

Environmental Assessment



Tulsa Ports

**Wastewater Treatment Facility
Project No. 162023**

**Revision 1
7/19/2024**

Environmental Assessment

prepared for

**Tulsa Ports
Wastewater Treatment Facility
Inola, Oklahoma**

Project No. 162023

**Revision 1
7/19/2024**

prepared by

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

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
ABB	American burying beetle
ACS	American Community Survey
AJD	Approved Jurisdictional Determination
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CFR	Code of Federal Regulations
CLOMR	Conditional Letter of Map Revision
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
INRMP	Integrated natural resources management plan
Inola Industrial Park	City of Tulsa-Rogers County Port of Inola Industrial Park
IPaC	Information for Planning and Consultation
L	Lake
MGD	Million gallons per day
NAAQS	National Ambient Air Quality Standards
NFHL	National Flood Hazard Layer
NHD	National Hydrology Dataset
NLEB	Northern long-eared bat
NPDES	National Pollutant Discharge System
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
ODEQ	Oklahoma Department of Environmental Quality
PEM	Freshwater emergent wetland
PSO	Public Service Company of Oklahoma
PSS	Freshwater forested/ shrub wetland
PUB	Palustrine unconsolidated bottom
Port property	Newly acquired industrial park site
Proposed project	Wastewater treatment facility within the Port property
R	Riverine
RECs	Recognize Environmental Conditions
Regional Supplement	<i>2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)</i>
TMDL	Total Maximum Daily Load

Abbreviation**Term/Phrase/Name**

Tulsa Ports

City of Tulsa-Rogers County Port Authority

USACE

U.S. Army Corps of Engineers

USFWS

U.S. Fish and Wildlife Service

WLA

Wasteload Allocation

WOTUS

Waters of the United States

WWTF

Wastewater Treatment Facility

1. PURPOSE, NEED, AND SCOPE

City of Tulsa-Rogers County Port Authority (Tulsa Ports) acquired 2,400-acres located in Inola, Oklahoma in 2019 to construct a new industrial park (Inola Industrial Park). Tulsa Ports contracted with Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) in 2020 to conduct a desktop due diligence study and prepare a master plan for the newly acquired Port property. During the master planning process, the most significant setback to developing the site was determined to be the ability to treat and discharge wastewater generated on-site.

Tulsa Ports is proposing to construct a wastewater treatment facility (WWTF) near the southwest corner of the Inola Industrial Park (Figure 1-1) in Township 19N, Range 16E, Section 25 within the Town of Inola municipal boundary, Rogers County, Oklahoma. A previous Environmental Assessment for the construction of the WWTF was completed in March 2022 and is attached as Appendix A. The construction of the WWTF and associated collection system will not require the acquisition of any right-of-way or easements, as Tulsa Ports currently owns all property within the Inola Industrial Park. However, the discharge route identified for the wastewater treatment facility (WWTF) to the Verdigris River crosses U.S. Army Corps of Engineers (USACE) levee easements which triggered the need for a new Environmental Assessment for this Proposed Action.

In 2021, Tulsa Ports contracted with Burns & McDonnell to study and determine the assimilative capacity of the Verdigris River to accommodate the future wastewater generated from the 2,400-acre greenfield site, to determine the wasteload allocation (WLA) available, and to obtain the required permits for the discharge. The WLA Study serves as the precursor to the submittal of a request to discharge permit application to authorize discharges under a National Pollutant Discharge Elimination System permit (NPDES). The WLA Study has been completed and approved by the Oklahoma Department of Environmental Quality (ODEQ), and the preparation of an application for an individual NDPES permit is underway. Under the NPDES permit, Tulsa Ports is seeking to discharge industrial wastewater generated by Inola Industrial Park facilities and domestic wastewater from the Town of Inola.

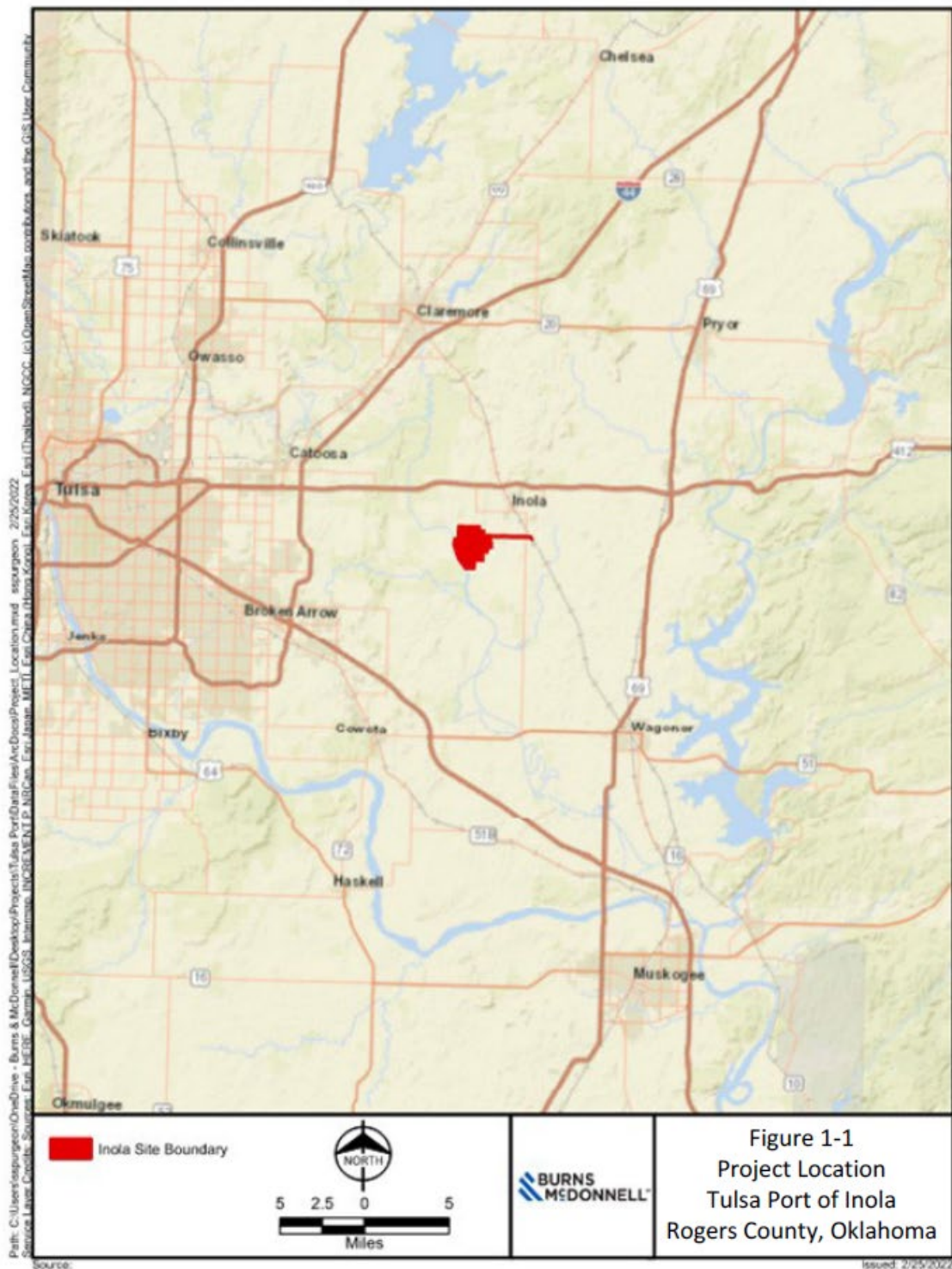


Figure 1-1: Project Location

2. ALTERNATIVES

Multiple alternatives were evaluated for the treatment of wastewater generated on-site including: no treatment; pumping of wastewater to a nearby municipality for treatment; land application; total retention lagoons; and the construction of an on-site WWTF with discharge to the Verdigris River.

2.2 No Action Alternative

A “no treatment” option was not considered a viable alternative as the Inola Industrial Park is an intentional economic development initiative to create local employment opportunities. Without a centralized facility to treat wastewater generated on-site and then discharge the wastewater to Waters of the State, the ability to develop the site would be greatly hindered by placing this burden on each development project within the Industrial Park, resulting in additional delays and costs to each project. Additionally, individual discharge points for each facility located at the industrial park would have a greater impact on the environment than a single combined system with a single conveyance system and discharge point.

2.3 Action Alternatives

A number of disposal alternatives were assessed during the preliminary phase of the WLA process. The State of Oklahoma *Continuing Planning Process, 2012* requires all new discharges to develop and submit an Alternatives Report to ODEQ that assess other disposal alternatives and demonstrates why discharge is the most feasible option. The alternatives to discharging wastewater to the Verdigris River that were assessed are conveying wastewater to a nearby municipality, land application, and total retention lagoons.

2.3.1 Conveying Wastewater to Nearby Municipality

The option to pump wastewater generated on-site to an adjacent municipality was initially discussed as a potentially viable alternative as outlined below. Due to additional construction and maintenance costs along with additional environmental concerns, this alternative was eliminated from further consideration.

The Town of Inola is the nearest municipality but with a population of approximately 1,800, it does not have the resources available to build and/or maintain a treatment facility necessary to treat the Inola Industrial Park wastewaters and the Town of Inola domestic wastewater flows. Because of this evaluation and discussions with the Town, a partnership may form to develop a combined treatment facility on the Inola Industrial Park property in the future but is not seen as a financially or logistically viable option at this time.

The City of Broken Arrow, Oklahoma has a population of approximately 108,000 and is across the Verdigris River and approximately 14 miles west of Inola. Broken Arrow wastewater treatment facilities could receive and treat the additional flows generated by the Industrial Park if small upgrades to the plant were made; however, transferring the wastewater to the Broken Arrow treatment facility would require construction of a pump station and miles of force main which would need to cross the Verdigris River and multiple smaller creeks. The staged development of the Inola Industrial Park would create challenges in conveying the wastewater efficiently to Broken Arrow, requiring numerous improvements as the industrial park develops over time.

Conveying the Inola Industrial Park wastewater off-site would also eliminate the possibility of implementing water reuse practices on-site. Water reuse is desired by Tulsa Ports as a marketing tool, and it would limit the amount of potable water required to serve the industrial park. For these reasons, conveying wastewater to a municipality was removed from further consideration.

2.3.2 Land Application

To apply the industrial park wastewater to the land in lieu of discharge would require at 1,300 acres of open land to support a slow rate land application (i.e., irrigation) based on the hydraulic loading requirements and field area determination under Oklahoma Administrative Code (OAC) 252:656-25. This land area would occupy more than 50 percent of the industrial park restricting the long-term development potential of the industrial park. Therefore, the application of wastewater to the land via irrigation as a standalone alternative is not feasible or reasonable and was removed from further consideration.

2.3.3 Total Retention Lagoon

Per the OAC 252:619-1, General Provisions for the Operation and Maintenance of Non-Industrial Total Retention Lagoon Systems, industrial wastewaters may not be disposed of in total retention lagoons. Therefore, it is not feasible to dispose of all the Port's wastewater via a total retention lagoon and an NPDES permit for discharge is necessary. For this reason, construction and management of a total retention lagoon was removed from further consideration.

2.3.4 Onsite WWTF and Discharge

An on-site facility would provide the opportunity for separate industrial and domestic wastewater collection systems to support more efficient treatment processes. Additionally, current regulations do not allow industrial wastewater to be recycled for reuse; therefore, separate collection systems would allow the domestic wastewater to be recycled in the future to reduce the total volume of wastewater to be discharged and to address the anticipated demand for potable water at the Inola Industrial Park as well as

neighboring properties. The construction of a WWTF at the industrial park would support the partnership with the Town of Inola to combine wastewater treatment into a single facility able to address anticipated future growth.

Multiple discharge locations were modeled and assessed during the WLA process to determine the best outfall location to accommodate the anticipated discharge from the WWTF while providing enough capacity to maintain biological oxygen demand within the Verdigris River. The selected outfall location (36.097717°, -95.558592°), shown in Figure 2-1, provides the highest waste loading allocation of oxygen demanding constituents and therefore was selected as the preferred discharge point for this Proposed Action.

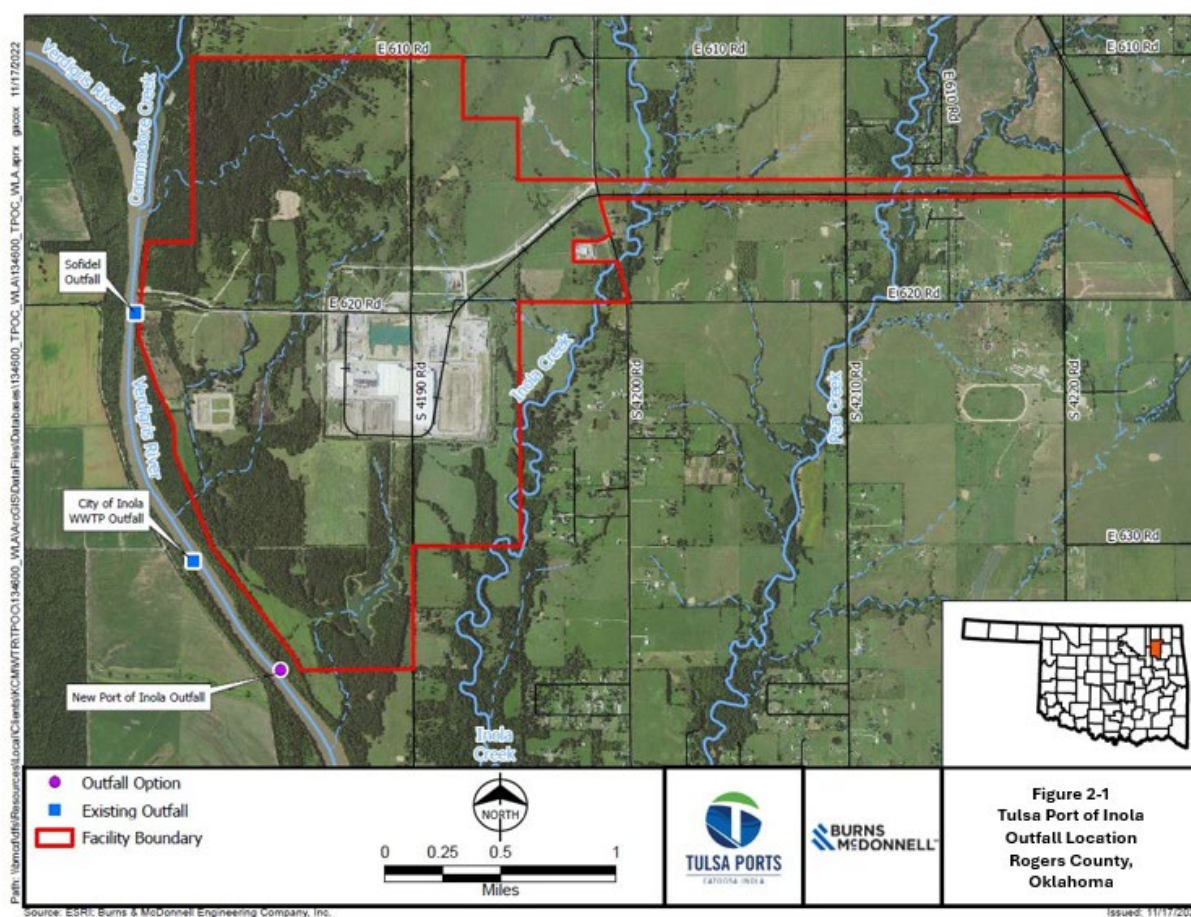


Figure 2-1: Outfall Location

2.4 Preferred Alternative

On-site treatment of wastewater and discharge to the Verdigris River was determined to be the most economical and the alternative with the least environmental impact. This alternative will allow Tulsa

Ports to develop a phased construction plan to increase the treatment capacity as the Inola Industrial Park develops.

3. PROPOSED ACTION

Tulsa Ports is proposing to construct an onsite WWTF to treat and discharge wastewater generated by the facilities located at the Inola Industrial Park and domestic wastewater from the Town of Inola. The treated effluent would be piped approximately 1.5 miles south of the Inola Industrial Park and 0.7 mile south of the WWTF and discharged directly to the Verdigris River.

The construction of the WWTF outfall piping would require site clearing, trench excavation, construction of a headwall structure and pipeline, and site restoration. Additional clearing for site access and temporary access roads may occur outside of the easement area, but drawings for this activity have not been completed. However, these areas were included in the 2022 Environmental Assessment that was conducted for the construction of the WWTF, Appendix A. Clearing of the 100-foot-wide easement to contain the outfall piping would be required to construct the pipeline and headwall structure. Once the easement area is cleared, excavation for the pipeline would begin at the river and proceed towards the WWTF. The excavation depth needed to place the pipeline would vary between six (6) to seventeen (17) feet, dependent upon existing grade. As the excavation proceeds, bedding material would be placed in the bottom of the trench, the pipeline constructed, and then the backfill material would be compacted to return the excavation extents to preconstruction grades. The headwall structure would be formed and poured in place once the first pipe segment is placed.

