texas  
500 Broadnax St  
Daingerfield, Texas 75638

Re: Naples Power Plant, Morris County, Texas

Dear Commissioner Clair,

Arkansas Electric Cooperative Corporation (AECC) is seeking financial assistance from the USDA Rural Development, Rural Utilities Service (RUS) under the RUS Electric Program for the Naples Power Plant (Project). In anticipation of the National Environmental Policy Act (NEPA), Clean Air Act, Endangered Species Act, and National Historic Preservation Act compliance, the purpose of this letter is to introduce the Project and gather information from your office on preliminary concerns, if any, for consideration in this compliance process. RUS has determined that an Environmental Assessment (EA) is the appropriate NEPA class of action for this Project pursuant to 7 Code of Federal Regulations § 1970.101. RUS has delegated transmittal of Agency Scoping letters to AECC and their consultant Burns & McDonnell per 7 CFR 1970.5(b)(2). This letter serves to notify you of the Project and to request your input.

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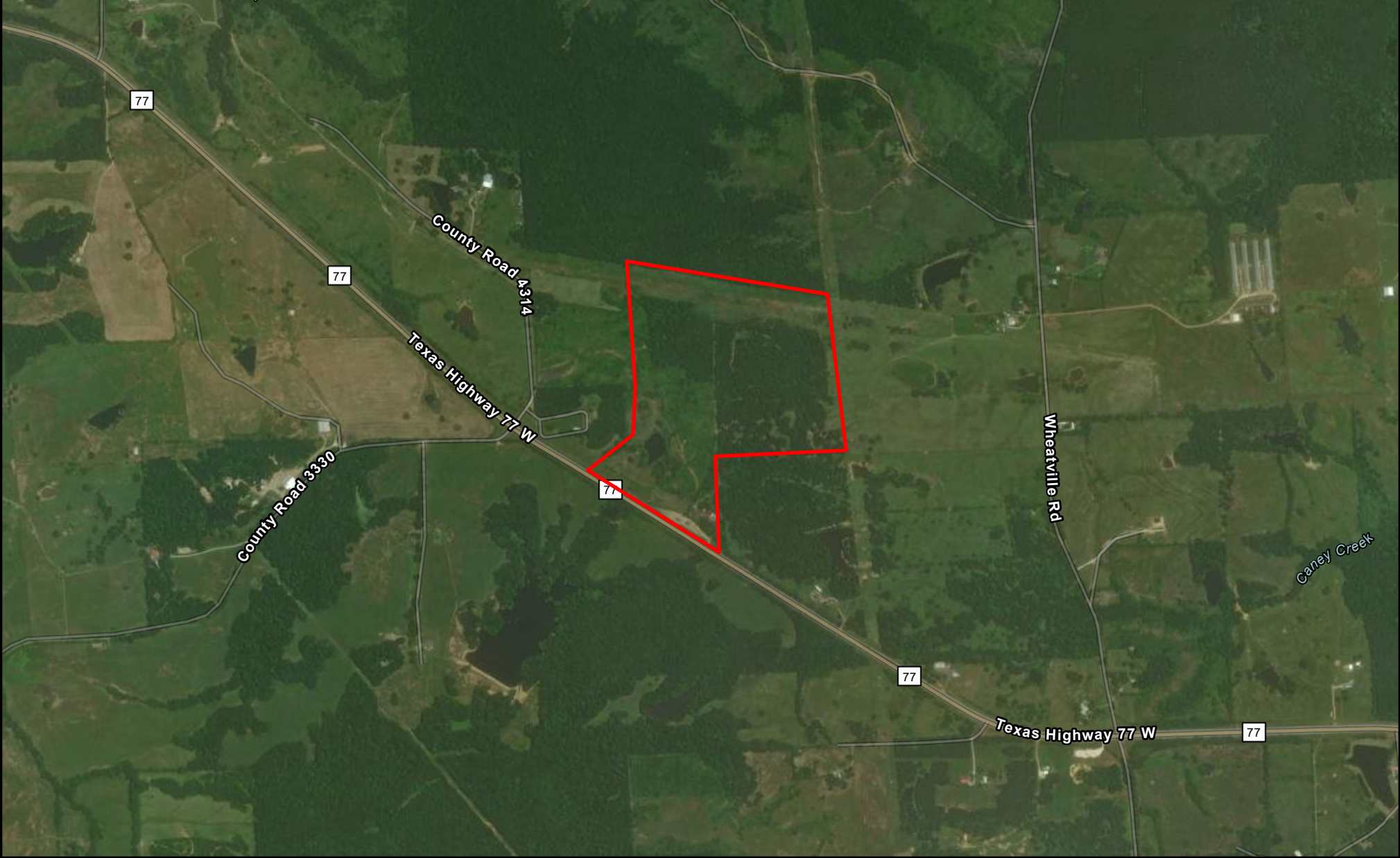
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Chris Howell  
Project Manager

Enclosure

Figure 1

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Stephen Cain, AECC



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# DOUGLAS F. REEDER

MORRIS COUNTY JUDGE  
500 BROADNAX, SUITE B  
DAINGERFIELD, TEXAS 75638

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TELEPHONE: 903-645-3691  
FAX: 903-645-5729

Chris Howell  
Burns & McDonnell Engineering Company, Inc.  
9450 Ward Parkway  
Kansas City, MO 64114

Re: Naples Power Plant Project – Request for Additional Information Regarding Water Usage

Dear Mr. Howell,

Thank you for reaching out to Morris County regarding the proposed Naples Power Plant Project. We appreciate your proactive communication and the opportunity to provide feedback on this significant development. Morris County is genuinely excited about the potential benefits the project could bring to our community and the surrounding region, including its ability to meet future energy demands while incorporating innovative, water-efficient, and low-emission technologies.

We would like to express some minor concerns about the potential impact on local water resources. Given the scale of the project and its operational requirements, we would appreciate further clarification on the following points:

1. Number of Water Wells Required:
  - o How many water wells will be necessary for the construction and operation of the facility?
2. Volume of Water Usage:
  - o What is the estimated volume of water that will be required during the construction and operational phases of the power plant?
3. Impact on Area Resources:
  - o Has an assessment been conducted to evaluate how the water wells and usage will affect local groundwater levels, adjacent landowners, or ecological systems?
  - o If such an assessment has been conducted, we kindly request more details on the findings and any mitigation measures planned to address potential impacts.

Morris County places a high priority on the sustainability of our water resources, as they are essential to the community's agricultural, industrial, and residential needs. While we are excited about the economic and energy-related benefits of the Naples Power Plant Project, we want to ensure that the long-term effects on the area's natural resources are carefully considered.

Finally, please know that Morris County is eager to support AECC in any way possible to help facilitate the success of this project. We value the collaboration and are committed to working together to address any challenges that may arise.

Thank you for your attention to these matters. We look forward to receiving your response with additional details regarding the project's water requirements and impacts. Should you need further input or assistance from the county, please feel free to reach out to my office at 903-645-3691 or via email at [doug.reeder@co.morris.tx.us](mailto:doug.reeder@co.morris.tx.us).