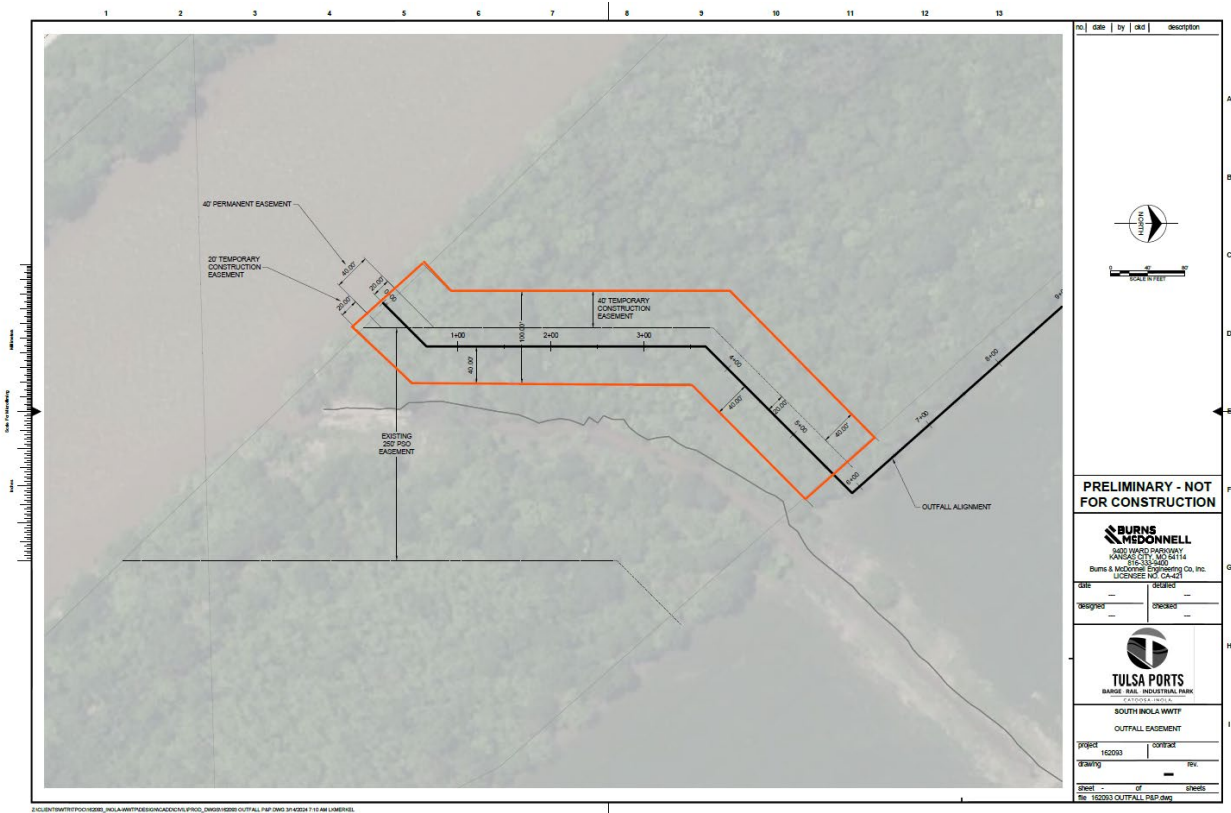


Figure 3-1: Proposed Action Easement Area

4. AFFECTED ENVIRONMENT

4.1 Location

The proposed Inola Industrial Park site is approximately 2,400 acres of undeveloped land located southwest of the intersection of E 620 Road and S 4200 Road located adjacent to the Verdigris River. The combined treated effluent from the WWTF and the Town of Inola would be piped approximately 0.7 mile from the WWTF and, 1.5 miles south of the Inola Industrial Park and discharged to the Verdigris River from the proposed outfall (36.097717°, -95.558592°), Figure 2-1.

4.2 Climate

The National Weather Service local forecast office for climate data in the Town of Inola is Tulsa, Oklahoma. Between 1971 and 2020, Tulsa experienced an average mean temperature ranging from 38.5 to 83.4 degrees Fahrenheit. Since the beginning of the 20th Century, temperatures in Oklahoma have risen about 0.6 degrees Fahrenheit (NOAA, 2024). Based on the findings of the Fourth National Climate Assessment, the Southern Great Plains, which includes Kansas, Oklahoma, and Texas, annual average temperatures are projected to increase between 3.6 and 5.1 degrees Fahrenheit by the mid-21st Century. The frequency, duration, and intensity of extreme heat events is also expected to increase, and the number of extreme cold events is also expected to decrease (USGRCP, 2018). Between 1888 and the present, the average annual rainfall in Tulsa was 40.96 inches (NOAA, 2024). As temperatures and extreme precipitation events are both projected to increase, the risk of flooding and potential soil erosion caused by loss of soil moisture are especially of concern in the Southern Great Plains Region (USGRCP, 2018).

4.3 Social and Economic Conditions

According to the U.S. Census Bureau 2022 data, the total population of the Town of Inola was 1,890. The median household income was \$57,679 with 773 total housing units. Approximately 9.8 percent of all people in the Town of Inola live in poverty, less than the state poverty rate of 15.7 percent.

Employees of private companies make up the biggest sector of the class of workers, at almost 70 percent, followed by government workers at almost 13 percent, self-employed workers at 9 percent, not-for-profit workers at almost 6 percent, and self-employed workers at almost 3 percent. The unemployment rate in the Town of Inola is 55.7 percent, slightly lower than the state unemployment rate of 57.8 percent (US Census Bureau, 2022).

4.4 Natural Resources

Burns & McDonnell completed a review of natural resources, including an analysis of existing vegetation, wetlands, waterbodies, floodplains, and water quality within the Proposed Action.

4.4.1 Vegetation

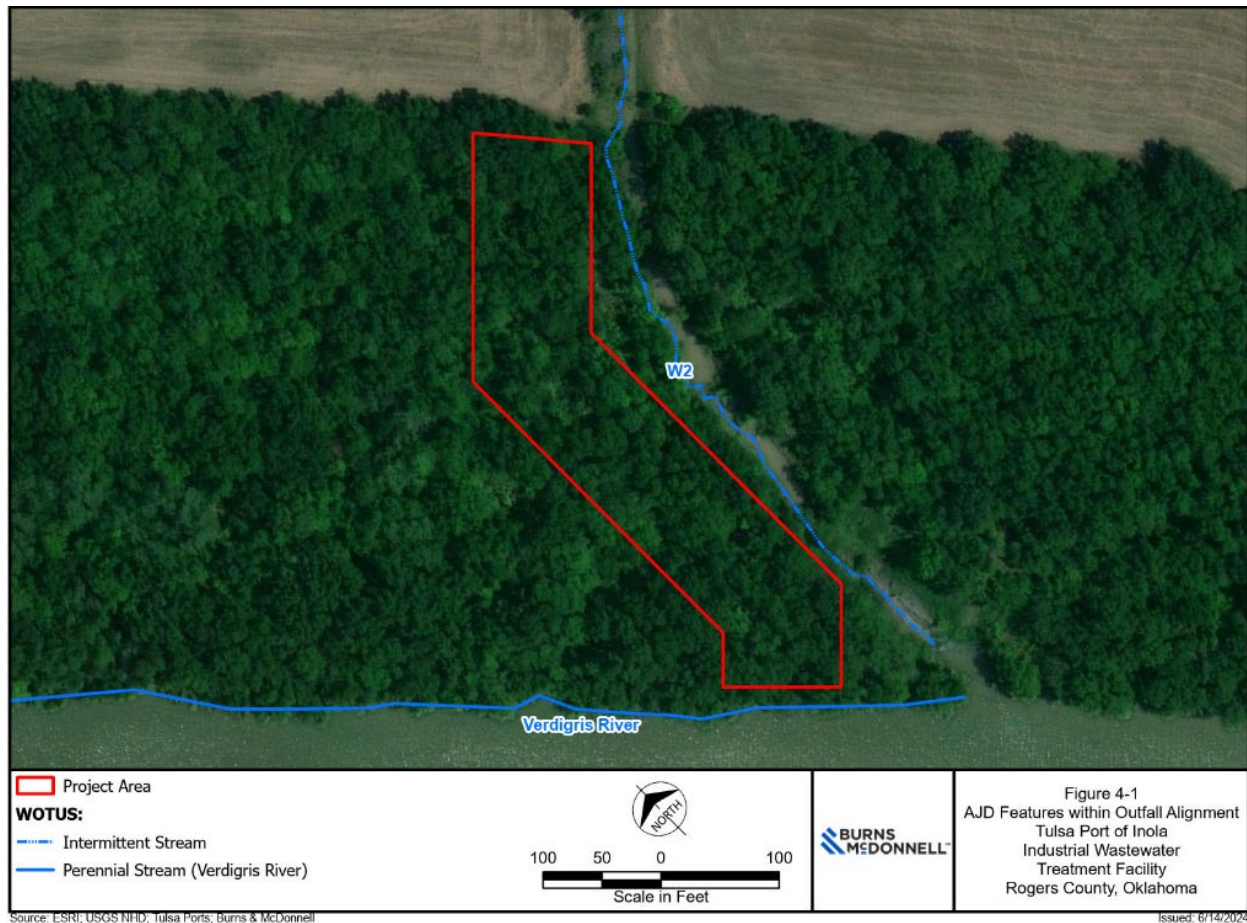
The easement for the Proposed Action is covered entirely of upland forest vegetation. The tree stratum was made up of woody species approximately 20 feet or more in height and 3 inches or larger in diameter at breast height (dbh), including Shumard oak (*Quercus shumardii*), southern pecan (*Carya illinoensis*), American elm (*Ulmus americana*), and hackberry (*Celtis occidentalis*). The shrub and sapling layers were made up of woody plants, excluding woody vines, approximately 3 to 20 feet in height and less than 3 inches diameter at breast height (dbh), including coral berry (*Symphoricarpos orbiculatus*) and Ashe juniper (*Juniperus ashei*). The herbaceous layer was lightly vegetated with longleaf wood oats (*Chasmanthium sessiliflorum*) and Canadian wildrye (*Elymus canadensis*).

4.4.2 Soils

The easement for the Proposed Action is made up of two soil series, Verdigris clay loam, 0 to 1 percent slopes, occasionally flooded (Ve) and Verdigris silty clay loam, 0 to 2 percent slopes, frequently flooded (Vf). Both soil types consist of very deep, well drained, very dark brown to very dark grayish brown clay loams and silty clay loam soils formed in silty alluvium on floodplains. Both soil types have listed hydric components comprising up to 5 percent of their land area (USDA, 2024).

4.4.3 Wetlands and Waterbodies

Tulsa Ports received an Approved Jurisdictional Determination from the U.S. Army Corps of Engineers (USACE) on February 6, 2024, covering the private parcel immediately adjacent to the limits of the Proposed Action. No jurisdictional Waters of the U.S. (WOTUS), including wetlands are present within the limits of the Proposed Action. Additionally, wetland investigations covering the Proposed Action were conducted on March 14 through 15, 2023. The Proposed Action consists entirely of upland forest, and no potential WOTUS were identified within the limits of the Proposed Action. Tributary W2, a relatively permanent water, parallels the easement for the Proposed Action to the east and the Verdigris River, a traditionally navigable water, borders the Proposed Action to the southwest. The site is located within the Commodore Creek-Verdigris River (HUC110701050306) watershed. Please refer to Figure 4-1 for a depiction of the wetlands and waterbodies in proximity to the Proposed Action.

Figure 4-1: Wetlands and Waterbodies

4.4.4 Floodplains

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Viewer indicates the presence of a Zone AE 100-Year Regulatory Floodway associated with the Verdigris River and a Zone AE 100-Year Regulatory Floodplain (Town of Inola 400456 (40131C0435H)) that extend across the Proposed Action easement (0.84 acre). Portions closest to the Verdigris River are within the Zone AE Floodway (0.42 acre). The base flood elevation is specified at an elevation of 548 feet above sea level. Please refer to Figure 4-2 for a depiction of floodplains within the Proposed Action.



Figure 4-2: FEMA Floodplain Map

4.4.5 Water Quality

The nearest surface water resource is the Verdigris River, bordering the Proposed Action easement to the southwest. The segment of the Verdigris River just north/upstream of the Proposed Action has a completed Total Maximum Daily Load (TMDL) for turbidity and bacteria. North of the Proposed Action easement is Commodore Creek, a tributary that flows into the Verdigris River. To the south of the Proposed Action easement and on the opposite bank of the Verdigris River is the Adams Creek Tributary, which is included on the Oklahoma 303(d) list of impaired waterbodies for dissolved oxygen. The proposed discharge outfall from the Proposed Action would not be within the TMDL designated area of the Verdigris River.

4.5 Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online tool was accessed on April 4, 2024, for the Port property. The IPaC is included in Attachment 4. The IPaC identified four federally threatened species, including the piping plover (*Charadrius melodus*), red

knot (*Calidris canutus rufa*), rabbitsfoot (*Quadrula cylindrica cylindrica*), and American burying beetle (*Nicrophorus americanus*). The tricolored bat (*Perimyotis subflavus*) is proposed for listing as endangered, the alligator snapping turtle (*Macrochelys temminckii*) is proposed for listing as threatened, and the monarch butterfly (*Danaus plexippus*) is a candidate for federal listing. The species identified as possibly being present within the Port property and Proposed Action are listed in Table 4-1.

Table 4-1: Federally Threatened and Endangered Species Identified within the Proposed Action

Common Name	Scientific Name	Federal Listing Status	Habitat Type
Tricolored bat	<i>Perimyotis subflavus</i>	Proposed Endangered	Winter hibernacula includes caves, abandoned mines, and road associated culverts. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark, but may also be found in Spanish moss, pine trees, and occasionally human structures. Tend to forage in forests or along forest edges.
Piping plover	<i>Charadrius melodus</i>	Threatened	Open, sparsely vegetated sand or gravel beaches adjacent to alkali wetlands, and on beaches, sand bars, and dredged material islands of major river systems.
Red knot	<i>Calidris canutus rufa</i>	Threatened	Marine habitats, including sandy beaches, saltmarshes, lagoons, mudflats or estuaries and bays, and mangrove swamps with invertebrate prey.
Alligator snapping turtle	<i>Macrochelys temminckii</i>	Proposed Threatened	East central and southeastern lakes, rivers, and sloughs.

Common Name	Scientific Name	Federal Listing Status	Habitat Type
Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	Threatened	Freshwater small to medium sized streams with areas of shallow water and shoals.
American burying beetle	<i>Nicrophorus americanus</i>	Threatened	Habitat generalist with areas of carrion such as grasslands, scrublands, and forest edges.
Monarch butterfly	<i>Danaus plexippus</i>	Candidate	Gardens, prairies, and natural areas with milkweed.

Source: USFWS 2024. <https://ipac.ecosphere.fws.gov/location/index>

4.5.1 Tricolored Bat

The USFWS has published Minimum Conservation Measures (MCMs) for projects “likely to adversely affect” or when “take is reasonably certain to occur” for the tricolored bat. For a complete detailed list of MCMs please refer to the *Northern Long-eared Bat and Tricolored Bat Voluntary Environmental Review Process for Development Projects Version 1.0* (USFWS, 2024e). These can generally be summarized to:

- avoid activities resulting in the disruption or disturbance of tricolored bat in their hibernacula during hibernation,
- avoid removing suitable roost trees within 0.25-mile of known hibernacula or maternity roost tree during spring staging and fall swarming and during the pup season (when feasible, avoid regardless of the season),
- avoid removing suitable roost trees within 1.5-miles of a tricolored bat capture/acoustic record location during the pup season.

There are no known hibernacula within 0.25-mile of the Proposed Action location; however, hardwood forest habitats present across the Proposed Action easement provide roosting habitat for the tricolored bat.

4.5.2 Piping Plover and Red Knot

The piping plover and red knot are migratory shorebirds that only pass through the State of Oklahoma during their spring and fall migrations (ODWC, 2024; eBird, 2024; USFWS, 2011). Desktop review followed by field observations determined no potential habitats for the piping plover and red knot are present; therefore, these species do not occur. A No Effect determination is appropriate for these species.

4.5.3 Alligator Snapping Turtle

No perennial water sources are within the Proposed Action easement; however, the Verdigris River borders the Proposed Action easement to the southwest. The alligator snapping turtle may occur due to reintroduction efforts to begin reestablishing populations in the Caney and Verdigris rivers near the Oklahoma-Kansas border, and in the Washita River in southeastern Oklahoma (USFWS, 2021b).

4.5.4 Rabbitsfoot

No perennial water sources are within the Proposed Action easement; however, the Verdigris River borders the Proposed Action easement to the southwest. Due to modification of the Verdigris River from construction of Oologah Reservoir and the McClellan-Kerr Navigation System, rabbitsfoot populations in that river have become reduced and isolated due to inundation of formerly occupied habitat (ODWC, 2024). Rabbitsfoot has a low likelihood of occurrence within the Verdigris River due to habitat modification; however, occurrence cannot be ruled out at this time.

4.5.5 American Burying Beetle

The American Burying Beetle “May Occur” within the Proposed Action easement. The American Burying Beetle is known to occur in roughly 29 counties within Oklahoma and prefer open oak and hickory forests with grassy cover (ODWC, 2024). Within defined conservation lands in the Southern Plains Analysis Area of Oklahoma and Arkansas, incidental take is exempted if it occurs in compliance with a USFWS-approved management plan, such as an Integrated Natural Resources Management Plan, that includes conservation measures for the American Burying Beetle. Outside of defined conservation lands incidental take is not prohibited because the Southern Plains Analysis Area currently has low risks to the species associated with land development. The USFWS defined “conservation lands” as lands included within the existing boundaries of Fort Chaffee in Arkansas (approximately 64,000 acres), McAlester Army Ammunition Plant in Oklahoma (approximately 45,000 acres), Camp Gruber/Cherokee Wildlife Management Area in Oklahoma approximately 64,000 acres), and The Nature Conservancy Tall Grass Prairie Preserve in Oklahoma (approximately 40,000 acres). These areas have defined boundaries and management that are compatible with recovery for American Burying Beetle. An effects determination was submitted to the USFWS on July 12, 2024, using the determination key within the IPaC. Based on the consistency letter (Appendix C) generated from the submission, the Project may affect the American burying beetle; however, any incidental take that may occur as a result of the Project is not prohibited under the Act Section 4(d) rule adopted for this species at 50 CFR § 17.47(d). The USFWS has 30 days to comment on this ruling if they find the IPaC-assisted determination to be incorrect. Following

30 days with no comment, coordination with USFWS is concluded. Presence/absence surveys for the American Burying Beetle are currently not required within the Proposed Action easement.

4.5.6 Monarch Butterfly

Oklahoma 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 Oklahoma both in the fall (September through November) and the spring (March). Early each March, monarchs begin arriving from their overwintering grounds in Mexico. Seeking emerging milkweeds (*Asclepias spp.*), they move through Oklahoma laying eggs before dying. Their offspring, the first of several new generations of monarchs that re-populate the eastern half of the U.S. and southern Canada, continue heading north, leaving most of Oklahoma behind. Most adult butterflies live approximately 2 to 5 weeks; overwintering adults; however, enter into reproductive diapause (suspended reproduction) and live 6 to 9 months (USFWS, 2024c).

4.5.7 Bald and Golden Eagle Protection Act

The Proposed Action would be constructed within the general range of the bald eagle. The Verdigris River flows adjacent to the Proposed Action easement. Suitable nesting habitat may be located along the Verdigris River. According to eBird (2024) the nearest bald eagle sightings are located approximately 2 miles to the south at Bluff Landing Public Use Area. No bald eagle nests have been recorded in proximity to the Proposed Action according to ODWC. No eagles and no nests were observed during field surveys, see Section 5.4.2 for additional discussion on impacts.

Golden eagles typically stay west of Interstate 35, although sightings have been documented in every county of the state, and they do not nest in Oklahoma (ODWC, 2024). The Proposed Action is within the general range of the golden eagle; however, cliff faces that provide suitable nesting habitat are not present near the Proposed Action easement and the species would occur only as a very rare to casual vagrant.

4.5.8 Migratory Bird Treaty Act

Migratory birds are defined as a group native to the U.S and listed in 50 Code of Federal Regulation (CFR) 10.13. A variety of migratory birds have the potential to occur in the Proposed Action easement. The peak nesting season for migratory birds in Oklahoma occurs from March to September (ODOT, 2009). The background review did not reveal any known concentrations of nesting migratory birds or rookeries.

4.6 Cultural Resources

Cultural resources investigations were conducted within the footprint of the Proposed Action to professional standards and guidelines in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-44742), the *Secretary's Standard for Identification* (48 FR 44720-44723), the Section 106 of the National Historic Preservation Act, USACE – Tulsa District *Standards and Guidelines for Cultural Resources Investigations on Tulsa District Owned Land v 1.2* (2021), and the 2023 standards outlined by the Osage Nation Historic Preservation Office.

USACE Regulatory Archaeologist Deseray Wrynn approved the ARPA permit application on April 23, 2024, and archeological field surveys were carried out on May 16, 2024, which included pedestrian survey and systematic shovel testing within the Area of Potential Effect (APE). The conclusions of the field survey reported that no cultural resources were discovered in the APE. Based on these reported results, no cultural or historical resources are expected to be impacted by the Proposed Action. No cultural resources were documented in the 1.25 acres of land that comprises the Proposed Action direct APE. The complete cultural resources field survey was forwarded to the Section 106 Coordinator of the US Army Corps of Engineers, with received confirmation of receipt, on July 2, 2024 for review and concurrence.

4.7 Air Quality

Ambient air quality refers to the concentration of a particular compound within a given volume of air. Climate, meteorology, and the number of and distribution of point emission sources (i.e., stationary sources) influence local air quality. Common anthropogenic sources of air pollution include power plants, factories, vehicles, and trains. Natural sources of air pollution can include windblown dust and volcanic eruptions.

In the U.S., the Environmental Protection Agency (EPA) regulates air quality. The Clean Air Act, 42 U.S.C. §7401 et seq., most recently amended in 1990, authorizes the EPA to establish National Ambient Air Quality Standards (NAAQS). The six criteria pollutants for which the EPA has established a NAAQS include carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂). The EPA in conjunction with state, local, and tribal governments are responsible for monitoring air quality. Areas with concentrations of these criteria pollutants that meet (or are below) the established NAAQS, the level at which there would be no harmful effects to the public, are considered to be in “attainment.” The EPA designates areas where concentrations of any of the criteria pollutants do not meet a NAAQS as “nonattainment.”

The ODEQ monitors air quality within the state through a network of 17 continuous data collection sites (ODEQ 2024). Currently, no EPA-designated “nonattainment” areas are within Oklahoma (USEPA 2024). The Proposed Action is located about 10 miles east of the nearest ODEQ ozone monitoring site (Tulsa East #178), which shows current O₃ levels are meeting the NAAQS. Other monitoring sites within the City of Tulsa and in its suburban areas monitor the other criteria air pollutants and current pollutant levels are meeting the NAAQS.

4.8 Hazardous, Toxic, and Radiological Waste

A Phase 1 Environmental Site Assessment was completed by Terracon Consultants, Inc. in 2013 for the Port property. At the time of the report, several minor Recognized Environmental Conditions (RECs) were identified. However, none of the RECs were identified within the easement for the Proposed Action. Indicators of RECs were not observed within adjoining properties and the site was not flagged nor identified within the environmental regulatory database searches.

5. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

5.1 Social and Economic Impacts

The Inola Industrial Park is expected to bring significant social and economic benefits due to job creation and a new domestic wastewater treatment facility. More than 40 individual entities have submitted inquiries to locate future projects at the Inola Industrial Park. However, the following list of target industries serves as a general guide for the types of industrial wastewater that may be produced and treated at the wastewater treatment plant:

- Plastic, resin, and composite manufacturing
- Nonferrous metal rolling and alloying
- Iron and steel manufacturing
- Solar panel component manufacturing & assembly
- Semiconductor manufacturing
- Battery & battery component manufacturing
- Electric vehicle component manufacturing & assembly
- Advanced aerial vehicle manufacturing & assembly

It is expected that the Inola Industrial Park could host approximately nine projects on the 2,400-acre site and create a total of 14,000 jobs. Additionally, the Inola Industrial Park has partnered with the Town of Inola to treat and discharge both the Inola Industrial Park wastewater and the Town of Inola domestic wastewater.

No Action Alternative impacts would result in no additional social and economic benefits to the area from job creation. Additionally, the Town of Inola would need to construct additional treatment facilities in addition to the existing lagoon system.

5.2 Natural Resources Impacts

Construction and operation of the Proposed Action, and conversely the No Action Alternative, would impact natural resources as summarized in the sections that follow. Most impacts would be temporary in nature; however, minor changes to the natural environment would occur due to long term operation and maintenance needs associated with the Proposed Action.

5.2.1 Vegetation

The easement of the Proposed Action is currently made up entirely of upland forest vegetation. Construction of the Proposed Action would require clearing and grubbing of trees within the new

easement. Upon completion of construction, the vegetation will be re-established and maintained as herbaceous vegetation.

Under the No Action Alternative, vegetation impacts would not occur and the current vegetation regime would remain in place.

5.2.2 Soils

Construction of the Proposed Action would require soil disturbance. Upon completion of vegetation clearing activities, a trench would be excavated, and excavated soils would be stockpiled onsite. Topsoil from the upper 12 inches would be stockpiled separately from subsoil materials. The water discharge pipeline would be installed within the trench, and upon completion, soil would be backfilled around the pipe. Topsoil would be distributed evenly along the surface, matching with pre-construction contours, compacted, stabilized, and revegetated.

Under the No Action Alternative, there would be no disturbance to the soil profile.

5.2.3 Wetlands and Waterbodies

No WOTUS, including wetlands, are present within the easement for the Proposed Action. No impacts to WOTUS would occur within the easement for the Proposed Action. The Verdigris River would be impacted by installation of the outfall pipe just beyond the limits of the Proposed Action easement. Best management practices would be employed in that location for control of sediment loss from construction activities.

Under the No Action Alternative, no direct or indirect disturbances to wetlands and waterbodies would occur.

5.2.4 Floodplains

Impacts within the floodplain would be temporary in nature. Executive Order on Floodplain Management (EO 11988) directs Federal Agencies to avoid actions located in or adversely affecting floodplains unless there is no practicable alternative. When there is no practicable alternative, they must take action to mitigate loss. The installation of pipeline through the floodplain is unavoidable since the eastern bank of the Verdigris River is Zone AE (100-yr floodplain) up to the outfall from the exiting Inola Public Works Authority – Wastewater Treatment Plant.

Impacts to the floodplain may occur from the Proposed Action during construction, but upon completion of construction soil will be backfilled around the pipe, topsoil will be distributed to match pre-

construction contours, and vegetation will be re-established and maintained. Changes to the floodplain elevation are not expected to result from the Proposed Action. Should permanent impacts to the floodplain occur, Tulsa Ports would engage FEMA to conduct the required analyses and prepare a Conditional Letter of Map Revision (CLOMR), if needed.

Under the No Action Alternative, there would be no impact to the floodplain, and agency coordination for activities in the floodplain would not be required.

5.2.5 Water Quality

The segment of the Verdigris River just north of the Proposed Action has a completed TMDL for turbidity and bacteria. To the south of the Proposed Action and on the opposite bank of the Verdigris River is the Adams Creek Tributary, which is included on the Oklahoma 303(d) list of impaired waterbodies for dissolved oxygen. The discharge from the Proposed Action would not occur within the TMDL designated area of the Verdigris River.

Discharge from the WWTF may include the following wastewaters that could impact the Verdigris River:

- cooling waters, which may have a heat component;
- industrial wastewaters, which may contain a variety of conventional and non-conventional pollutants; and
- domestic wastewater, which may contain oxygen demanding constituents and bacteria.

ODEQ assesses the impact of a new discharge to a receiving waterbody and implements effluent limitations in a NPDES permit to ensure protection of the receiving waterbody. Compliance with NPDES permit effluent limitations is required and expected for the Inola Industrial Park.

Under the No Action Alternative, there would be no impacts upon water quality and compliance and coordination under NPDES would not be required.

5.3 Wetlands and Water Quality Permits

No WOTUS occur within the Proposed Action easement. Dredge and fill impacts associated with construction of the outfall to the Verdigris River, immediately adjacent to the Proposed Action would be permitted under Nationwide Permit 7, Outfall Structures and Associated Intake Structures, requiring a Pre-Construction Notification to the USACE Tulsa District Regulatory Office.

Under the No Action Alternative, there would be no fill impacts in WOTUS and a permit would not be needed from the USACE.

5.4 Threatened and Endangered Species

Based on the life history of each species and the habitat data collected during the field investigations, Burns & McDonnell biologists evaluated the potential for each species to occur within the Survey Area, which includes both the easement area of the Proposed Action and the area assessed for the WWTF.

Based on the results of analysis, each species was ranked into one of the following categories.

- Known to occur – The species has been documented within the Survey Area or was observed during field investigations.
- May occur – The Survey Area is within the species' currently known range, and habitat type, soil, etc., resemble those known to be utilized by the species.
- Unlikely to occur – The Survey Area is within the species' currently known range, but habitat type, soil, etc., do not resemble those known to be utilized by the species, or the Survey Area is clearly outside the species' currently known range.
- Does not occur – The species does not occur within the Survey Area due to absence of habitat (e.g., no aquatic habitat for fish).

Once each species' potential to occur within the Survey Area was categorized, Burns & McDonnell biologists evaluated the Proposed Action's potential to affect each federally listed threatened or endangered species, including candidates for listing as threatened or endangered, to establish a recommended determination of effect. These recommended determinations follow the effects determinations guidance as put forth by the USFWS (USFWS, 2022) and include:

- No effect – The action will not affect federally listed species or critical habitat.
- May affect, but is not likely to adversely affect – The action may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial.
- May affect, is likely to adversely affect – Adverse effects to listed species may occur as a direct or indirect result of the action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial.

In addition to the federally listed species, Burns & McDonnell biologists evaluated the Proposed Action's potential to impact the bald or golden eagle to establish a recommended determination of impact, as follows:

- May impact – Adverse impacts to bald or golden eagles may occur as a direct or indirect result of the action or its interrelated or interdependent actions.
- No impact – The action will not impact bald or golden eagles or critical habitat.

Table 5-1 summarizes the list of species that potentially occur within Rogers County, their corresponding potential to occur within the Survey Area, and potential effects to the species as a result of the Proposed Action.

Table 5-1: Species Potential to Occur and Effects Determination

Common Name	Potential to Occur within Survey Area	Recommended Effects Determination^a
Federally Listed Threatened and Endangered Species		
Mammals		
Tricolored Bat	May occur. Project is located within the species' known range and roosting habitat is present.	Not Required ^{b, c}
Birds		
Piping Plover	Does not occur; suitable habitat is not present within the Project Area.	No Effect
Red Knot	Does not occur; suitable habitat is not present within the Project Area.	No Effect
Reptiles		
Alligator Snapping Turtle	May occur in the Verdigris River immediately adjacent to the required easement.	No Effect ^d
Clams		
Rabbitsfoot	Unlikely to occur in the Verdigris River; however, occurrence cannot be ruled out at this time.	No Effect
Insects		
American Burying Beetle	The Proposed Action is not within the boundary of USFWS defined conservation lands for the American Burying Beetle. Incidental take is authorized under the species 4(d) rule outside of conservation lands, pending completion of the 4(d) rule checklist through the IPAC. Concurrence is given under the 4(d) rule if no comments are received during the 30 day review period.	May Affect ^e

Common Name	Potential to Occur within Survey Area	Recommended Effects Determination ^a
Monarch Butterfly	May occur; however, impacts are anticipated to be insignificant or discountable.	Not Required ^f
Other Federally Protected Species		
Bald & Golden Eagle	No nests were observed within or adjacent to the Proposed Action easement.	No Impact
Migratory Birds	Nesting migratory birds may be present from March through September	No Impact if clearing occurs outside of the nesting season. Pre-construction nesting surveys should be performed if clearing activities occur during the nesting season.

(a) Determinations based on USFWS (2024a) nomenclature.

(b) The tricolored bat is proposed endangered. If listed prior to the start of Project activities, a “No Effect” determination can be achieved by clearing trees during the inactive season (November 16 – March 31). Clearing outside of this window would result in a “May Affect” determination and consultation with the USFWS would be required.

(c) Effects for this species only need to be considered for wind energy projects.

(d) The alligator snapping turtle is currently proposed threatened. An effects determination is not required in the absence of a listing; however, should this species be listed at a future date, a determination of “No Effect” is appropriate for activities within the Proposed Action easement. If this species is officially listed as threatened, adjacent activities in the Verdigris River would require coordination with USFWS and would be permitted separately.

(e) The Project may affect the American burying beetle; however, any incidental take that may occur as a result of the Project is not prohibited under the Act Section 4(d) rule adopted for this species at 50 CFR § 17.47(d). Please refer to the USFWS consistency letter generated on July 12, 2024 (Appendix C). USFWS has 30 days to comment, no comment in 30 days indicates concurrence and Project Activities can proceed.

(f) 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.

5.4.1 Threatened and Endangered Species Effects

Although not currently listed, the tricolored bat is anticipated to be officially listed as endangered prior to implementation of the Proposed Action. Prior to listing, coordination with USFWS is not required for proposed species. Upon listing, a determination of “May Affect” is appropriate for the tricolored bat and coordination with USFWS would be required. A “No Effect” determination could be achieved if Tulsa Ports commits to clearing trees during the inactive season (November 16 – March 31). If clearing occurs during the inactive season then coordination with USFWS would not be required.

A determination of No Effect is appropriate for the piping plover and red knot due to the lack of suitable habitat within the Project Area. These species would not occur except for unlikely and brief stopovers during migration.