Sincerely,



Doug Reeder  
Morris County Judge

---

Re: \*\* External \*\* RE: Notes from Today's Call with RUS

---

From doug.reeder <doug.reeder@co.morris.tx.us>

Date Thu 1/30/2025 10:04 AM

To Howell, Chris <chowell@burnsmcd.com>

Cc terry.czerwien@usda.gov <terry.czerwien@usda.gov>; McCaslin, Audra L <almccaslin@burnsmcd.com>; Mallott, Chris <ckmallott@burnsmcd.com>; terry.czerwien@usda.gov <terry.czerwien@usda.gov>; McCaslin, Audra L <almccaslin@burnsmcd.com>; Mallott, Chris <ckmallott@burnsmcd.com>

Thank you for your response.

Sent from my iPhone

On Jan 29, 2025, at 2:56 PM, Howell, Chris <chowell@burnsmcd.com> wrote:

Dear Judge Reeder,

Thank you for your response to the consultation letter! AECC and Burns & McDonnell likewise look forward to working with Morris County throughout this project.

AECC has hired and engaged in hydrogeological studies and are in the process of identifying a well drilling contractor to begin well exploration activities. The well exploration activities will help determine how many wells will ultimately be needed and what the effects on the surrounding area may be. General daily water consumption at the plant will be very low as this type of generation facility (simple-cycle gas turbine) does not use water for cooling as no steam is produced. There will be water withdrawal to fill water storage tanks on site, but that is not a common activity. Daily use at the site will include showers, sinks, eye wash stations, etc. and occasionally the turbines will be washed. All appropriate information will be provided to regulatory agencies as the design progresses and as AECC applies for permits that may be needed. It is anticipated the design of the well(s) will not affect other users' abilities to operate their wells in the area, but as a safeguard, any new well(s) will be pump-tested and monitored to ensure that adjacent wells are not affected.

Feel free to call or email if you have further questions!  
Chris

**Chris Howell**

Project Manager \ Environmental Services

o 816-822-4243

[chowell@burnsmcd.com](mailto:chowell@burnsmcd.com) \ [burnsmcd.com](http://burnsmcd.com)

[<image001.jpg>](#)

## **Appendix E - Unanticipated Discovery Plan**

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ARKANSAS ELECTRIC COOPERATIVE CORPORATION

# Unanticipated Discoveries Plan for Cultural Resources and Human Remains

Naples Power Plant Project

PROJECT NO. 176136

DRAFT

JUNE 5, 2025



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## List of Abbreviations

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Abbreviation	Term/Phrase/Name
AECC	Arkansas Electric Cooperative Corporation
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
NRHP	National Register of Historic Places
Project	Naples Power Plant
RUS	Rural Utilities Service
SOI	Secretary of Interior
THC	Texas Historical Commission
UDP	Unanticipated Discoveries Plan



# 1.0 Introduction

---

Arkansas Electric Cooperation Corporation (AECC) is proposing construction and operation of the Naples Power Plant Project (Project) in Morris County, Texas. This Unanticipated Discoveries Plan (UDP) for cultural resources and human remains has been developed to outline the procedures to be followed in the event of an unanticipated discovery during construction of the Project.

Although the Project area was previously surveyed for cultural resources, there remains a possibility that previously undocumented cultural resources or human remains could be discovered during Project implementation. This document describes the procedures for dealing with unanticipated discoveries and is intended to provide direction and guidance to Project personnel as to the proper procedure to be followed should an unanticipated discovery occur.

AECC will be responsible for advising construction personnel during implementation of the procedures of this plan in the event of an unanticipated discovery of cultural resources.

## 1.1 Cultural Resources

Cultural resources are artifacts (tangible objects that are at least 50 years old) or features (nonportable areas where you can see evidence of use by past people and are often identified by unnatural soil layers or fills). A cultural resource can be pre- or post-contact and could consist of, but is not limited to:

- A historic building, structure, object, or assemblage of historic materials older than 50 years.
- An accumulation of shell burned rocks, or other subsistence-related materials.
- An area of charcoal or very dark soil with artifacts.
- Stone tools, arrowheads, or dense concentrations of stone artifacts; or
- A cluster of bones in association with shell, charcoal, burned rocks, or stone artifacts.

## 1.2 Human Remains

Human remains are physical remains of a human body or bodies, including, but not limited to, bones, teeth, hair, ashes, and preserved soft tissues (mummified or otherwise preserved) of an individual. Remains may be articulated or disarticulated bones or teeth. Such remains may or may not be associated with mortuary goods, such as headstones, coffin hardware, rings of stones, or mortuary-related offerings. Any and all human remains must be treated with dignity and respect at all times.

## 2.0 Procedures for the Discovery of Cultural Resources

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Should any Project personnel believe that cultural resources have been discovered during construction activities, the procedures in this chapter will be implemented.

- 1) **STOP WORK.** If any employee, contractor, or subcontractor believes that they have uncovered cultural materials at any point in the construction of the Project, construction activities within the immediate area of the discovery will be halted and the discovery shall be protected from further disturbance. The “immediate area” shall be defined as 50 feet for non-burial discoveries but may depend on the situation.
- 2) **CONTACT.** The individual providing oversight for the construction work shall be notified immediately and that person shall contact the U.S. Department of Agriculture Rural Utilities Service (RUS) upon confirming the discovery.
- 3) Within 24 hours, if possible, a professional archaeologist who meets the Secretary of Interior’s (SOI) Professional Qualification Standards (44 FR 44738-9) for archaeologists will examine the discovery. If the archaeologist determines that the discovery is not cultural material(s), the archaeologist will advise AECC that they may allow construction to continue at that location. The archaeologist will document the discovery site and submit the documentation to RUS.
- 4) If the archaeologist determines that the discovery is intact cultural materials, and if the discovery does not appear to be human remains, the archaeologist will immediately notify AECC. AECC will then notify RUS within 24 hours. If the discovery occurs during a weekend or Federal holiday, RUS will be notified on the first working day after the weekend and/or holiday.
- 5) RUS will notify the Texas Historical Commission (THC) and other stakeholders as necessary.
- 6) In consultation with RUS, THC, and other appropriate stakeholders, AECC will work with an SOI-qualified archaeologist who will examine the discovery. All work to evaluate significance and Project effects will be confined to the Project’s potential area of impact. The costs of such professional services will generally be the responsibility of AECC.
  - a) The archaeologist will evaluate the cultural material and provide a recommendation regarding the significance of the cultural material and whether the cultural material includes Native American resources.
  - b) AECC may submit a request to RUS to re-commence construction in the vicinity of the discovery if it is demonstrated that construction will not impact the discovery being evaluated or any potential minimization or data recovery measures.
  - c) When the evaluation of the cultural material is complete, AECC will notify RUS and discuss the potential significance of the resource and applicable next steps.



## 3.0 Procedures for the Discovery of Human Remains

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In the event that human remains are encountered during construction activities, the following plan outlines the specific procedures to be followed. These procedures meet or exceed the Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects set forth by the National Historic Preservation Act (PL 89-665), its implementing regulations, “Protection of Historic and Cultural Properties” (36 CFR Part 800); Procedures for the Protection of Historic Properties (33 CFR 325 Appendix C); and the Texas Health and Safety Code (Title 8, Chapters 711-715).

All activity that might disturb the remains shall cease and may not resume until authorized by appropriate law enforcement officials or the RUS. Any human remains, burial sites, or burial-related materials that are discovered during construction will at all times be treated with dignity and respect. If any member of the construction workforce believes that human remains are encountered the following plan will be implemented:

1. **STOP WORK.** Any activity that may disturb the unmarked burial site, human skeletal remains, or associated burial artifacts will immediately cease upon discovery. No photographs will be taken of human remains. The site will be carefully covered and secured for protection from degradation by weather or unauthorized individuals.
2. **Contact.** AECC shall be notified immediately and will be responsible for taking appropriate steps to further protect the discovery. This will include fencing off the immediate area of discovery and flagging off a 100-foot radius around the area as an exclusion zone. No earthmoving activity may resume until authorized by RUS.
3. AECC will contact an SOI-qualified archaeologist trained in the identification of human skeletal remains. The archeologist will examine the skeletal material. If the archeologist determines that it is human, the archeologist will notify the Morris County Sheriff and the RUS Archaeologist.
4. If the County Sheriff finds that the unmarked burial site is not a crime scene and determines that there is no need for a legal inquiry by their offices or for a criminal investigation, then the RUS will determine jurisdiction of the site, human skeletal remains, and the burial artifacts, and an appropriate course of action with the THC.





## **Appendix F - Noise Study**

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ARKANSAS ELECTRIC COOPERATIVE  
CORPORATION

# SOUND STUDY

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NAPLES POWER PLANT

PROJECT NO. 164180

REVISION 0  
JUNE 4, 2025

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## List of Abbreviations

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Abbreviation	Term/Phrase/Name
AECC	Arkansas Electric Cooperative Corporation
ANSI	American National Standards Institute
BOP	balance of plant
dB	decibel
dBA	A-weighted decibel
Hz	hertz
L <sub>ANS</sub>	A-weighted, noise compensated metric
L <sub>dn</sub>	day-night average sound level
L <sub>eq</sub>	equivalent-continuous sound level
L <sub>10</sub>	10-percentile exceedance sound level
L <sub>50</sub>	50-percentile exceedance sound level
L <sub>90</sub>	90-percentile exceedance sound level
MW	megawatt
mph	miles per hour
NIST	U.S. National Institute of Standards and Technology
Project	Naples Power Plant Project
PWL	sound power level
SCR	selective catalytic reduction
SPL	sound pressure level

## Executive Summary

---

Burns & McDonnell conducted a sound study for the Arkansas Electric Cooperative Corporation (AECC) Naples Power Plant Project (Project), located in Morris County, Texas. The Project is a new development of a 900-megawatt (MW) simple-cycle combustion turbine power generating facility built on a green-field site. The Project is expected to include two (2) Siemens 9000HL simple-cycle units, each equipped with a selective catalytic reduction (SCR) system and associated balance-of-plant (BOP) equipment.

The objectives of the sound study were to identify the applicable noise regulations, measure baseline sound levels near the Project property and surrounding area, and create an acoustical model to evaluate potential future noise impacts from the Project.

The State of Texas does not have any applicable noise statutes and designates authority for noise only to the cities (not counties). Since the Project is located in unincorporated Morris County, there are no applicable local numerical noise limits for the Project. Project sound levels have been predicted using vendor provided data for the combustion turbine equipment for the current design. Sound levels have been compared to the existing ambient measurements, since there are no specific numerical noise limits for the Project.

## 1.0 Acoustical Terminology

---

The term “sound level” is often used to describe two different sound characteristics: sound power and sound pressure. Every source that produces sound has a sound power level (PWL). The PWL is the acoustical energy emitted by a sound source and is an absolute number that is not affected by the surrounding environment. The acoustical energy produced by a source propagates through media as pressure fluctuations. These pressure fluctuations, also called sound pressure levels (SPL), are what human ears hear and microphones measure.

Sound is physically characterized by amplitude and frequency. The amplitude of sound is measured in decibels (dB) as the logarithmic ratio of a sound pressure to a reference sound pressure (20 micropascals). The reference sound pressure corresponds to the typical threshold of human hearing. To the average listener, a 3-dB change in a continuous broadband sound is generally considered “just barely perceptible”; a 5-dB change is generally considered “clearly noticeable”; and a 10-dB change is generally considered a doubling (or halving, if the sound is decreasing) of the apparent loudness.

Sound waves can occur at many different wavelengths, also known as the frequency. Frequency is measured in hertz (Hz) and is the number of wave cycles per second that occur. The typical human ear can hear frequencies ranging from approximately 20 to 20,000 Hz. Normally, the human ear is most sensitive to sounds in the middle frequencies (1,000 to 8,000 Hz) and is less sensitive to sounds in the lower and higher frequencies. As such, the A-weighting scale was developed to simulate the frequency response of the human ear to sounds at typical environmental levels. The A-weighting scale emphasizes sounds in the middle frequencies and de-emphasizes sounds in the low and high frequencies. Any sound level to which the A-weighting scale has been applied is expressed in A-weighted decibels, or dBA. For reference, the A-weighted sound pressure level and subjective loudness associated with some common sound sources are listed in Table 1-1. The C-weighting scale has more of an emphasis on low frequency content than the A-weighting scale and is generally used to describe the low frequency characteristics of sound levels (e.g., “rattling” or “rumbling” associated with sound levels).

Sound in the environment is constantly fluctuating, as when a car drives by, a dog barks, or a plane passes overhead. Therefore, sound metrics have been developed to quantify fluctuating environmental sound levels. These metrics include the exceedance sound level. The exceedance sound level is the sound level exceeded during “x” percent of the sampling period and is also referred to as a statistical sound level. Common exceedance sound level values are the 10-, 50-, 90-percentile exceedance sound levels, denoted by  $L_{10}$ ,  $L_{50}$ , and  $L_{90}$ . The equivalent-continuous sound level ( $L_{eq}$ ) is the arithmetic average of the varying sound over a given time period and is the most common metric used to describe sound. The USEPA uses a noise metric called the day-night average sound level ( $L_{dn}$ ) which is a 24-hour average sound level, with a 10-dBA penalty applied to sound measured during nighttime hours (10:00 PM to 7:00 AM).

When audible noise observations and high-frequency octave band data (e.g., above 1,000 Hz) indicate that measured sound levels have a strong insect, bird, or leaf rustle noise component it may be appropriate to estimate what the sound levels would be without the influence of insect noise or other high-frequency sounds. The A-weighted, noise-compensated metric (ANS-weighted metric, “ $L_{ANS}$ ”) can be used to filter out sounds above 1,000 Hz and more accurately characterize the environment sound levels without the high-frequency noise.

Table 1-1: Typical Sound Pressure Levels Associated with Common Sound Sources

Sound Pressure Level (dBA)	Subjective Evaluation	Environment
140	Deafening	Jet aircraft at 75 feet
130	Threshold of pain	Jet aircraft during takeoff at a distance of 300 feet
120	Threshold of feeling	Elevated train
110	Very loud	Jet flyover at 1,000 feet
100		Motorcycle at 25 feet
90	Moderately loud	Propeller plane flyover at 1,000 feet
80		Diesel truck (40 mph) at 50 feet
70	Loud	B-757 cabin during flight
60	Moderate	Air-conditioner condenser at 15 feet
50	Quiet	Private Office
40		Farm field with light breeze, birdcalls
30	Very quiet	Quiet residential neighborhood
20		Rustling leaves
10	Just audible	--
0	Threshold of hearing	--

Sources:

(1) Adapted from *Architectural Acoustics*, M. David Egan, 1988(2) *Architectural Graphic Standards*, Ramsey and Sleeper, 1994

## 2.0 Applicable Regulations

---

State and local noise regulations were reviewed to determine the applicable Project noise limits. The Project is located in Morris County, Texas. The State of Texas does not have any noise statutes and designates authority for noise control only to the cities (not counties). Since the Project is located outside of city limits, there are no numerical local noise limits that would be applicable to the Project.