The alligator snapping turtle is currently proposed for listing as threatened. Alligator snapping turtle habitat is not present within the easement for the Proposed Action; however, the species may occur in the Verdigris River immediately adjacent to the Proposed Action. An effects determination is not required in the absence of a listing; however, should this species be listed at a future date, a determination of “No Effect” is appropriate for activities within the Proposed Action easement. If this species is officially listed as threatened, adjacent activities in the Verdigris River would require coordination with USFWS and would be permitted separately.

Rabbitsfoot does not occur within the easement for the Proposed Action and is unlikely to occur in the Verdigris River immediately adjacent to the Proposed Action. A determination of “No Effect” is appropriate for activities within the Proposed Action easement. Adjacent activities in the Verdigris River would require coordination with USFWS and would be permitted separately. Best management practices should be implemented during construction to avoid impacts to aquatic habitats and potential habitat for the endangered Neosho mucket and rabbitsfoot mussels. If in-stream work is necessary, a freshwater mussel survey may be required to determine impacts.

An effects determination for the American burying beetle was submitted to the USFWS on July 12, 2024, using the determination key within the IPaC. Based on the consistency letter (Appendix C) generated from the submission, the Project may affect the American burying beetle; however, any incidental take that may occur as a result of the Project is not prohibited under the Act Section 4(d) rule adopted for this species at 50 CFR § 17.47(d). The USFWS has 30 days to comment on this ruling if they find the IPaC-assisted determination to be incorrect. Following 30 days with no comment, coordination with USFWS is concluded.

The monarch butterfly may occur within the easement for the Proposed Action; however, this species is currently a candidate for listing, and an effects determination is not required. No published timeline has been identified for listing of this species, and coordination with the USFWS is not required.

Under the No Action Alternative, there would be “No Effect” upon federally listed species.

5.4.2 Bald & Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald eagles, including their parts, nests, or eggs. The Act provides criminal and civil penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle... [or any golden eagle], alive or dead, or any part, nest, or egg thereof.” The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” “Disturb” means: “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

Forested habitats along the margin of the Verdigris River are suitable for bald eagle nesting and foraging activities. Although bald eagles are known to traverse the Verdigris River, eagle nests are not present within proximity to the Proposed Action. The Proposed Action is not anticipated to “take” or “disturb” bald and golden eagles. Coordination with the USFWS is not required.

Under the No Action Alternative, there would be impact to bald and golden eagles.

5.4.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits anyone, without a permit issued by the Department of Interior, from “taking” protected migratory bird species. “Take” includes to kill, possess, import, export, transport, sell, purchase, barter, or offer for sale of migratory birds including the parts, nests, or eggs. Migratory bird nesting habitats are present within the easement for the Proposed Action. No action is required for clearing activities outside of the migratory bird nesting season. If clearing activities occur during the nesting season from March to September, investigations for the presence of nesting migratory birds and active nests should be performed within seven days prior to clearing activities. In the event that active migratory bird nests are encountered onsite during clearing activities, the coordinates of the nest location would be taken and shared with environmental coordinators and clearing crew contacts. The nest will be monitored by a qualified biologist until any chicks have fledged and the nest is no longer active. If possible, the structures or vegetation that the nest is in should be marked or taped off to ensure that the nest location is visible and is not cleared until the nest is no longer active. The USFWS does not have set active nest buffer recommendations for migratory bird species; however, a 30-foot buffer from active nests of birds of conservation concern is recommended.

Under the No Action Alternative, there would be no impact upon nesting migratory birds.

5.5 Cultural Resources

No architectural resources would be physically impacted as a result of the Proposed Action and no cultural resources were documented within the 1.25 acres of land that comprises the Proposed Action direct APE. It is recommended that the Proposed Action proceed as planned without further consideration of effects to cultural resources.

Under the No Action Alternative, cultural resources would not be impacted.

5.6 Water Quality

The ODEQ's Watershed Planning section provides protection for the State's healthy waters through the implementation of programs addressing Clean Water Act (CWA) Sections 208 and 401. CWA Section 208 requires the states to develop a list of WLAs for municipal and industrial point source dischargers, known as the 208 Plan. A WLA is the amount of a pollutant allowed to be discharged by a facility while still meeting water quality standards. Water quality modeling is utilized to calculate wasteload allocations that ensure that the receiving water will continue to meet water quality standards. The 208 Plan is updated when a facility's wasteload allocation is developed or revised and appropriate limits subsequently incorporated in a discharge permit. A WLA for oxygen demanding constituents was approved by ODEQ on December 15, 2023, and accepted by EPA on May 18, 2024. An application for a NDPES permit to discharge domestic and industrial wastewater to the Verdigris River will be submitted, and compliance with permit limitations is required and expected.

The ODEQ is the lead state agency that administers the CWA Section 401 water quality certification program in Oklahoma. ODEQ conducts CWA Section 401 certification review of projects requiring a federal discharge permit to determine if the requirements of the permitted discharge will comply with Oklahoma water quality standards. ODEQ can add conditions to the federal permit that would ensure compliance with water quality standards. The most common federal permits in Oklahoma requiring 401 certifications are CWA Section 404 permits from the USACE for the discharge of dredged or fill material into WOTUS. It was determined that the Proposed Action would have no impacts to WOTUS, and that the dredge and fill impacts associated with the proposed outfall to the Verdigris River will be permitted under the Nationwide Permit 7, see Section 5.3 for further details. All wastewater disposal, discharge or beneficial reuse, would be in compliance with the CWA and State requirements.

Under the No Action Alternative, there would be no impact upon water quality.

5.7 Air Quality

Operation of the Proposed Action is not expected to cause a measurable difference in the air quality surrounding the project area. Land disturbance associated with the Proposed Action is limited to the short-term, construction of the discharge pipeline. Earth moving equipment and vehicle traffic would result in temporary emissions of CO, NO_x, and SO₂ from engine combustion and tailpipe emissions. The potential exists for dust emissions from vehicle traffic and wind erosion (PM₁₀ and PM_{2.5}) where excavation occurs and the soil is disturbed to build the discharge pipe. Construction vehicle emissions would be a minor, temporary contribution to ozone formation and not a new point source of concern to the greater Tulsa metropolitan area. No new permanent stationary source of air emissions would be constructed as part of the Proposed Action. Therefore, no significant disturbances to the air quality are expected as a result of the Proposed Action, and it would not contribute to an exceedance of NAAQS levels in the Tulsa area. The Proposed Action is not expected to have any negative effects on air quality that would result in any violation of a NAAQS or cause a health concern to local human or wildlife populations.

Under the No Action Alternative, no impacts upon air quality would occur.

5.8 Noise

Noise is generally defined as sound with intensity greater than the ambient or background sound pressure level. Project construction and operation may affect overall sound levels in proximity of the Proposed Action. The ambient sound level of a region, which is defined by the total noise generated within the specific environment, is usually comprised of sounds emanating from both natural and artificial sources. At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week, in part due to changing weather conditions and the impacts of seasonal vegetation cover.

Temporary noise sources associated with the Proposed Action would include construction activities, such as vegetation clearing, grading and excavation, construction equipment operation, and installation. Construction noise is highly variable as equipment operates intermittently. The type of equipment operating at any location changes with each construction phase. The noise level impacts near the construction workspace from typical construction activities would depend on the type of equipment used, the duration of use for each piece of equipment, the number of construction vehicles and equipment used simultaneously, and the distance between the source and receptor. Although residences in the immediate vicinity of the construction activities may experience an increase in noise, this effect would be temporary and local. Construction may result in slight increases to the existing ambient sound level and may result

in noise impacts at nearby residences. Noise impacts due to construction are expected to have minimal effect and there would be no long-term noise impacts associated with the operation of the Proposed Action.

Under the No Action Alternative, there would be no change in ambient noise levels.

5.9 Hazardous, Toxic, and Radiological Waste

As described in Section 3, the Proposed Action will involve the construction of a wastewater treatment facility outfall piping. Activities to be completed will be related to site clearing, trench excavation, construction of a headwall structure and pipeline, and site restoration after which the site will be returned to previous conditions. Fuels needed for construction equipment will be located onsite but will be contained and any spills would be remediated according to the Spill Prevention, Control, Countermeasures (SPCC) Plan per the requirements found in 40 CFR §112. Construction activities will be temporary and of limited duration and are not expected to create any hazardous, toxic, or radiological wastes. None of the RECs were identified within the Proposed Action easement area. Indicators of RECs were not observed within adjoining properties and the site was not flagged nor identified within the environmental regulatory database searches.

If unexpected wastes or contamination is encountered during construction, work would stop until the site is evaluated and any required remedial or disposal action taken before resuming construction.

Under the No Action Alternative, unexpected wastes or contamination would not be encountered.

5.10 Cumulative Impacts

The CEQ defines cumulative effects as the “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such an action.” Cumulative effects “can result from individually minor but collectively significant actions taking place over a period of time.”¹

Potential direct and indirect effects of the Proposed Action are described for each resource area in the sections above. The proposed project would not result in any negative cumulative impacts that could not be mitigated. The proposed project would minimize cumulative effects by providing a central treatment

¹ 40 CFR §1508.1(g)(3)

facility instead of individual treatment facilities. Overall, the cumulative effects on the environment are minor.

No other projects have occurred in the past or the present around the Proposed Action that would result in significant cumulative effects.

Under the No Action Alternative, no cumulative impacts would occur.

6. MITIGATION PLAN

Tulsa Ports will follow the appropriate mitigation sequencing steps for all air quality, biological resources (including wetlands and federally listed species), cultural resources, geology and soils, hazardous materials, hydrology and water quality, noise, and traffic and circulation as necessary. Impacts will be avoided and minimized to the extent possible.

6.1 Natural Resource Impacts

Impacts to the natural resources within the area of the Proposed Action will be temporary in nature; Mitigation measures are to restore the area of Proposed Action back to the natural environment as is feasible.

6.2 Wetlands & Waterbodies

No WOTUS occur within the Proposed Action easement. Dredge and fill impacts associated with construction of the outfall to the Verdigris River, immediately adjacent to the Proposed Action would be permitted under Nationwide Permit 7, Outfall Structures and Associated Intake Structures, requiring a Pre-Construction Notification to the USACE Tulsa District Regulatory Office.

6.3 Threatened and Endangered Species

Federally listed threatened and endangered species and protection status are identified in Section 4.5 and potential impacts to threatened and endangered species are addressed in Section 5.4.

If clearing activities for the Proposed Action occur during the nesting season from March to September, investigations for the presence of nesting migratory birds and active nests would be performed within seven days prior to clearing activities. If active migratory bird nests are encountered onsite during clearing activities, the coordinates of the nest location would be taken and shared with environmental coordinators and clearing crew contacts. The nest will be monitored by a qualified biologist until any chicks have fledged and the nest is no longer active. If possible, the structures or vegetation that the nest is in would be marked or taped off to ensure that the nest location is visible and is not cleared until the nest is no longer active.

No bald eagle nests have been recorded in proximity to the Proposed Action according to ODWC. No eagles and no nests were observed during field surveys. If bald eagles are seen during the Proposed Action, work will be halted until they have left the area.

6.4 Cultural Resources

No archaeological resources are expected to be physically impacted as a result of the Proposed Action and no cultural resources were documented within the 1.25 acres of land that comprises the Proposed Action direct APE. If buried cultural resources are encountered during Project construction, land-disturbing activities in the immediate area must be halted, and the OAS and the USACE must be notified. Any exposed cultural resources will be evaluated for their significance.

6.5 Water Quality

ODEQ will assess the impact of the new discharge to the receiving waterbody and will include effluent limitations in the NPDES permit to ensure protection of the receiving waterbody. Impacts to water quality are discussed Section 5.6. Tulsa Ports will submit an application for an individual NPDES permit to discharge. Compliance with NPDES permit effluent and limitations is required and expected for the Inola Industrial Park.

6.6 Air Quality

The Proposed Action is not expected to have any negative effects on air quality that would result in violation of a NAAQS or cause a health concern to local human or wildlife populations. If negative effects on air quality occur during the Proposed Action activities, appropriate control measures will be taken to address the air quality issues.

6.7 Noise

Noise impacts due to construction are expected to have minimal effect and there would be no long-term noise impacts associated with the operation of the Proposed Action, see Section 5.8. To minimize construction noise during nighttime hours, construction working hours are planned to typically be within daytime hours, with the exemption of various activities that may extend for one or more 24-hour days of continuous work, depending on the site and weather conditions, public safety, permit requirements, schedule, crew availability, and other factors. Other construction noise mitigation may include instituting work practices such as reducing idling of unused equipment and fitting any equipment exhaust with residential mufflers.

6.8 Hazardous, Toxic, and Radiological Waste

Impacts to the environment due to hazardous, toxic, or radiological waste are discussed in Section 5.9. If unexpected wastes or contamination are encountered during construction, work would stop until the site is

evaluated and any required remedial or disposal action taken before resuming. If a spill of fuel occurs during construction activities, the spill will be contained and remediated per the requirements of the onsite SPCC plan before resuming.

7. FEDERAL, STATE, AND LOCAL AGENCY COORDINATION

The state and federal agencies, and the specific individuals who were consulted in the evaluation of permitting and environmental impacts of the Proposed Action are included in Table 7-1.

Table 7-1: Agency Coordination

Agency	Individual Consulted
ODEQ Water Quality Division	Soojung Lim Joe Long
Oklahoma Natural Heritage Inventory	Kristin Comolli
U.S. Fish & Wildlife Service	Information For Planning & Consultation Tool
USACE Tulsa District Archaeological Resources Protection Act Coordinator	Tracy R. White-Davidson Deseray Wrinn
USACE Tulsa District – Regulatory	

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9. APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS

Section of Report	Applicable Rules and Regulations
Section 4.0 Affected Environment	
4.1 Location	NA
4.2 Climate	NA
4.3 Social and Economic Conditions	NA
4.4 Natural Resources	See below
4.4.1 Vegetation	NA
4.4.2 Soils	NA
4.4.3 Wetlands & Waterbodies	Section 401 of the Clean Water Act Section 404 of the Clean Water Act Section 10 of the Rivers and Harbors Act
4.4.4 Floodplains	
4.4.5 Water Quality	Section 208 & 303(d) of the Clean Water Act Section 401 of the Clean Water Act Section 402 of the Clean Water Act OAC 252:730 OAC 252:740 OAC 252:690
4.5 Threatened and Endangered Species	Endangered Species Act Migratory Bird Treaty Act Bald & Golden Eagle Protection Act
4.6 Cultural Resources	National Historic Preservation Act
4.7 Air Quality	Clean Air Act
4.8 Hazardous, Toxic, and Radiological Waste	Resource Conservation and Recovery Act
Section 5.0 Environmental Impacts of Proposed Action	
5.1 Social and Economic Impacts	
5.2 Natural Resources Impacts	See below
5.2.1 Vegetation	NA
5.2.2 Soils	NA
5.2.3 Wetlands and Waterbodies	Section 401 of the Clean Water Act Section 404 of the Clean Water Act Section 10 of the Rivers and Harbors Act
5.2.4 Floodplains	
5.2.5 Water Quality	Section 208 & 303(d) of the Clean Water Act Section 401 of the Clean Water Act Section 402 of the Clean Water Act OAC 252:730 OAC 252:740 OAC 252:690
5.3 Wetlands and Water Quality Permits	Section 401 of the Clean Water Act Section 404 of the Clean Water Act Section 10 of the Rivers and Harbors Act
5.4 Threatened and Endangered Species	Endangered Species Act Migratory Bird Treaty Act Bald & Golden Eagle Protection Act

5.5 Cultural Resources	National Historic Preservation Act
5.6 Water Quality	Section 208 & 303(d) of the Clean Water Act Section 401 of the Clean Water Act Section 402 of the Clean Water Act OAC 252:730 OAC 252:740 OAC 252:690
5.7 Air Quality	Clean Air Act
5.8 Noise	NA
5.9 Hazardous, Toxic, and Radiological Waste	Resource Conservation and Recovery Act
5.10 Cumulative Impacts	NA

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**APPENDIX A -TULSA PORTS WASTEWATER TREATMENT PLANT
ENVIRONMENTAL ASSESSMENT, MARCH 2022**

Environmental Narrative



Tulsa Ports

**Wastewater Treatment Plant
Project No. 134600**

**Revision 3
3/11/2022**

Environmental Narrative

prepared for

**Tulsa Ports
Wastewater Treatment Plant
Catoosa, Oklahoma**

Project No. 134600

**Revision 3
3/11/2022**

prepared by

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

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
ABB	American burying beetle
ACS	American Community Survey
AJD	Approved Jurisdictional Determination
BMcD	Burns & McDonnell Engineering Company, Inc.
CLOMR	Conditional Letter of Map Revision
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
INRMP	Integrated natural resources management plan
IPaC	Information for Planning and Consultation
L	Lake
MGD	Million gallons per day
NFHL	National Flood Hazard Layer
NHD	National Hydrology Dataset
NLEB	Northern long-eared bat
NPDES	National Pollutant Discharge System
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
ODEQ	Oklahoma Department of Environmental Quality
PEM	Freshwater emergent wetland
PSO	Public Service Company of Oklahoma
PSS	Freshwater forested/ shrub wetland
PUB	Palustrine unconsolidated bottom
Port property	Newly acquired industrial park site
Proposed project	Wastewater treatment facility within the Port property
R	Riverine
RECs	Recognize Environmental Conditions
Regional Supplement	<i>2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)</i>
TMDL	Total Maximum Daily Load
USACE	U.S. Army Corps of Engineers
WLA	Wasteload Allocation

A. PROJECT DESCRIPTION

A.1 Beneficiaries

The beneficiaries of the construction of a wastewater treatment facility at the Inola Industrial Park will be manifold. Direct beneficiaries will include the Tulsa Ports as the owner of the industrial park and the industries that elect to develop within the park extents.