## 3.0 Sound Level Measurements

Burns & McDonnell personnel took sound level measurements to establish the existing ambient sound levels in the areas surrounding the Project. Sound level measurements were made using sound level meters that met the ANSI S1.4 requirements for a Type 1 Precision Sound Level Meter. One-half inch random-incidence microphones were used on the meters. Microphone windscreens were used for all measurements. Sound level meters were calibrated before and after each set of measurements using a sound level calibrator. Calibration level changes did not exceed  $\pm 0.5$  dB during the measurements. The meters and calibrator were checked within a year prior of the measurements to verify compliance with the U.S. National Institute of Standards and Technology (NIST) specifications.

Continuous, long-term sound level measurements were collected at one measurement location on the Project site, offset a similar distance from the main road as the nearby residents. The long-term measurement location is shown in Figure A-1 of Appendix A. The microphone was placed at a height of approximately five feet above the ground and mounted on a tripod.

The long-term monitor measured sound levels continuously over a 24-hour period from approximately 1:20 PM on August 12, 2024, to 1:20 PM on August 13, 2024. Ambient sound levels in the area were primarily comprised of traffic from the nearby highway, occasional birds and plane flyovers, and nighttime insect noise. There was also a brief period in the morning of August 13<sup>th</sup> which included some fence construction activity from the neighboring resident. The measured sound level data is shown in graph and tabular form in Appendix B.

Due to the time of year, there was a significant increase in insect noise over the nighttime hours. To show the approximate sound levels that could be expected for other times of the year when insect noise is much lower, the ANS-weighted ( $L_{ANS}$ ) values have been provided, which corrects for the insect noise by filtering out the high-frequencies typically associated with insect noise. A summary of the data is shown in Table 3-1 below and is broken down by time of day (e.g., daytime/nighttime).

**Table 3-1: Long-Term Measurement Summary**

Measurement Location	Time of Day <sup>a</sup>	$L_{Aeq}$ (dBA)	$L_{dn}^b$ (dBA)	$L_{A90}$ (dBA)	$L_{ANS}$ (dBA)
MP1	Daytime	48	57	37	43
	Nighttime	50		47	39

a) Daytime is from 7 AM to 10PM, and nighttime is from 10 PM to 7 AM

b) Day-night average  $L_{eq}$  with a 10-dB penalty on nighttime sound levels



## 4.0 Modeled Sound Levels

Operational sound levels for the proposed Project were performed using the Computer Aided Noise Abatement (CadnaA) modeling software. Equipment sound levels used for modeling were based on a combination of in-house data and estimated values based on past experience with similar sized equipment. This model was used for determining expected sound levels due to the Project and the associated impacts to the existing ambient sound levels at the nearest noise sensitive receptors.

### 4.1 Sound Modeling Methodology and Input Parameters

Predictive noise modeling was performed using the industry-accepted sound modeling software CadnaA, version 2024. The software is a scaled, three-dimensional program, which considers air absorption, terrain, ground absorption, and reflections and shielding for each piece of noise-emitting equipment, and then predicts sound pressure levels at discrete locations and over a gridded area based on input source sound levels. The model calculates sound propagation based on International Organization for Standardization (ISO) 9613-2:1996, General Method of Calculation. ISO 9613-2 assesses the sound level propagation based on the octave band center-frequency range from 31.5 to 8,000 Hz.

The ISO standard considers sound propagation and directivity. The sound-modeling software calculates omnidirectional, downwind sound propagation, in tandem with user-specified directivities and propagation properties. Empirical studies accepted within the industry have demonstrated that modeling may over-predict sound levels in certain directions, and as a result, modeling results generally are considered a conservative measure of the Project's actual sound level.

The modeled atmospheric conditions were assumed to be calm, and the temperature and relative humidity were left at the program's default values. Reflections and shielding were considered for sound waves encountering physical structures. Sound levels around the site can be influenced by the sound reflections from physical structures onsite. The area surrounding the Project has mild elevation changes, which scatter and absorb the sound waves. Thus, terrain was included to account for surface effects such as ground absorption. Average ground absorption for the Project site was set to a value of 0.0 to account for the hard pavements and ground absorption for the surrounding area was set to a value of 1.0 to account for generally soft vegetative ground surrounding the Project site. The modeling assumptions are outlined in Table 4-1. This model is exclusive of noise sources not associated with the Project (e.g., traffic noise and local fauna). Only Project sound levels have been evaluated.

**Table 4-1: Sound Modeling Parameters**

Model Input	Parameter Value
On-site Ground Absorption	0.0
Surrounding Ground Absorption	1.0
Number of Reflections	2
Receptor Height	5 feet above grade
Terrain	USGS topographic land data
Temperature	50 °F
Humidity	70%

## 4.2 Project Acoustical Design

The Project general arrangement is included as Figure A-2 of Appendix A. The Project is expected to include two (2) Siemens 9000HL simple-cycle combustion turbines and associated balance-of-plant (BOP) equipment. Each combustion turbine is also expected to include a selective catalytic reduction (SCR) system. Siemens has provided sound data for the combustion turbine equipment. BOP equipment sound levels have been estimated based on in-house sound levels from Projects with similar type and sized equipment. The current acoustic design for the combustion turbine includes a silencer along the horizontal exhaust duct. No additional mitigation options beyond what Siemens has provided have been included in the noise model. All modeled sound levels are included in Appendix C.

## 4.3 Model Results

Project sound levels were modeled for normal operation, steady-state condition (i.e., no start-up, shutdown, or off-normal operating conditions). The acoustic model results are only for the new Project and do not include any contributions for existing ambient sound sources. The predicted A-weighted sound level contours for the existing Project design are shown in Figure A-3 of Appendix A. The Project sound levels predicted at nearby discrete residential receptors are provided in Table 4-2 below.

**Table 4-2: Future Predicted Sound Level Results**

Receptor Name	Ambient Sound Levels <sup>1</sup> (dBA)	Project Model Results (dBA)
R01	48	52
R02	48	61
R03	48	50
R04	48	59
R05	48	51
R06	48	50
R07	48	50
R08	48	54
R09	48	55
R10	48	54
R11	48	51

1) Lowest measured average daytime or nighttime  $L_{eq}$

As shown in the table results, the Project is expected to contribute 61 dBA at the worst-case receptor, R02, west of the Project site.

## 5.0 Conclusion

---

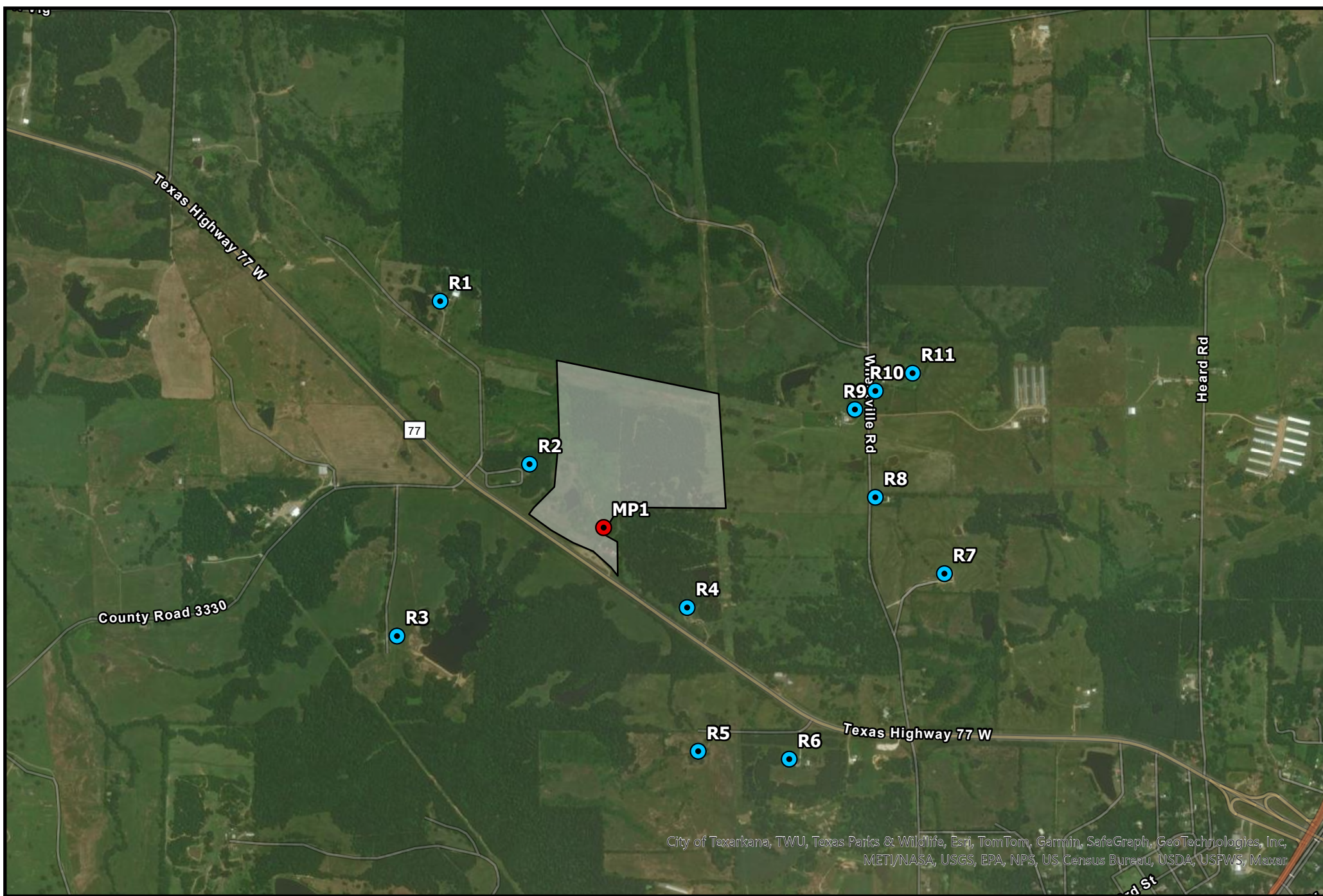
Burns & McDonnell conducted a sound study for the AECC Naples Power Plant Project, located in Morris County, Texas. The study included a regulatory review for noise limits applicable to the Project, existing ambient sound level measurements, and acoustical modeling to estimate Project sound levels at the nearest residential receptors.

The Project does not have any applicable numerical regulatory noise limits. Project sound levels have been predicted based on acoustic modeling of expected base-package equipment as part of the Project's current design. Project sound levels have been compared to the expected existing ambient sound levels in the area surrounding the Project site. The Project is expected to contribute 61 dBA at the worst-case residential receptor, R02, located west of the Project, during full load operation.

## APPENDIX A – FIGURES

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Path: Z:\Clients\ENR\AEC\164180\_MorrisCounty\GIS\Morris County PDR\GIS.aprx • Units: • Coordinate System: •



City of Texarkana, TWU, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Property Boundary