Indirect beneficiaries would include Rogers County, the Town of Inola, and other municipalities in the northeast Tulsa region with the increased tax revenue. The additional industrial development would increase available jobs, thereby attracting additional residents to the region. Additionally, companies that conduct business with the future developments at the Inola Industrial Park may benefit from increased sales, cheaper materials, or additional supply chain options.

A.2 Proposed Construction

Tulsa Ports is proposing to construct a wastewater treatment facility near the southwest corner of the industrial park site (Port property) (Figure A-1) in Township 19N, Range 16E, Section 25 within the Town of Inola municipal boundary, Rogers County, Oklahoma (proposed project). The construction of the wastewater treatment facility or associated collection system will not require the acquisition of any right-of-way or easements, as the Tulsa Ports currently owns all property within the Inola Industrial Park site.

The selected site location will allow for the proposed collection system(s) to use the natural topography of the Port property to maximize the amount of gravity flow and minimizes the impact on developable space. With the selected location adjacent to the river, additional consideration of floodplain impacts will be required in the detailed design phase.

The selected site will require basic site grading for construction of plant infrastructure, material and equipment storage, and considerations of proposed development to adjacent property. While every effort will be made to minimize clearing and grubbing, some clearing activities will be required to provide adequate space for construction activities.

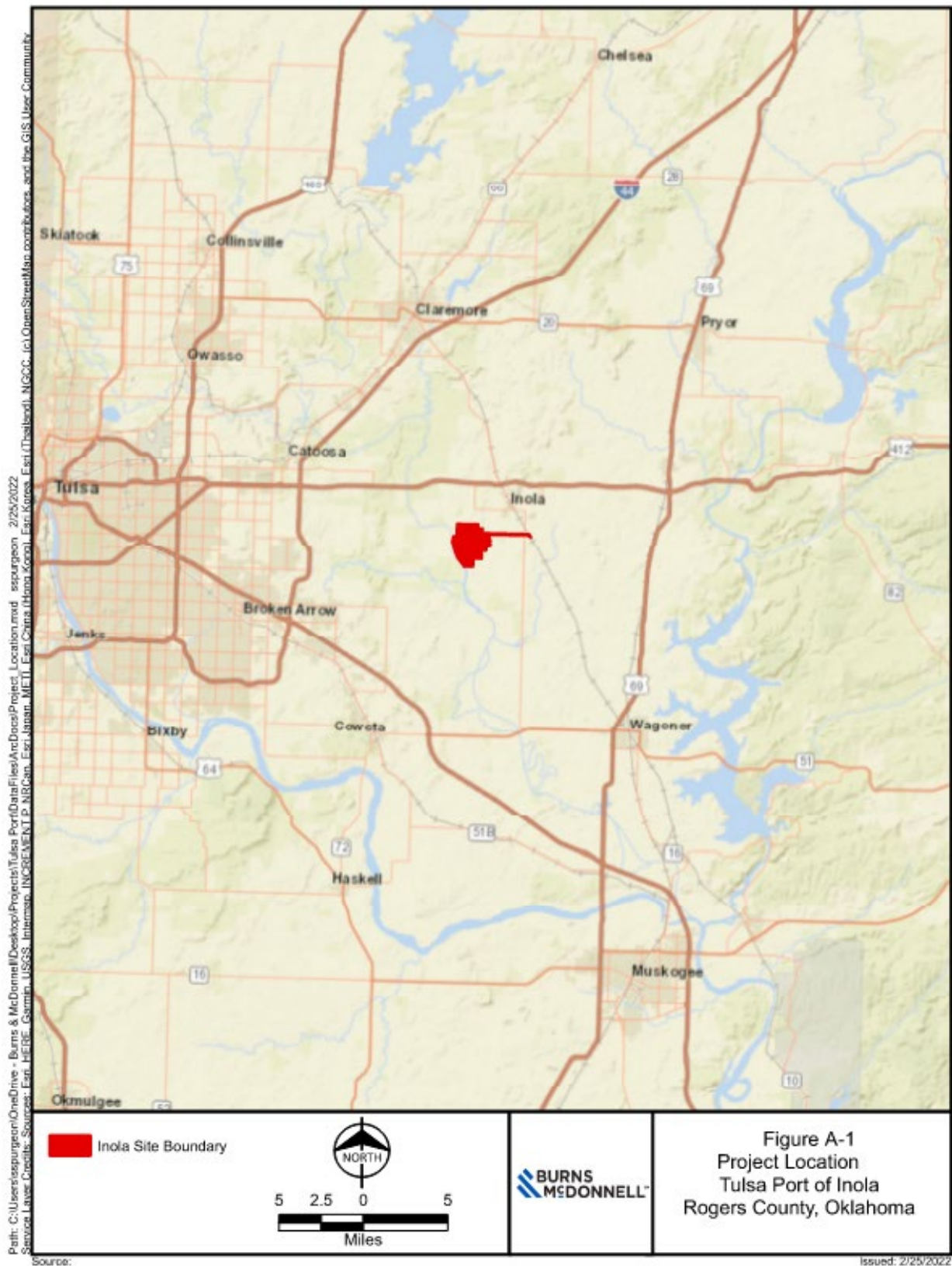


Figure A-1: Project Location

A.3 Need and Purpose

Tulsa Ports acquired the 2,400-acre industrial park site located in Inola, Oklahoma in 2019, and contracted with Burns & McDonnell (BMcD) in 2020 to conduct a desktop due diligence study and prepare a master plan for the newly acquired Port property. During the master planning process, the most significant setback to developing the site was determined to be the ability to treat and discharge wastewater generated on-site.

In 2021, Tulsa Ports contracted with BMcD to study to determine assimilative capacity of the Verdigris River to accommodate discharge and permitting of future wastewater generated from the 2,200-acre* greenfield site and determine the wasteload allocation (WLA) available. This WLA Study is currently underway as of the writing of this report. The Wasteload Allocation (WLA) Study serves as the precursor to the submittal of a request of discharge permit application to authorize discharges under the Clean Water Act.

*The approximately 200-acre Sofidel development uses a separate wastewater treatment and discharge permitting process and is not considered in this report.

During the master planning process, targeted industry sectors were selected based on their compatibility with the area's natural, built, and civic environment. Such factors include wetlands, floodplains, infrastructure, supply chain, taxes, etc. As a result, BMcD and the Tulsa Ports identified 10 industries to use to determine the wastewater discharge rate and composition. The WLA study is in the process of modeling the anticipated flow rate and constituent loading in support of the discharge permit application.

A.4 Alternatives to the Proposed Project

Three alternatives were evaluated for the treatment of wastewater generated on-site including: no treatment, pumping of wastewater to nearby municipality for treatment, and the construction of an on-site wastewater treatment facility

A.4.1 No Treatment

A “no treatment” option was not considered a viable alternative as this industrial park is an intentional economic development initiative to create local employment opportunities. Without a centralized facility to treat wastewater generated on-site, the ability to develop the site would be greatly hindered by placing this burden on each development project, resulting in additional delays and costs to the project.

A.4.2 Conveying Wastewater to Nearby Municipality

The option to pump wastewater generated on-site to an adjacent municipality was discussed as a viable alternative as outlined below. Due to additional construction and maintenance costs along with additional environmental concerns, this alternative was eliminated from further consideration.

The Town of Inola is the nearest municipality but with a population of approximately 1,800, it does not have the resources available to build and/or maintain a treatment facility necessary to treat the industrial park's wastewater and the Town's domestic wastewater flows. Due to this evaluation and discussions with the Town, a partnership may form to develop a combined treatment facility on the industrial park property in the future.

The City of Broken Arrow has a population of approximately 108,000 and is located to the west and across the Verdigris River. Broken Arrow wastewater treatment facilities could receive the additional flows generated by the park with smaller upgrades; however, transferring the wastewater to the existing treatment facility would require a pump station, miles of force main, and crossings of the Verdigris River and multiple creeks. The staged development of the industrial park would create challenges in conveying the wastewater efficiently to Broken Arrow, requiring numerous improvements as the park develops.

Conveying the industrial park wastewater off-site would also eliminate the possibility implementing reuse water on-site. Water reuse is desired by the Tulsa Ports as a marketing tool, and it would limit the amount of potable water required to serve the site.

A.4.3 On-site Wastewater Treatment Facility

On-site treatment of the industrial park was determined to be the most economical and the alternative with the least environmental impact. This alternative will allow the Tulsa Ports to develop a phased construction plan to increase the treatment capacity as the industrial park develops.

An on-site facility will provide the opportunity for separate industrial and domestic wastewater collection systems for more efficient treatment processes. Additionally, current regulations do not allow industrial wastewater to be recycled for reuse; therefore, separate collection systems would allow the domestic wastewater to be recycled to reduce the potable water demand at the industrial park as well as neighboring properties. This green infrastructure opportunity would also serve as a marketing tool to attract developments to the site.

The construction of an on-site facility would also allow a future partnership with the Town of Inola by combining wastewater treatment into a single facility. This would potentially allow for the two

wastewater discharge permits to be combined for increased treatment efficiency and decreased environmental risk.

C. AFFECTED ENVIRONMENT

The project components described in this section discuss potential direct and indirect impacts from proposed project activities and specify proposed measures to mitigate probable impacts.

C.1 Affected Area

The descriptions of the affected area and under each of the resource categories are provided at two levels – the larger 2,400-acre property owned by the Tulsa Ports, (Port property), and the approximate 65 acres (proposed project site) in the southwest corner of the Port property.

The Port property is approximately 5.50 miles southwest of the main part of the Town of Inola along the Verdigris River in the southeast corner of Rogers County, Oklahoma. The 2,400-acre property, owned by the Tulsa Ports, is within the Town of Inola city limits and encompasses the Rocky Point Public Use Area in the northwest corner of the property and the Sofidel Paper Mill facility near the center of the Port property. The 200-acre paper mill site is dominated by manufacturing and distribution facilities, supporting infrastructure, and access roads and surface parking areas along with natural vegetated areas. The facility is a private business and would not be directly or indirectly affected by the proposed project. The Port property was previously zoned for agricultural use. As noted, a portion of the Port property is used for industry and contains a number of access roads. The site is being master planned for manufacturing and heavy industrial land use.

The Rocky Point Public Area (Parcel 660013052) is jointly owned by the City of Tulsa-Rogers County and is open to the public to experience the landform and geological features, river views, and cultural/historical features within its boundaries. The public accesses the site from E. 620 Road along the northern edge of the Port property. There are no other public use areas; local, state, or national parks; state or federal wildlife management areas, refuges, game preserves, or wilderness areas within or adjacent to the Port property. There are no nationally designated wild or scenic rivers within or adjacent to the Port property. The proposed project would not affect, directly or indirectly, the Rocky Point Public Area.

Rogers County is classified as the Osage Cuestas Central Irregular Plains Ecoregion of Oklahoma. The Osage Cuestas are characterized by irregular to undulating plains that are broken by low hills and cuestas. Perennial streams with sand, mud, and sometimes gravel and cobbles are present. Streams are often more slowly moving and turbid in the southern portion, where the site is located. Natural vegetation includes mostly tall grass prairie species including big bluestem (*Andropogon gerardi*), little bluestem (*Schizachyrium scoparium*), switchgrass (*Panicum virgatum*), and Indiangrass (*Sorghastrum nutans*). Areas of crosstimbers, oak-hickory forest, bottomland forests, and dry upland forest and woodlands are

present within this ecoregion. It is common for riparian areas like those located in the project area can include forests of boxelder (*Acer negundo*), silver maple (*Acer saccharinum*), Shumard oak (*Quercus shumardii*), American elm (*Ulmus americana*), hackberry (*Celtis occidentalis*), pecan (*Carya illinoensis*), walnut (*Juglans nigra*), sycamore (*Platanus occidenalis*), and eastern cottonwood (*Populus deltoides*).

Land cover types within the ecoregion includes rangeland, grassland, cropland, and woodland. Cropland including wheat, soybeans, grain sorghum, and alfalfa hay is common. Livestock, especially cattle, farming is an important industry.

Agricultural land use within the Port property is comprised primarily of pasture/hay and deciduous forest. The land cover of the site is depicted on Figure C-1 and summarized in Table C-1.

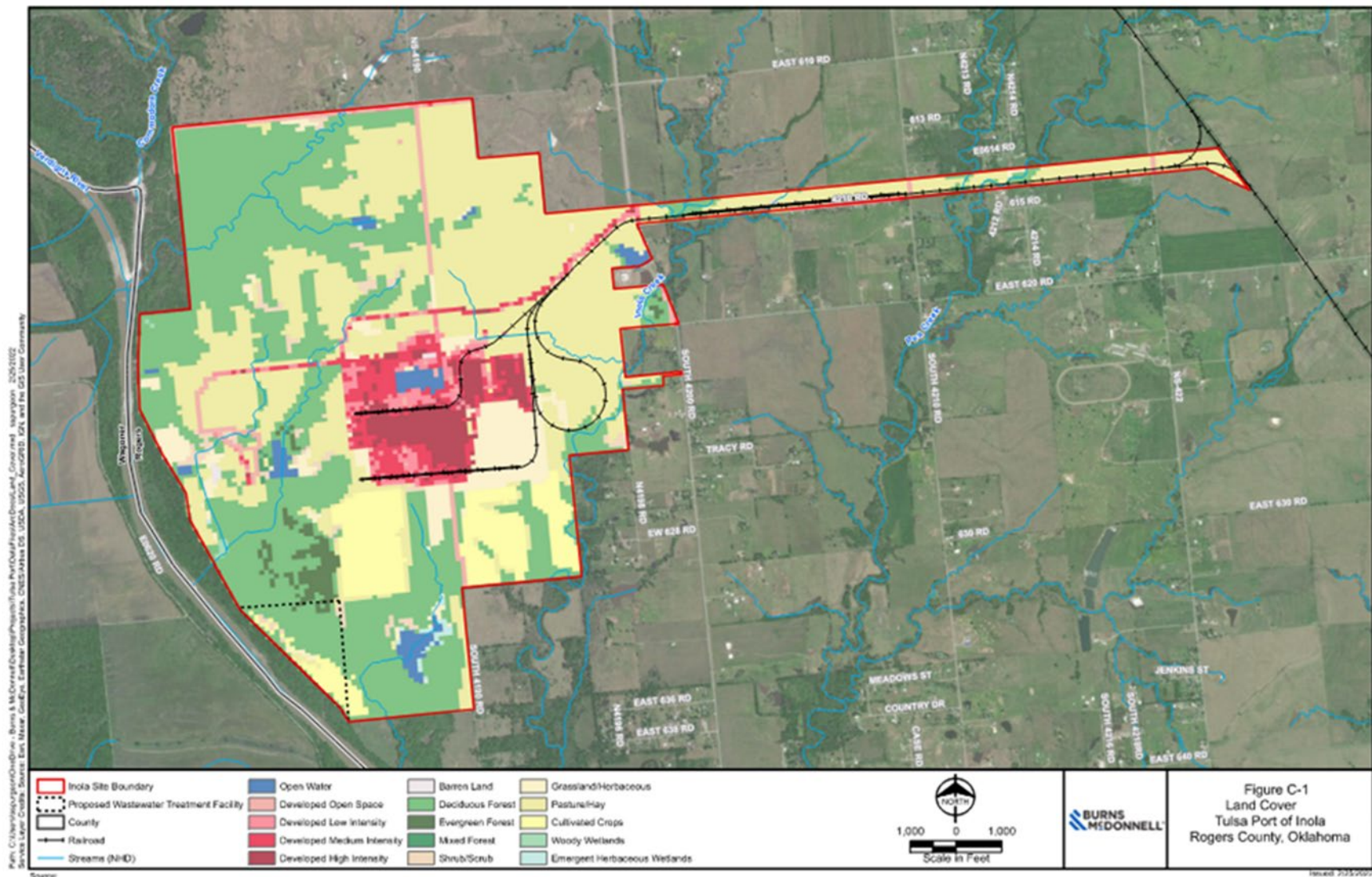


Figure C-1: Land Cover Figure

Table C-1: Land Cover of the Site

Land Use Type	Acres
Pasture/Hay	931.36
Deciduous Forest	897.55
Cultivated Crops	169.24
Grassland/Herbaceous	134.77
Developed Medium Intensity	93.85
Developed High Intensity	81.84
Developed Low Intensity	57.38
Developed Open Space	54.48
Open Water	41.14
Shrub/Scrub	35.58
Evergreen Forest	32.25
Emergent Herbaceous Wetlands	6.00
Woody Wetlands	2.89
Barren Lands	2.45
Mixed Forest	2.22

Source: USGS National Land Cover Database (2021)

Land use within the proposed project site (wastewater treatment area) is predominantly deciduous forest as summarized in Table C-2.