Nearest Residential Receptors

Measurement Locations

00.20.4

MILES

00.250.5

KILOMETERS

N

Figure A-1

Ambient Measurement Location

LOCATION: Morris County, TX

CLIENT/PROJECT: AECC - Naples Power Plant

PROJ. NO.: 164180

CREATED: 09/30/2024

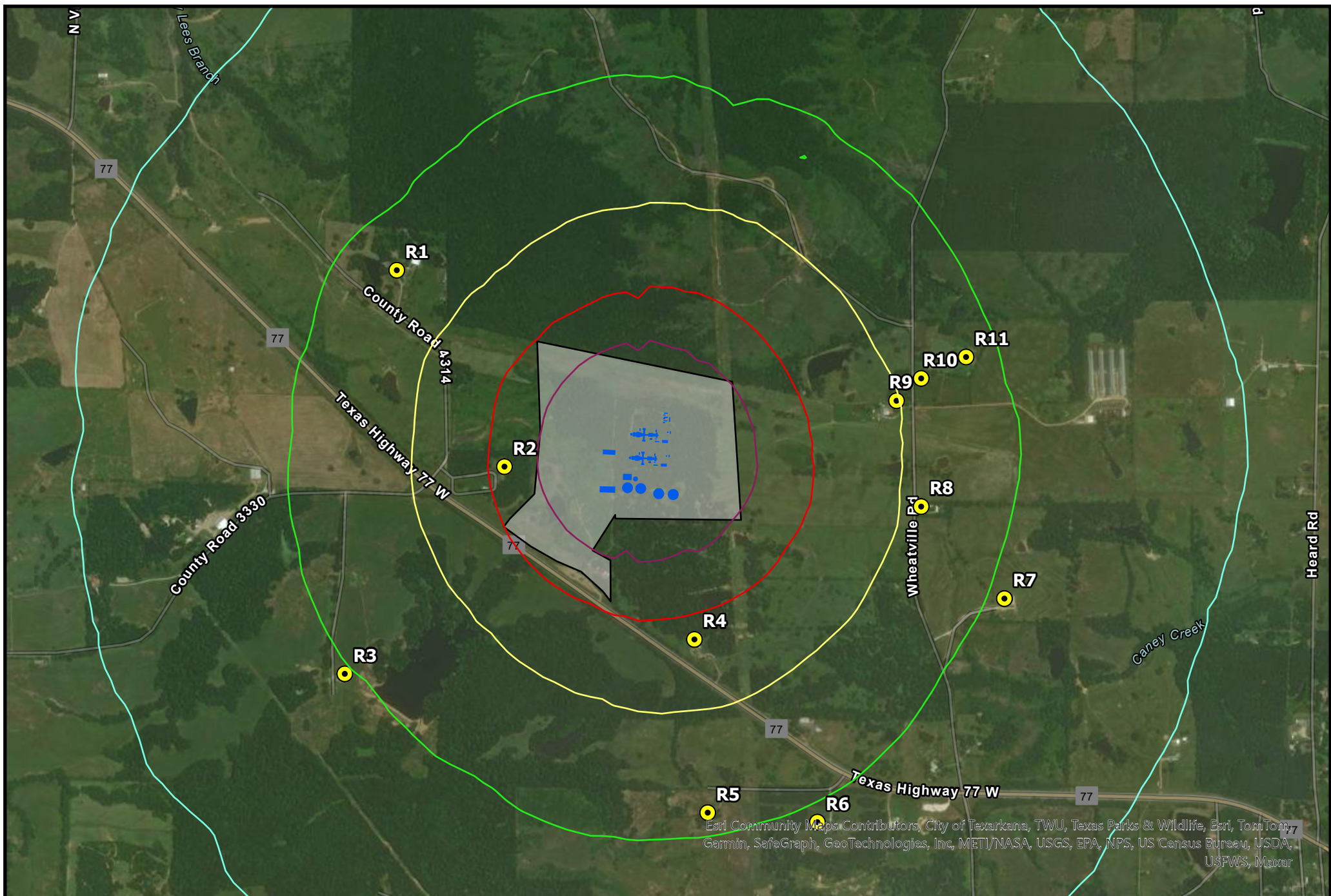
BURNS

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LEGEND			REFERENCE		Figure A-3 - Project Sound Level Contours (dBA)	
	Property Boundary		40 dBA		55 dBA	<b>LOCATION:</b> Morris County, TX <b>CLIENT/PROJECT:</b> AECC - Naples Power Plant <b>PROJ. NO.:</b> 164180 <b>CREATED:</b> 06/04/2025
	Structures		45 dBA		60 dBA	
	Receivers		50 dBA		65 dBA	

## APPENDIX B – MEASUREMENT DATA

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Time	MP1			
	L <sub>Aeq</sub>	L <sub>A90</sub>	L <sub>ANS</sub>	L <sub>Ceq</sub>
	(dBA)	(dBA)	(dBA)	(dBC)
8/12/24 1:23 PM	53	30	37	54
8/12/24 2:00 PM	38	33	39	51
8/12/24 3:00 PM	41	34	41	50
8/12/24 4:00 PM	42	36	44	50
8/12/24 5:00 PM	41	33	39	49
8/12/24 6:00 PM	43	39	40	50
8/12/24 7:00 PM	43	37	38	49
8/12/24 8:00 PM	47	43	39	51
8/12/24 9:00 PM	52	51	37	52
8/12/24 10:00 PM	52	51	42	56
8/12/24 11:00 PM	52	51	39	56
8/13/24 12:00 AM	51	50	35	51
8/13/24 1:00 AM	50	49	35	50
8/13/24 2:00 AM	51	51	37	53
8/13/24 3:00 AM	51	48	38	51
8/13/24 4:00 AM	50	47	36	50
8/13/24 5:00 AM	43	39	39	51
8/13/24 6:00 AM	48	40	43	54
8/13/24 7:00 AM	48	43	45	54
8/13/24 8:00 AM	48	39	41	57
8/13/24 9:00 AM	42	36	42	55
8/13/24 10:00 AM	53	40	51	62
8/13/24 11:00 AM	51	32	48	59
8/13/24 12:00 PM	39	31	40	53
8/13/24 1:00 PM	40	33	41	57
<b>Daytime Average</b>	<b>48</b>	<b>37</b>	<b>43</b>	<b>55</b>
<b>Nighttime Average</b>	<b>50</b>	<b>47</b>	<b>39</b>	<b>53</b>
<b>Day-night Average (L<sub>dn</sub>)</b>	<b>57</b>	--	--	--

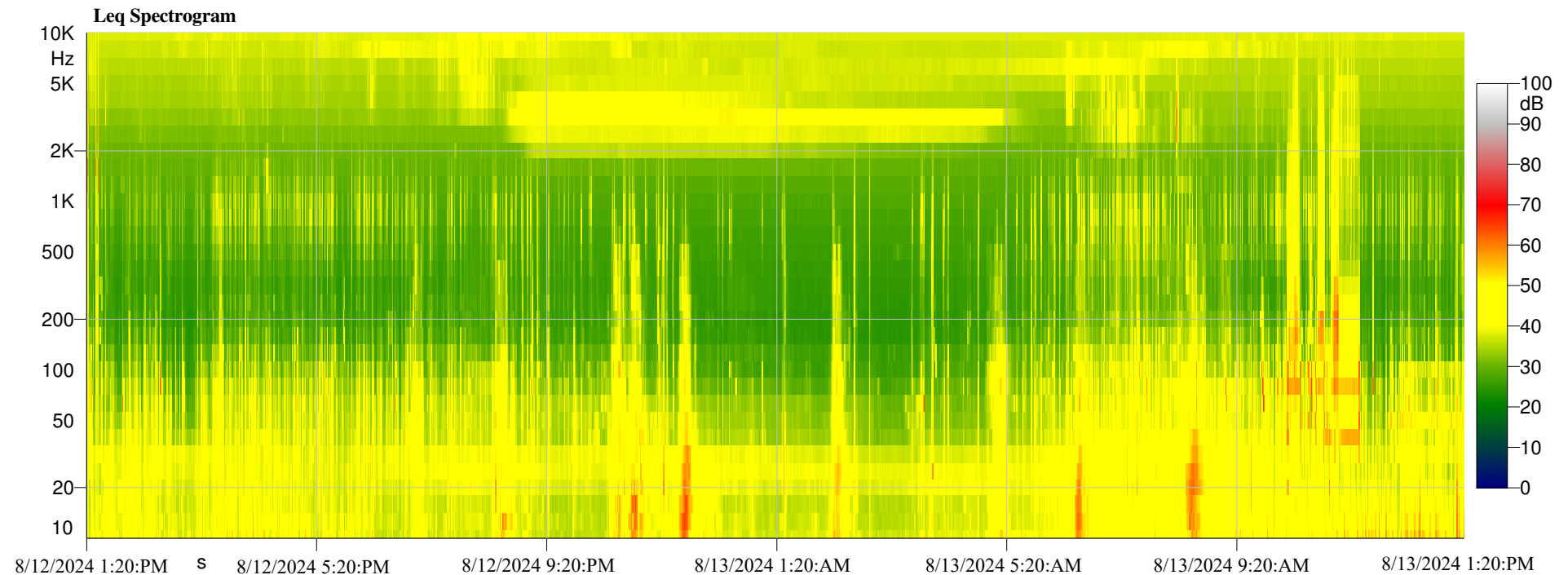
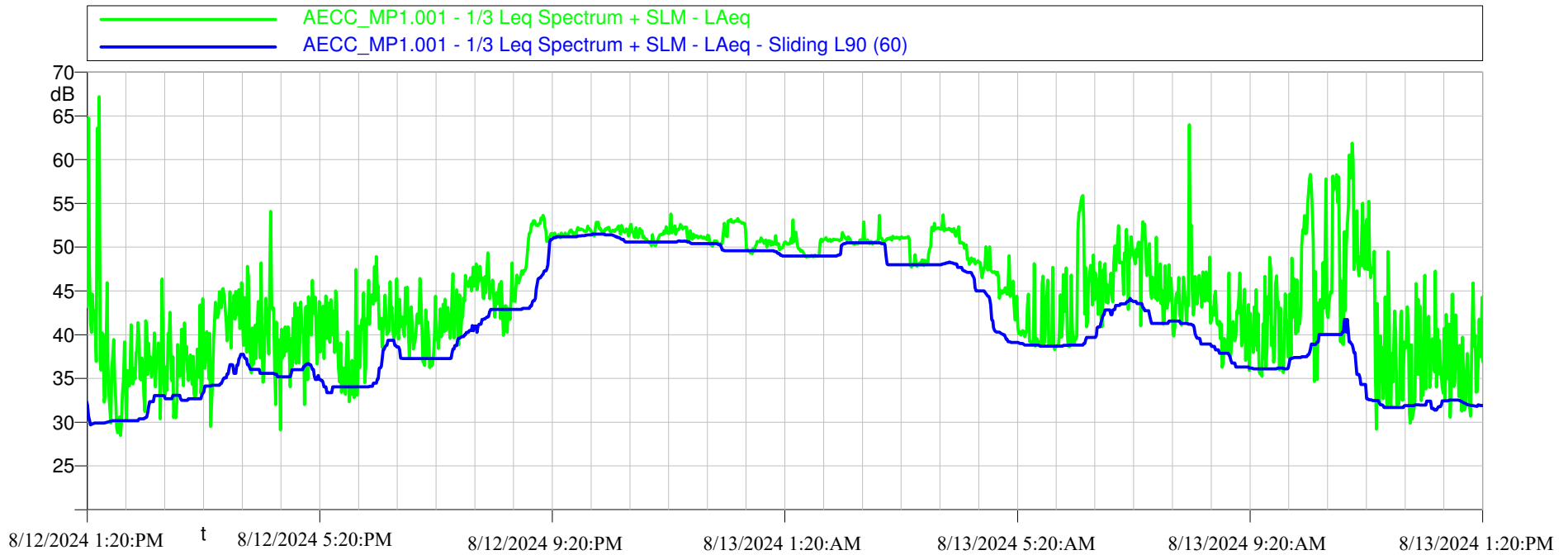
\*Daytime is from 7 AM to 10 PM, and nighttime is from 10 PM to 7 AM