Table C-2: Land Cover Across the Proposed Wastewater Treatment Area

Land Cover Type	Acres
Deciduous Forest	40.92
Cultivated Crops	16.01
Pasture/Hay	2.67
Shrub/Scrub	2.22
Evergreen Forest	1.78
Grassland/Herbaceous	1.56

Source: USGS National Land Cover Database (2021)

C.2 Coastal Zones

The Port property and proposed project is in the interior of the State of Oklahoma and is not within a designated coastal zone subject to the Coastal Zone Management Act. There are no shorelines, beaches, dunes, or estuaries within or adjacent to the project area or proposed project site.

C.3 Wetlands

Within the Port property, National Wetland Inventory (NWI) data indicate the potential presence of freshwater emergent wetlands (PEM), freshwater forested/shrub wetland (PSS), freshwater pond (PUB), lake (L), and riverine (R) wetlands (Table C-3; Figure C-2; USFWS 2019). A total of 69.18 acres of NWI wetlands are mapped within the site, approximately 2.9 percent of the total acreage.

Table C-3: National Wetland Inventory Acreages within the Port Property

Wetland Type	Acreage
Freshwater Emergent	0.33
Freshwater Forested/Shrub	1.33
Freshwater Pond	49.20
Lake	0.09
Riverine	18.23
Total	69.18

The National Hydrography Dataset (NHD) also shows Inola Creek mapped within the eastern portion of the site, and the Verdigris River mapped to the west of the project area. Inola Creek appears to be a tributary to the Verdigris River. There are also several NHD mapped waterbodies within the site. The site is located within the Commodore Creek-Verdigris River (HUC110701050306) and Inola Creek (HUC110701050304) Watersheds.

Terracon wetland scientists completed a wetland delineation on October 23, 2014, for the northern part of the Port property site according to methods described in the U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (Regional Supplement; USACE 2010) (Attachment 2). The USACE issued an Approved Jurisdictional Determination (AJD), dated July 9, 2021, for these features, indicating the presence of jurisdictional wetlands. The USACE issued an announcement on January 5, 2022 that “stand-alone” AJDs issued under the Navigable Waters Protection Rule before August 30, 2021 will be re-opened when used to apply for a permit. This announcement follows a decision by the District Court of Arizona, vacating and remanding the Navigable Waters Protection Rule.

A desktop assessment of NWI data indicate the potential presence of PUB and a R wetland within the proposed wastewater treatment area (Table C-3; Figure C-2; USFWS 2019). A total of 2.74 acres of NWI wetlands are mapped within the proposed wastewater treatment area, representing roughly 4 percent of the total acreage.

Table C-4: National Wetland Inventory Acreages within the Proposed Project

Wetland Type	Acreage
Freshwater Pond	1.41
Riverine	1.33
Total	2.74

Impacts to wetlands and waters will be avoided and minimized to the extent possible. Following the determination of footprint area, additional surveys will be conducted to delineate the potential jurisdictional water features within the proposed area of disturbance. Should the project encroach on or impacts wetlands or waters, coordination with appropriate agencies will be conducted as necessary and an AJD be resubmitted to USACE for the entire site.

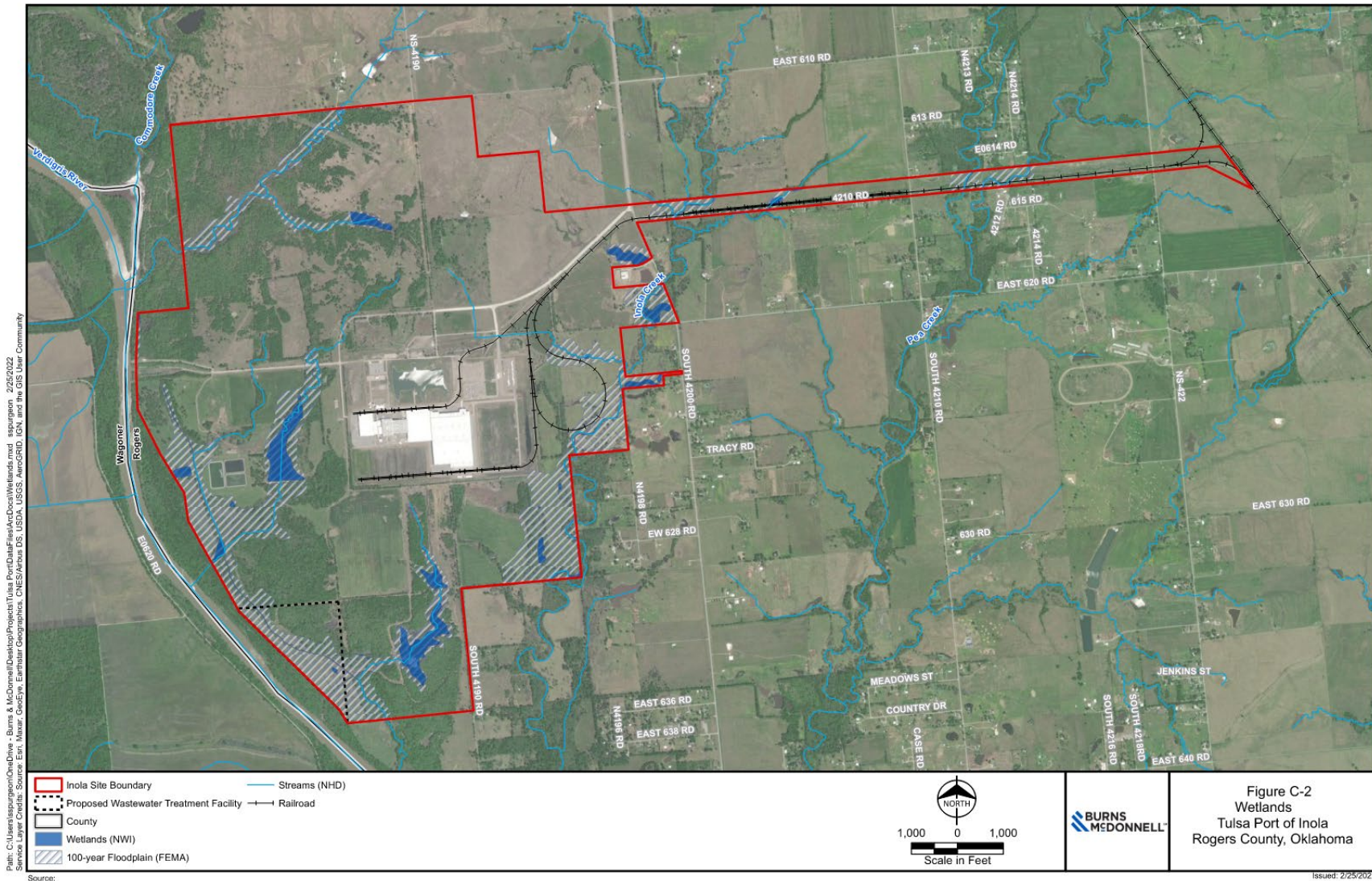


Figure C-2: Wetlands Figure

C.4 Floodplains

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Viewer indicates the presence of a Zone AE 100-Year Regulatory Floodway associated with the Verdigris River in the western portion of the site and Zone A 100-Year Regulatory Floodplain throughout the Port property (Town of Inola 400456 (40131C0430H); Wagoner County Unincorporated Area 400215 (40145C0130H)) (Attachment 3). Most of the floodplains mapped on the Port property and the proposed project site are associated with the Verdigris River and its tributaries. The current 100-Year Regulatory Zone AE and Zone A Floodplains cover approximately 461.37 acres of the Port property. Comparatively, the Zone AE Floodplain covers 38.60 acres of the proposed project area.

Changes to the floodplain elevation are not expected as part of the proposed project. Should impacts to the floodplain be required, Tulsa Ports would engage FEMA to conduct the required analyses and prepare a Conditional Letter of Map Revision (CLOMR), if needed.

C.5 Climate Change

Based on the findings of the Fourth National Climate Assessment conducted in 2018, the Southern Great Plains, including Oklahoma, will experience greater pressure on energy production, water resource, and the production and distribution of food stuffs as the climate continues to change. Oklahoma has a pronounced east-west precipitation gradient in which the Port property and proposed project site lie within a zone that experiences 50-60 inches per year, with the panhandle experiencing 10-20 inches per year for comparison. Energy production, food production, and the survival of human and natural ecosystems rely on water. To maintain water sources across the region as well as in Oklahoma, governments and communities are seeking ways to provide and fund sustainable infrastructure improvements to reduce the risk of climate change impacts. The proposed project would support continued wastewater treatment using up-to-date technologies minimizing chemical use, capitalizing on technologies to separate industrial and domestic wastewater treatment to return water to the Verdigris River at a high level of quality.

C.6 Endangered Species

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online tool was accessed on February 10, 2022, for the Port property. The IPaC is included in Attachment 4. The IPaC identified two federally endangered species, whooping crane (*Grus americana*) and Neosho mucket (*Lampsilis rafinesqueana*). The IPaC also identified the federally threatened northern long-eared bat (*Myotis septentrionalis*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), rabbitsfoot (*Quadrula cylindrica cylindrica*), and American burying beetle (*Nicrophorus americanus*).

The candidate species monarch butterfly (*Danaus plexippus*) was also returned. A separate IPaC focused on the proposed project site returned the same results, excluding the whooping crane. The species identified as possibly being present within the Port property and proposed project site are listed in Table C-5. Suitable habitat for the above-listed species may be present based on the desktop review conducted to-date.

Table C-5: Federally Threatened and Endangered Species Identified within the Port Property

Common Name	Scientific Name	Federal Listing Status	Habitat Type
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	Winter hibernacula includes caves or abandoned mines. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark and a dbh of 3 inches or greater. Tend to forage in forests or along forest edges.
Piping plover	<i>Charadrius meoldus</i>	Threatened	Open, sparsely vegetated sand or gravel beaches adjacent to alkali wetlands, and on beaches, sand bars, and dredged material islands of major river systems.
Red knot	<i>Califris canutus rufa</i>	Threatened	Marine habitats, including sandy beaches, saltmarshes, lagoons, mudflats or estuaries and bays, and mangrove swamps with invertebrate prey.
Whooping crane	<i>Grus americana</i>	Endangered	Shallow marshes and adjacent, open grasslands.
Neosho mucket	<i>Lampsilis rafinesqueana</i>	Endangered	Freshwater streams with shallow riffles or swift-moving water.
Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	Threatened	Freshwater small to medium sized streams with areas of shallow water and shoals.
American burying beetle	<i>Nicrophorus americanus</i>	Threatened	Habitat generalist with areas of carrion such as grasslands, scrublands, and forest edges.
Monarch butterfly	<i>Danaus plexippus</i>	Candidate	Gardens, prairies, and natural areas with milkweed.

Source: USFWS 2022. <https://ipac.ecosphere.fws.gov/location/index>

Review of aerial photography and a desktop review identified potential habitat for the American burying beetle (ABB) and the northern long-eared bat (NLEB). The 4(d) rule for streamlined consultation would be applicable for NLEB in this area; however, tree clearing should be avoided during the months of June and July.

A previous ABB habitat assessment was completed in 2015 for the northern portion of the Port property by Enercon Services, Inc. On September 3, 2020, the USFWS announced the final determination, downlisting the American burying beetle (ABB) from endangered to threatened under the Endangered Species Act (ESA). The USFWS also announced a final 4(d) rule for the species. The final rule was made

available in the Federal Register on October 15, 2020 and was effective on November 16, 2020. The provisions of the 4(d) rule for the Southern Plains Analysis Areas (including the Oklahoma population of the ABB) that were provided in the Federal Register include the following.

Within defined conservation lands in the Southern Plains Analysis Area of Oklahoma and Arkansas (see explanation below), incidental take is exempted if it occurs in compliance with a USFWS-approved management plan, such as an integrated natural resources management plan (INRMP), that includes conservation measures for the ABB. Outside of defined conservation lands incidental take is not prohibited because the Southern Plains Analysis Area currently has low risks to the species associated with land development. Defined conservation lands in the Southern Plains Analysis Area provide relatively large, protected areas of habitat with good populations; these lands would potentially serve as sources of ABBs for relocation and reintroduction efforts in areas that are projected to have future climate conditions that would be expected to sustain the species. The USFWS defined “conservation lands” as lands included within the existing boundaries of Fort Chaffee in Arkansas (approximately 64,000 acres), McAlester Army Ammunition Plant in Oklahoma (approximately 45,000 acres), Camp Gruber/Cherokee Wildlife Management Area in Oklahoma (approximately 64,000 acres), and The Nature Conservancy Tall Grass Prairie Preserve in Oklahoma (approximately 40,000 acres). These areas have defined boundaries and management that is compatible with recovery for the American burying beetle. Active management and monitoring in these conservation lands is considered important to help support recovery by serving as source populations for relocation and reintroduction efforts of ABB populations, for as long as they sustain beetle populations.

The project does not occur within the boundary of USFWS defined conservation lands for the ABB; thus, incidental take is not prohibited by construction or operation of the project. No ABB presence/absence surveys would be required.

The USFWS proposes listing of the monarch butterfly, currently a candidate species, in 2024. Monarchs use open grasslands, meadows, and prairie remnants, laying their eggs exclusively on milkweed plants (*Asclepias spp.*). Although habitat within the Port property and proposed project site has not been surveyed, the potential exists for suitable habitat. Monarchs also pass through the eastern portion of Oklahoma during their spring and fall migration to and from Mexico. If this species is proposed for listing prior to or during construction of the proposed project, the effects of the proposed project on monarch butterflies would need to be assessed to determine the appropriate course of action, which may include conference or consultation with USFWS. A petition for rulemaking for a Section 4(d) Rule for the monarch was filed with the USFWS in November 2020.

Desktop review of aerial photography determined no potential habitat for the piping plover, red knot, or whooping crane; therefore, no impacts are expected. It is recommended that best management practices should be implemented during construction to avoid impacts to aquatic habitats and potential habitat for the endangered Neosho mucket and rabbitsfoot mussels. If in-stream work is necessary, a freshwater mussel survey may be required to determine impacts.

The Oklahoma Natural Heritage Inventory has no record of state endangered, threatened, or candidate species within Rogers County.

C.7 Land Use and Zoning

The Port property is dominated by open space, mostly undeveloped with the northwest corner occupied by the Rocky Point Public Use Area as described in Section C.1. The only developed area on the Port property is the 200-acre Sofidel Paper Mill facility near the center of the Port property. The proposed project site in the southwest corner of the Port property is undeveloped.

The Port property was recently annexed into the Inola town limits. The site was previously zoned for Agriculture. However, per the March 13, 2017, Town of Inola Regular Board of Trustees meeting minutes, the site was rezoned for heavy industrial use (I-4). The meeting minutes and additional zoning information are included in Attachment 5.

Rogers County maintains floodplain damage prevention ordinance to minimize flood losses. The Areas of Special Flood Hazard coincide with the special flood hazard areas identified by FEMA in the Flood Insurance Study for Rogers County, Oklahoma and Incorporated Area (April 3, 2021) and the corresponding FEMA Flood Insurance Rate Maps (FIRM) adopted by reference.

C.8 Solid Waste Management

The Port property and Sofidel Paper Mill facility are within the City of Inola limit. The existing paper mill produces tissue paper for sanitary and domestic use. Solid waste from the paper mill facility may be disposed of by Waste Management or Republic Services as both provide service to the area.

The proposed project would be served by the same waste management provider as the paper mill. Industrial waste solids generated by the wastewater treatment will be transported to the landfill and domestic waste collected during the wastewater treatment will be separated for land application. Estimated quantities of solid wastes generated by the proposed project have not been determined at this time. Tulsa Ports anticipates that the volume of solid waste requiring collection and disposal at local/regional landfills will not exceed the capacity available at those facilities.

Construction of the proposed facility will generate earth spoil and construction wastes (e.g., wood, metal, concrete, etc.). Earth spoils may be stockpiled within the Port property for future development use if the soils meet construction criteria. Soils not suitable for fill materials would be disposed of in accordance with state and local ordinances and at licensed facilities.

C.9 Hazardous or Toxic Substances

A Phase 1 Environmental Site Assessment was completed by Terracon Consultants, Inc. in 2013 for the Port property (Attachment 6). At the time of the report, several minor Recognize Environmental Conditions (RECs) were identified. However, some of the RECs, if not all, may have been mitigated with the construction of Sofidel's facilities. These RECs were part of the initial stages of development of the Black Fox Nuclear Power Plant that never came to fruition and are as follows:

- A small, stained area around a used oil tote.
- A small, stained area down-gradient of a diesel above ground storage tank.
- The potential release of chemicals from treated wood in a burn pit.

Indicators of RECs were not observed within adjoining properties and the site was not flagged nor identified within the environmental regulatory database searches.

A new Phase 1 Environmental Site Assessment will be completed for the proposed project site prior to initiating development

C.10 Water Resources

The nearest surface water resource is the Verdigris River, which is located to the east of the site. The segment of the Verdigris River just north of the project site has a completed Total Maximum Daily Load (TMDL) for turbidity and bacteria. The potential discharge locations from the project would not be within the TMDL designated area of the Verdigris River. North of the project site is Commodore Creek, a tributary that flows into the Verdigris River. To the south of the project and on the opposite bank of the Verdigris River is the Adams Creek Tributary, which is included on the Oklahoma 303(d) list of impaired waterbodies for dissolved oxygen. A wasteload allocation for oxygen demanding constituents must be obtained from Oklahoma Department of Environmental Quality (ODEQ) before an application for a National Pollutant Discharge System (NDPES) permit to discharge domestic and industrial wastewaters to the Verdigris River can be submitted. Wastewater disposal may also include beneficial reuse. All wastewater disposal, discharge or beneficial reuse, will be in compliance with the Clean Water Act and State requirements.

A 401 Certification from Oklahoma State may be required for construction activities that would discharge dredged or fill materials into Waters of the United States, including wetlands.

C.11 Water Supply and Distribution System

Potable water is currently provided to the Sofidel Paper Mill facility by Mayes County Rural Water District No. 6. The rural water district indicated that 1.45 million gallons per day (MGD) can be provided through a 12-inch potable water main entering the industrial park from the northeast along East 620 Road, and waterlines to provide additional future capacity and a redundant water service to the site are under discussion. At full development, it is anticipated that the industrial park site will utilize approximately 4 MGD of water, but the mix of raw water from the river, potable water, and reuse water is unknown. All water supplied to the site will be in compliance with the Safe Drinking Water Act.

C.12 Wastewater Collection and Treatment Facilities

Currently, no wastewater collection system or treatment facilities are available to the Port property. A WLA study is currently underway to model and determine the available wasteload allocation in the Verdigris River. The WLA work plan has been approved by ODEQ, with submission of the final report anticipated in March 2022 and will precede the discharge permit request to ODEQ/Environmental Protection Agency (EPA).

Wastewater discharge rate for the industrial park is currently estimated to be 4 MGD at full development, with a potential addition of 0.5 MGD if wastewater from the Town of Inola is treated at the proposed facility. Phased design and construction are planned to allow the treatment plant to expand as the wastewater demand increases with development. A phased approach will allow for more efficient wastewater treatment and targeted to the constituents in the wastewater stream. Depending upon the wastewater characteristics and discharge rates, industrial pretreatment may be required by some developments to provide additional capacity to the treatment plant, meet the development schedule, or meet the discharge limits as outlined in the discharge permit.

C.13 Environmental Justice (Executive Order 12898)

The proposed project is not anticipated to result in disproportionate high or adverse impacts to minority and low-income populations. U.S. Census data from the American Community Survey (ACS) indicated that the median household income for project area was between \$50,000-\$63,480. The portion of the site containing the proposed project falls within the census geography with a median income of \$61,000. The percent minority of the project area is between 21.17 and 27.08 percent. The portion of the site containing the proposed project falls in the census geography with a 21.17 percent minority population. No

residences are present on the Port property, and no families would be displaced because of the proposed action.

C.14 Transportation (Streets, Traffic, and Parking)

The Port property served by county roads connecting to US Highway 412 and State Highway 88 north of Inola. The local county roads will experience increased traffic volumes during construction of the proposed facility and once the facility is operational. Future development within the property would also contribute traffic to these local roadways. As noted in Appendix 8 of the Master Plan (see Attachment 7) Rogers County and the Oklahoma Department of Transportation (ODOT) intend to support the roadway, access and connectivity needs for the proposed and future development of the Port property.

Future development of the transportation infrastructure within the park will be completed as the park is developed. This phased approach will allow additional flexibility in the placement of future developments and delay design and construction costs incurred by the Tulsa Ports.

C.15 Air Quality

A facility operations permit for air emissions may be required from the ODEQ. A formal determination has not been made at this time. Tulsa Ports will conduct modeling, if appropriate, and submit the required permit application for review and approval, if warranted.

C.16 Noise

The site is located in rural setting but is zoned for heavy industrial uses. The proposed facility is not anticipated to generate noise levels that would affect surrounding uses, especially recreational uses along the river and with the Rocky Point Public Area.

C.17 Permits

Applicable permits from local, state, and federal agencies would be obtained to construct the proposed project. The type of permit will be determined once all site due diligence and field investigations are completed, and the site layout is confirmed to determine the disturbance footprint.

Permits that may be needed for the proposed project include:

- Section 404 of the Clean Water Act for the placement of fill materials within wetlands and waters of the US. Nationwide (NWP) with pre-construction notification (PCN), or an Individual Permit (IP) may be needed depending on the magnitude of the impacts.

- Section 401 Individual Water Quality Certification as a companion authorization to a Section 404 IP.
- Floodplain Development Permit, Rogers County

C.18 Public Notification/Controversy

The Public Service Company of Oklahoma (PSO) transferred the site to the Tulsa Ports in October 2019 to develop the site into a fully operational port and attract large-scale industries to develop. The transfer of land was covered extensively by local newspapers and recorded in the Town of Inola City Council minutes.

The Tulsa Ports has worked with the Town of Inola to incorporate additional land to the industrial park and a letter of support is included in Attachment 8.

C.19 Cumulative Effects

Potential direct and indirect effects of the proposed project are described for each resource area in the sections above.

The proposed project would not result in any negative cumulative impacts that could not be mitigated. The proposed project would minimize cumulative effects by providing a central treatment facility instead of individual treatment facilities. Overall, the cumulative effects on the environment are minor.

There are no other projects in the past or the present around the project area that would result in significant cumulative effects.

D. MITIGATION

Tulsa Ports will follow the appropriate mitigation sequencing steps for all air quality, biological resources (including wetlands and Federally listed species), cultural resources, geology and soils, hazardous materials, hydrology and water quality, noise, and traffic and circulation as necessary. Impacts will be avoided and minimized to the extent possible. Following the determination of footprint area, additional surveys will be conducted.

E. LIST OF ATTACHMENTS

APPENDIX A: Applicant Certification Clause

ATTACHMENT 1: Cultural Resources Investigation of the Inola Project Site Report

ATTACHMENT 2: Preliminary Waters of the U.S. Delineation Report

ATTACHMENT 3: FEMA FIRM Panels

ATTACHMENT 4: USFWS IPaC

ATTACHMENT 5: Historical Zoning Minutes

ATTACHMENT 6: Historical Phase 1 Environmental Site Assessment

ATTACHMENT 7: Tulsa Port of Inola Desktop Due Diligence Study

ATTACHMENT 8: Town of Inola Letter of Support

APPENDIX A - APPLICANT CERTIFICATION CLAUSE

Note: Attachments can be provided by request

**ATTACHMENT 1 - CULTURAL RESOURCES INVESTIGATION OF THE INOLA
PROJECT SITE REPORT**

ATTACHMENT 2 - PRELIMINARY WATERS OF THE U.S. DELINEATION REPORT

ATTACHMENT 3 - FEMA FIRM PANELS

ATTACHMENT 4 - USFWS IPAC

ATTACHMENT 5 - HISTORICAL ZONING MINUTES

ATTACHMENT 6 - HISTORICAL PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

ATTACHMENT 7 - TULSA PORT OF INOLA DESKTOP DUE DILIGENCE STUDY

ATTACHMENT 8 - TOWN OF INOLA LETTER OF SUPPORT



CREATE AMAZING.

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com

APPENDIX B-SECTION 404 PERMIT



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

February 6, 2024

Regulatory Office

Mr. David Yarbrough, P.E.
Tulsa Ports
5350 Cimarron Road
Catoosa, OK 74015

Dear Mr. Yarbrough:

Please reference correspondence dated January 16, 2024, submitted by Burns & McDonnell, concerning a request for an Approved Jurisdictional Determination (AJD). The proposed project is located in Sections 24 and 25, Township 19 North, Range 16 East, in Rogers County, Oklahoma. The area marked in red on the enclosed maps denotes the limits of the property examined under this request. We have reviewed the submitted data relative to Section 404 of the Clean Water Act (CWA).

We have examined the property (map enclosed) and concluded that the referenced property contains the following jurisdictional wetlands and Relatively Permanent Waters (RPW):

- Jurisdictional Wetland WA4 (2.64 acre)
- Jurisdictional Wetland WA13 (0.71 acre)
- Jurisdictional Wetland WA14 (0.47 acre)
- Jurisdictional Wetland WB01 (0.25 acre)
- Jurisdictional Wetland WB02 (0.33 acre)
- Jurisdictional Wetland WB03 (0.48 acre)
- Jurisdictional (a)(5) tributary W2 (RPW) (1,222 linear feet)
- Jurisdictional (a)(5) tributary W3 (RPW) (3,331 linear feet)

The basis for this determination is that the jurisdictional wetlands exhibit a continuous surface connection via RPWs W3 and W2 to the Verdigris River, a navigable water.

We have examined the property (map enclosed) and concluded that the referenced property contains 8 non-jurisdictional aquatic resources including:

- Non-jurisdictional Ephemeral Drainage W5 (221 linear feet)
- Non-jurisdictional Ephemeral Drainage W6 (58 linear feet)
- Non-jurisdictional Ephemeral Drainage W7 (810 linear feet)
- Non-jurisdictional Ephemeral Drainage W8 (371 linear feet)
- Non-jurisdictional Wetland W9 (0.08 acre)

Non-jurisdictional Pond W10 (0.02 acre)
Non-jurisdictional Pond W11 (0.82 acre)
Non-jurisdictional Ephemeral Drainage W12 (479 linear feet)

We have concluded that these features (depicted on the enclosed map) are not jurisdictional waters of the United States. Therefore, a discharge of dredge and/or fill material within these aquatic resources is not subject to regulation pursuant to Section 404 of the CWA, and a Department of the Army (DA) permit would not be required.

This final determination constitutes an approved JD subject to the optional Corps Administrative Appeal Process. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed is a copy of the "Notification of Administrative Appeal Options and Process and Request for Appeal (RFA)" form. If you request to appeal this determination you must submit a completed RFA form to the Southwestern Division Office at the following address:

Mr. Jamie Hyslop
Administrative Appeals Review Officer,
Southwestern Division (CESWD-PD-O)
U.S. Army Corps of Engineers
1100 Commerce Street, Suite 831
Dallas, Texas 75242-1317
Phone: 469-216-8324
Email: jamie.r.hyslop@usace.army.mil

In order for a RFA form to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit a RFA form, it must be received at the above address by April 6, 2024. It is not necessary to submit a RFA form to the Division Office if you do not object to the determination in this letter.

We believe this determination to be an accurate assessment of the presence of jurisdictional wetlands and other waters on the site which are subject to Section 404 of the CWA. This is a final determination of federal jurisdiction on the property pursuant to Section 404 of the CWA. This determination is valid for 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date.

This determination has been conducted to identify the limits of the Corps CWA jurisdiction for the particular site identified in this request. This determination may not

be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Your project has been assigned Identification Number SWT-2023-00183. Please refer to this number during future correspondence. If further assistance is required, contact Mr. Brett Adams at (918) 669-7534.

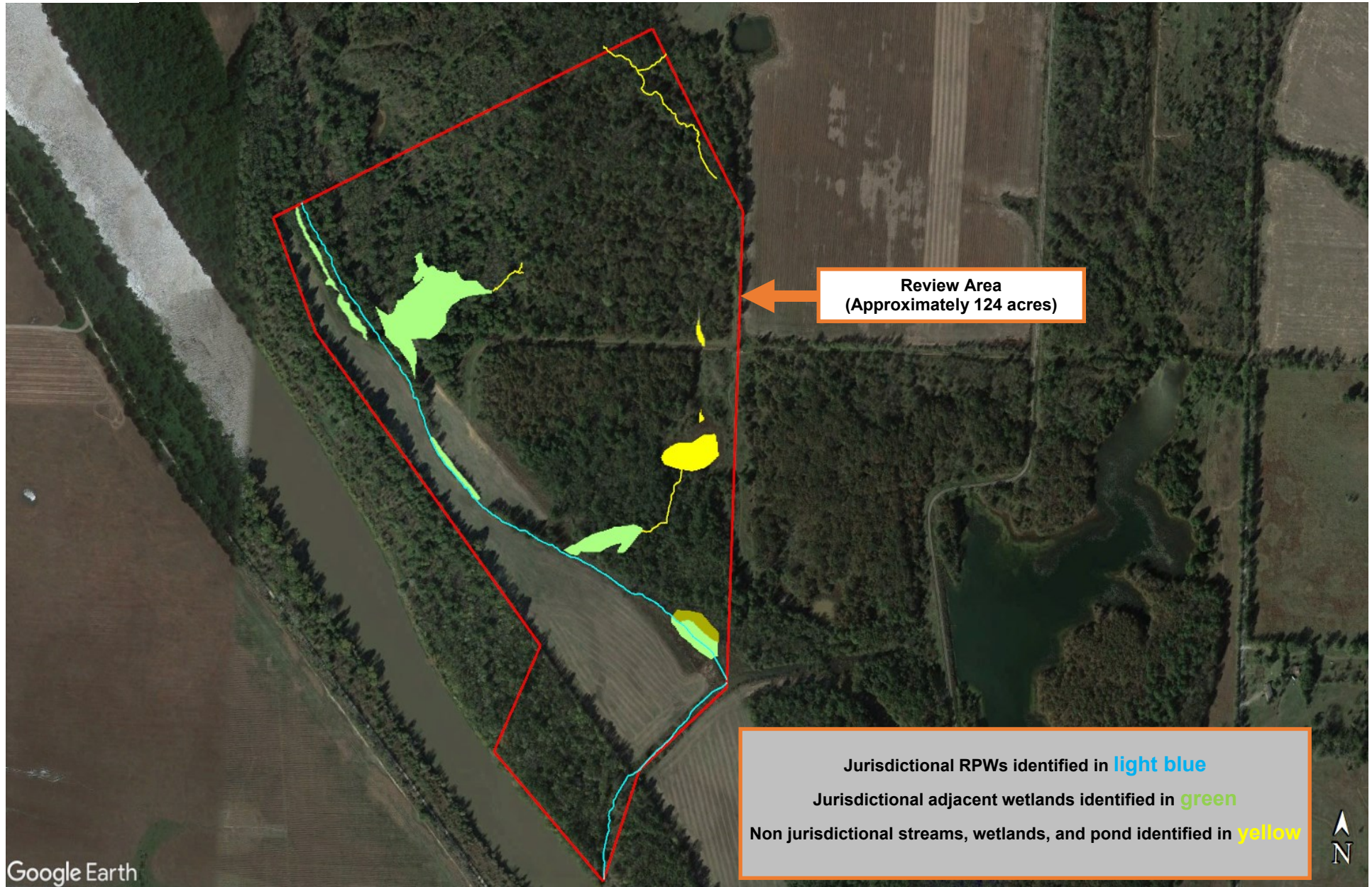
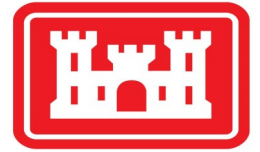
Sincerely,