\*\*Day-night average is average Leq with a 10 dB penalty on nighttime sound levels

Neighbor fence construction from ~10 AM to 11:30 AM

Measurement: AECC Naples Power Plant  
Location: MP1

Leq is the 1-minute average sound level  
L90 is the 10-minute 90th percentile exceedance sound level



## APPENDIX C – MODELED SOUND LEVELS

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## Appendix C - Modeled Sound Power Levels

AECC

Naples Power Plant

Name	Number of Sources	Sound Power Level (dB) <sup>1</sup> Octave Band Frequency (Hz)									Overall (dBA)	Notes
		31.5	63.0	125	250	500	1000	2000	4000	8000		
Roto Cooler	2	107	105	100	96	94	89	85	83	79	96	Siemens Provided
Ammonia Pumps	6	91	97	95	94	93	92	91	90	86	98	Estimated 85 dBA @ 3ft
GT Enclosure Discharge Vent	8	89	96	84	82	79	86	88	89	89	95	Siemens Provided
GT Enclosure Air Inlet Vent	8	91	98	86	88	87	87	90	90	90	96	Siemens Provided
Dew Point Heater Stack	1	119	101	93	88	89	95	93	92	91	100	Estimated 85 dBA @ 3ft
Fuel Gas Heater	3	103	99	101	91	85	83	83	80	76	91	In-house
Fuel Gas Pumps	3	89	95	93	92	91	90	89	88	84	96	Estimated 85 dBA @ 3ft
Fuel Gas Valve	6	106	102	91	83	82	88	90	93	91	98	Estimated 85 dBA @ 3ft
Fuel Oil Pump Skid	2	98	114	101	104	107	107	109	105	98	114	In-house
GT Blower Skid	2	110	106	108	98	92	90	90	87	83	98	Estimated 85 dBA @ 3ft
Stack Exit	2	130	122	112	114	124	121	121	134	120	136	Siemens Provided
TEC Blower	2	110	106	108	98	92	90	90	87	83	98	Estimated 85 dBA @ 3ft
ACHE	1	122	124	110	107	113	107	105	103	96	114	Estimated 85 dBA @ 3ft
Air Inlet Duct	2	111	106	105	94	88	102	87	88	93	103	Siemens Provided
Air Inlet House	2	118	112	108	99	87	90	79	96	105	105	Siemens Provided
Ammonia Flow Control Skid	2	93	99	97	96	95	94	93	92	88	100	Estimated 85 dBA @ 3ft
Aux Transformer	2	95	95	99	99	99	83	78	71	66	97	Estimated 80 dBA @ 3ft
GT Enclosure	2	113	117	101	96	96	99	92	93	99	104	Siemens Provided
CTG Cooling Air Package	2	103	105	91	88	94	88	86	84	77	95	Estimated 85 dBA @ 3ft
Dew Point Heater	1	116	108	107	100	96	97	95	92	87	102	Estimated 80 dBA @ 3ft
Exhaust Diffuser	2	94	99	98	107	118	113	114	121	106	124	Siemens Provided
FGC Cooler	3	112	114	100	97	103	97	95	93	86	104	Estimated 85 dBA @ 3ft
Fuel Gas Compressor	3	101	97	102	101	99	102	102	100	95	108	Estimated 90 dBA @ 3ft
GSUT	2	102	102	106	106	106	90	85	78	73	104	Estimated 85 dBA @ 3ft
GT Generator	2	116	122	119	111	118	108	112	110	107	119	Siemens Provided
GT Oil Package	2	110	104	101	101	101	99	95	94	90	104	Siemens Provided
SCR Duct	2	125	116	103	99	107	106	105	111	84	114	Siemens Provided
SCR Transition Section 1	2	122	113	100	96	104	103	103	101	78	109	Siemens Provided
SCR Transition Section 2	2	122	113	100	96	104	103	103	101	78	109	Siemens Provided
Silencer Duct	2	119	108	90	83	88	86	86	96	71	98	Siemens Provided
Silencer Transition	2	117	109	96	91	98	96	95	100	72	104	Siemens Provided
TA Duct and Casing	4	122	112	99	97	105	104	104	102	79	110	Siemens Provided
TA Filter House	4	122	119	105	91	87	75	67	68	50	95	Siemens Provided
Water Injection Pump Skid	2	99	115	100	106	105	105	105	101	98	111	Siemens Provided
Stack Casing Walls	3	121	107	84	72	76	75	77	89	69	91	Siemens Provided

Notes:

1. All sound levels are inclusive of any base package designed mitigation



## Appendix G - Permit Matrix

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# Permit Matrix

Air Permits						
Item #	Permit / Clearance	Regulatory Agency	Permit Applicability Likely/Not Likely/Not Applicable (N/A)	Public Participation	Estimated Agency Review Time	Notes
1	New Source Review Permit (case-by-case)	Texas Commission on Environmental Quality Air Permits Division MC-163 P.O. Box 13087 Austin, TX 78711-3087 (512) 239-1250	Likely	Up to 30 days, if required by the State	10 - 12 months	Prior to start of construction. If an NSR case-by-case permit is required, the Facility will be considered a major source and will require a Federal Operating Permit. The Federal Operating Permit will need to be submitted 12 months after the facility is deemed a major source.
2	Air Operating Permit (Title V)	Texas Commission on Environmental Quality Air Permits Division MC-163 P.O. Box 13087 Austin, TX 78711-3087 (512) 239-1250	Likely	Up to 30 days, if required by the State	10 - 12 months	Needs to be submitted with in 12 months of achieving commercial operation
Wetlands/Surface Water Permits						
Item #	Permit / Clearance	Regulatory Agency	Permit Applicability Likely/Not Likely/Not Applicable (N/A)	Public Participation	Estimated Agency Review Time	Notes
3	Section 401 Water Quality Certification (WQC) - Clean Water Act	Texas Commission on Environmental Quality (TCEQ) 401 Coordinator - MC- 150 P.O. Box 13087 Austin, TX 78711-3087 (512) 239-4671	Likely	A Notice of Application will be mailed to the following parties: (1) the adjacent landowners; (2) the mayor and health authorities of the city or town in which the activity is or will be located or in which waste is or will be disposed; (3) the county judge and health authorities of the county in which the facility is located or in which waste is or will be disposed; (4) the Texas Parks and Wildlife Department; (5) the United States Department of Interior Fish and Wildlife Service; (6) the Texas Water Development Board; (7) the United States Commerce Department, National Marine Fisheries Service; (8) the EPA, Region 6; (9) the Texas General Land Office; (10) the Secretary of the Coastal Coordination Council; and (11) the applicant.	Concurrent with 404 process	
4	Section 404 of the Clean Water Act (CWA) Permit - Nationwide Permit (NWP)	U.S. Army Corps of Engineers, Fort Worth District 819 Taylor St. Fort Worth, TX 76102-0300 (817) 886-1306	Likely	A Notice of Application will be mailed to the following parties: (1) the adjacent landowners; (2) the mayor and health authorities of the city or town in which the activity is or will be located or in which waste is or will be disposed; (3) the county judge and health authorities of the county in which the facility is located or in which waste is or will be disposed; (4) the Texas Parks and Wildlife Department; (5) the United States Department of Interior Fish and Wildlife Service; (6) the Texas Water Development Board; (7) the United States Commerce Department, National Marine Fisheries Service; (8) the EPA, Region 6; (9) the Texas General Land Office; (10) the Secretary of the Coastal Coordination Council; and (11) the applicant.	NWP: 90 - 120 calendar days (once application deemed complete)	0.1 acre jurisdictional waters of the U.S. loss requires a Nationwide (NWP) Pre-Construction Notification (PCN). Over 0.5 acre of water/wetland loss requires an Individual Permit (IP).
5	TPDES General Permit TXG670000 to Discharge Hydrostatic Test Water	Texas Commission on Environmental Quality Water Quality Division P.O. Box 13087 Austin, TX 78711-3087 (512) 239-4671	Likely	None required	Immediate	Submitted online through STEERS. Submittal not needed for new vessels only, but must comply with general permit conditions.
6	TPDES Industrial Discharge Permit	Texas Commission on Environmental Quality Water Quality Division P.O. Box 13087 Austin, TX 78711-3087 (512) 239-4671	Likely	Yes, notice published in local newspaper	330 Days	Coordination with the TCEQ is recommended to determine the type of Industrial Discharge permit that will be required

Environmental Impact Permits						
Item #	Permit / Clearance	Regulatory Agency	Permit Applicability Likely/Not Likely/Not Applicable (N/A)	Public Participation	Estimated Agency Review Time	Notes
7	Notice of Proposed Construction or Alteration	Federal Aviation Administration Fort Worth Regional Office 10101 Hillwood Pkwy Fort Worth, TX 76177 (817) 222-5009	Unlikely	None required	45 - 60 Days	Electronic tool on FAA website can be used to determine whether structures will require a notification.
8	Spill Prevention Control and Countermeasure (SPCC) Plan	U.S. Environmental Protection Agency (EPA) - Region 6 1201 Elm St. Dallas, TX 75270 (800) 887-6063	Likely	None required	SPCC plans are reviewed during facility inspections, or after a release of 1,000 gallons or more	
9	Permit to Appropriate Public Water	Texas Commission on Environmental Quality	Likely	None required	TBD	
Stormwater Permits						
Item #	Permit / Clearance	Regulatory Agency	Permit Applicability Likely/Not Likely/Not Applicable (N/A)	Public Participation	Estimated Agency Review Time	Notes
10	TPDES Stormwater Construction Permit NOI & SWPPP for Construction Activities	Texas Commission on Environmental Quality Water Quality Division P.O. Box 13087 Austin, TX 78711-3087 (512) 239-4671	Likely	None required	If submitted through STEERS, NOI is approved instantly and provisional coverage begins. If submitted via mail, coverage begins 7 days after postmarked for delivery. TCEQ will review the application and issue: - an Acknowledgement Certificate acknowledging coverage under the General Permit; - a Notice of Deficiency if there is insufficient information in the application, giving 30 days to respond; or - a Denial Letter, which is usually a result of a Notice of Deficiency information request not being provided	A Notice of Termination (NOT) is required to be filed within 30 days of the following:
11	TPDES Stormwater General Permit NOI & SWPPP for Operational Activities	Texas Commission on Environmental Quality Water Quality Division P.O. Box 13087 Austin, TX 78711-3087 (512) 239-4671	Likely	None required	If submitted through STEERS, NOI is approved instantly and provisional coverage begins. If submitted via mail, coverage begins 7 days after postmarked for delivery. TCEQ will review the application and issue: - an Acknowledgement Certificate acknowledging coverage under the General Permit; - a Notice of Deficiency if there is insufficient information in the application, giving 30 days to respond; or - a Denial Letter, which is usually a result of a Notice of Deficiency information request not being provided	This type of electric generation facility is not likely a regulated industrial facility in regards for this type of project, however coordination will be required to confirm
Cultural Resources						
Item #	Permit / Clearance	Regulatory Agency	Permit Applicability Likely/Not Likely/Not Applicable (N/A)	Public Participation	Estimated Agency Review Time	Notes
12	National Historic Preservation Act – Section 106 Concurrence	Texas Historical Commission (THC)	Likely	None required	45 Days	Included in NEPA EA



Wildlife Permits						
Item #	Permit / Clearance	Regulatory Agency	Permit Applicability Likely/Not Likely/Not Applicable (N/A)	Public Participation	Estimated Agency Review Time	Notes
13	Federal Threatened and Endangered Species Concurrence	U.S. Fish and Wildlife Service Austin Ecological Field Services Office 10711 Burnet Rd, Ste 303 Austin, TX 78758 (512) 490-0057	Likely	None required	45 days	Tricolored bat listing is imminent. Guidance in dealing with this species is currently lacking; however, treed habitats may support bats, resulting in likely coordination requirements and possible survey or seasonal tree clearing restrictions during certain times of year. If bat habit is present, tree clearing may not be allowed generally from May to August. Included in NEPA EA
14	State Threatened and Endangered Species Concurrence	Texas Parks and Wildlife Department (TPWD) Wildlife Division Wildlife Habitat Assessment Program 4200 Smith School Road Austin, Texas 78744-3291 (512) 389-4571 (Phone)	Unlikely	None required	30-60 Days	Included in NEPA EA
15	Migratory Bird Treaty Act (MBTA) - Clearance	U.S. Fish and Wildlife Service Austin Ecological Field Services Office 10711 Burnet Rd, Ste 303 Austin, TX 78758 (512) 490-0057	Unlikely	None required	60-90 days	Included in NEPA EA
16	Bald and Golden Eagle Protection Act (BGEPA) - Clearance	U.S. Fish and Wildlife Service Austin Ecological Field Services Office 10711 Burnet Rd, Ste 303 Austin, TX 78758 (512) 490-0057	Unlikely	None required	60-90 days	Included in NEPA EA
Notes						

\*Other, minor permits will be required but have not been included here (e.g, septic system, etc.).