Andrew R. Commer
Chief, Regulatory Office

Enclosures



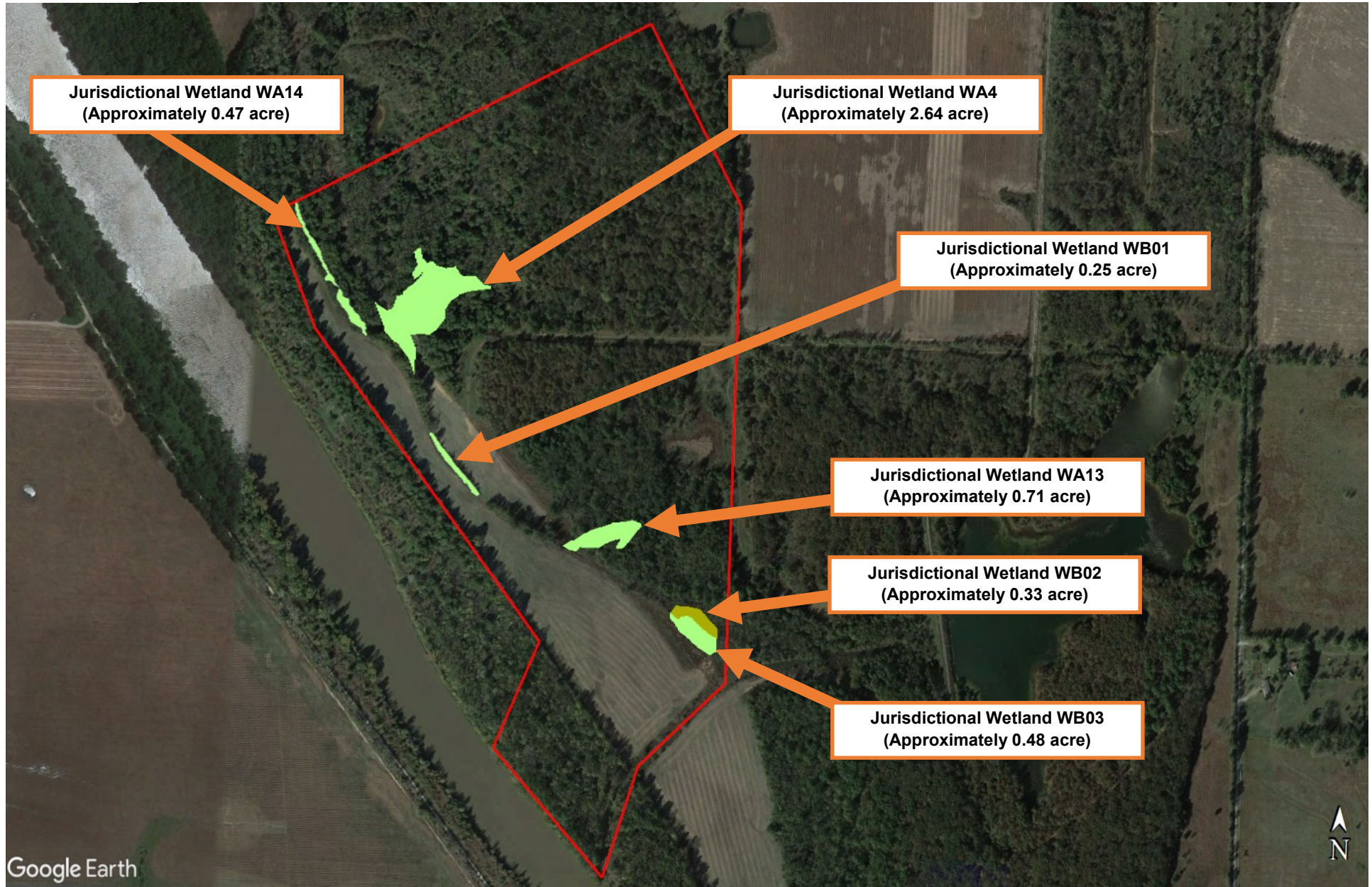
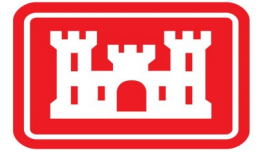
SWT-2023-00183
Approved Jurisdictional Determination



Project Coordinates: Lat/Long: 36.103885°, -95.559214°, Rogers County, Oklahoma



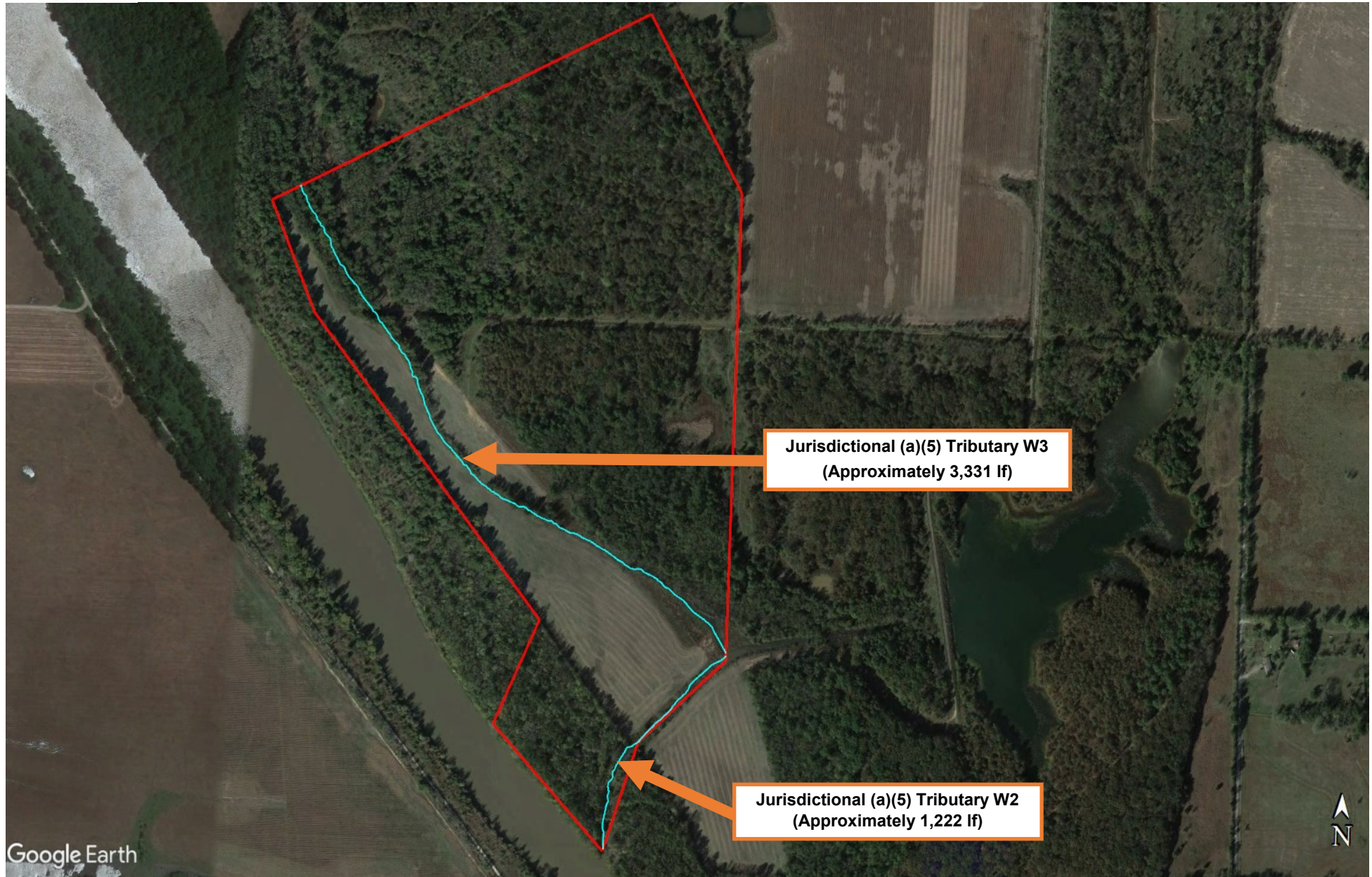
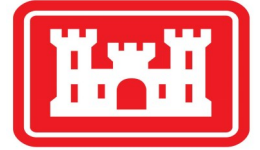
SWT-2023-00183
Approved Jurisdictional Determination



Project Coordinates: Lat/Long: 36.103885°, -95.559214°, Rogers County, Oklahoma



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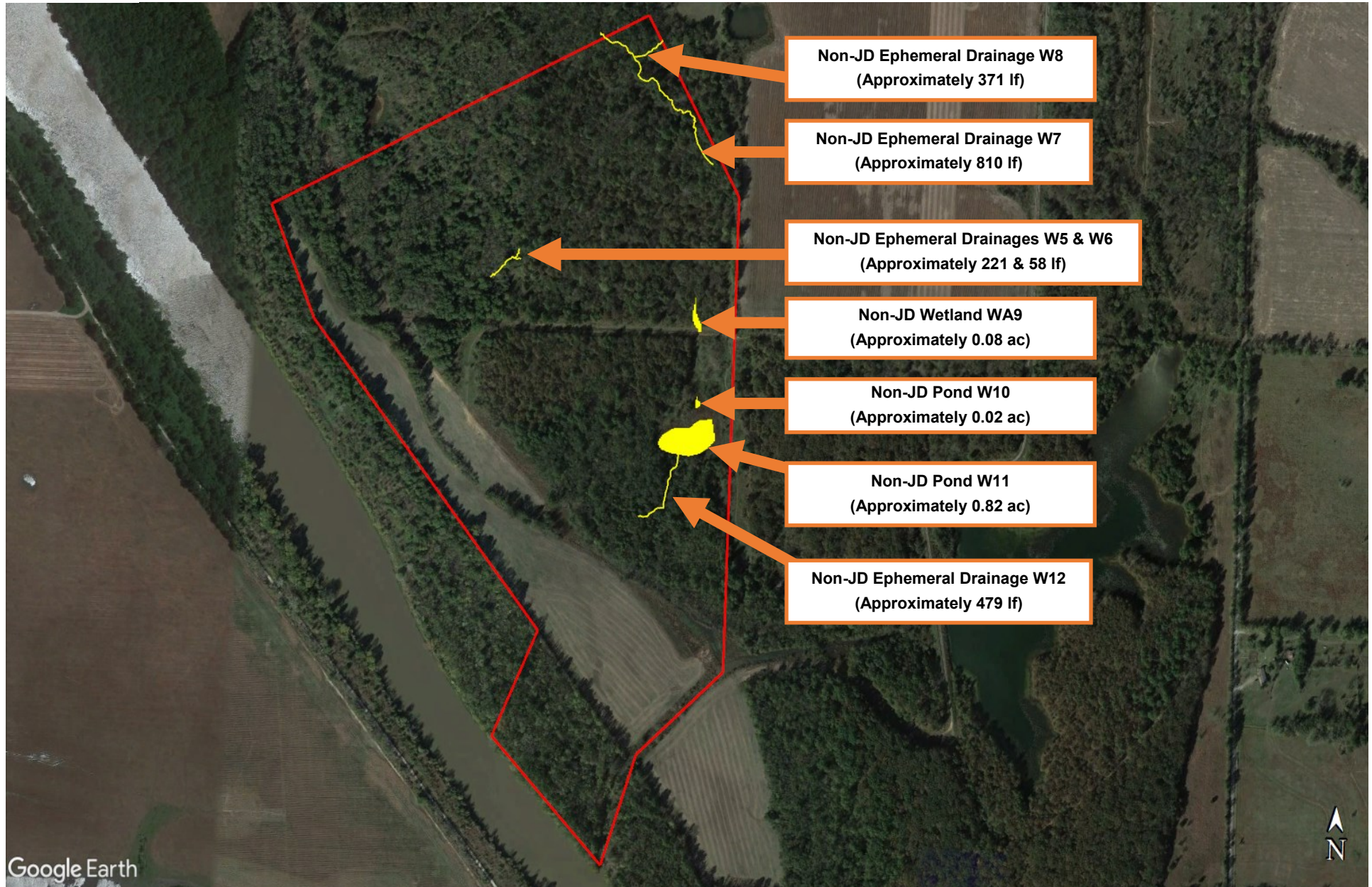
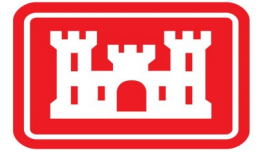


Project Coordinates: Lat/Long: 36.103885°, -95.559214°, Rogers County, Oklahoma



SWT-2023-00183

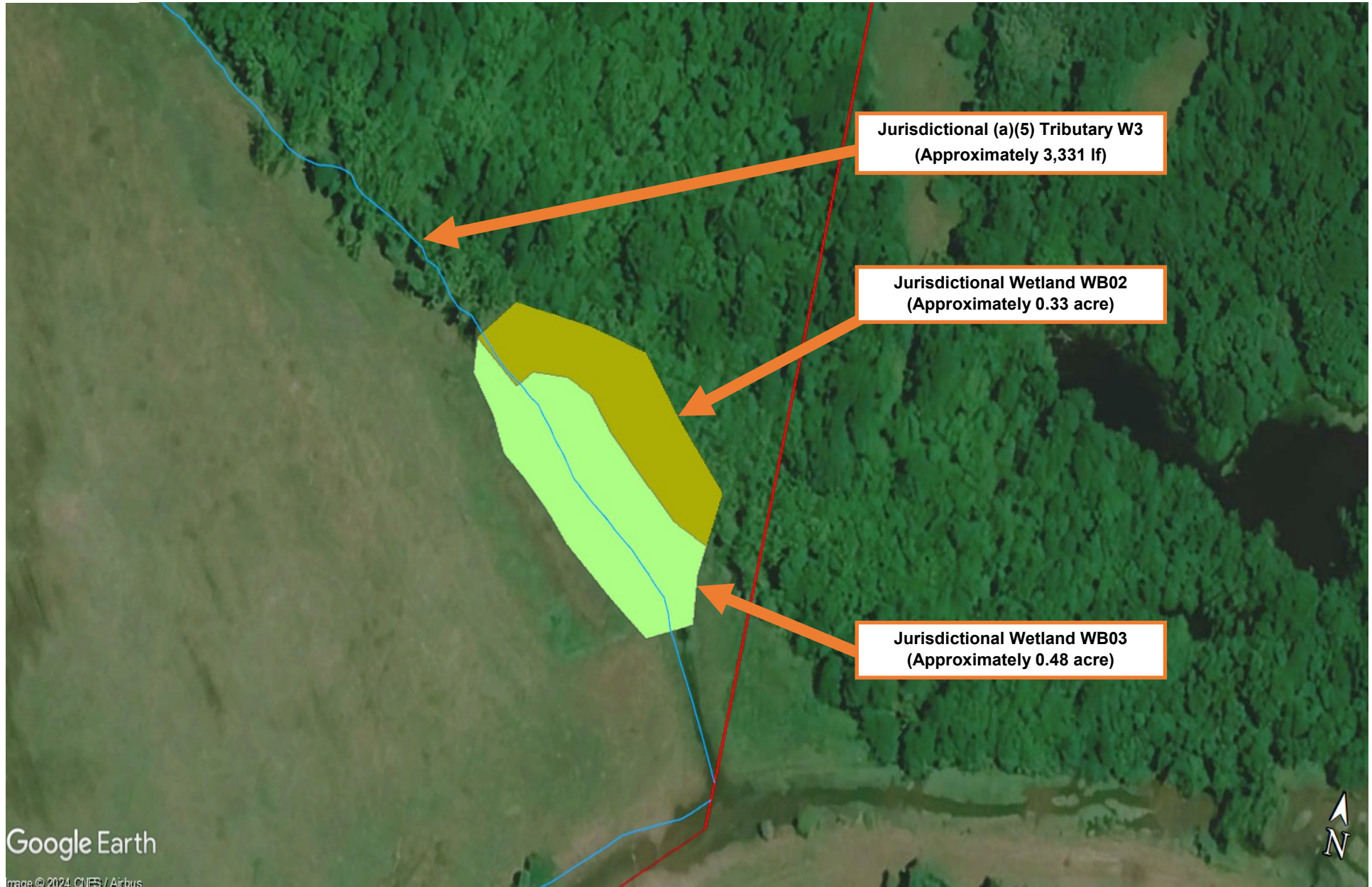
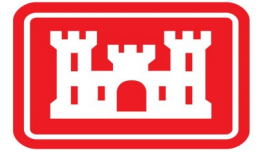
Approved Jurisdictional Determination



Project Coordinates: Lat/Long: 36.103885°, -95.559214°, Rogers County, Oklahoma



SWT-2023-00183
Approved Jurisdictional Determination



Project Coordinates: Lat/Long: 36.103885°, -95.559214°, Rogers County, Oklahoma

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Mr. David Yarbrough, P.E.		File Number: SWT-2023-00183	Date: February 6, 2024
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B	
	PERMIT DENIAL	C	
X	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at

http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved jurisdictional determination (JD) or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Mr. Andrew Commer
Chief, Regulatory Office
Tulsa District (CESWT-RO)
U.S. Army Corps of Engineers
2488 E 81st Street
Tulsa, OK 74137

If you only have questions regarding the appeal process you may also contact:

Mr. Jamie Hyslop
Administrative Appeals Review Officer,
Southwestern Division (CESWD-PD-O)
U.S. Army Corps of Engineers
1100 Commerce Street, Suite 831
Dallas, Texas 75242-1317
Phone: 469-216-8324
Email: jamie.r.hyslop@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or authorized agent.

Date:

Telephone number:

APPENDIX C-FISH AND WILDLIFE COORDINATION/CORRESPONDENCE

OBS Ref. 2023-454-BUS-BMC

Dear Randall Erwin,

October 10, 2023

We have reviewed occurrence information on federal and state threatened, endangered, or candidate species currently in the Oklahoma Natural Heritage Inventory database for the following location you provided:

Sec. 24 and 25-T19N-R16E, Rogers County

We found 1 occurrence of relevant species within the vicinity of the project location as described.

Species Name	Common Name	Federal Status
<i>Nicrophorus americanus</i>	American Burying Beetle	Threatened
County	TRS	Count
Wagoner	Sec. 15-T18N-R16E	1

Additionally, absence from our database does not preclude such species from occurring in the area.

If you have any questions about this response, please send me an email, or call us at the number given below.

Although not specific to your project, you may find the following link helpful.

ONHI, guide to ranking codes for endangered and threatened species:
<http://www.oknaturalheritage.ou.edu/content/biodiversity-info/ranking-guide/>

Kristin Comolli
Oklahoma Natural Heritage Inventory
(405) 325-4700
kcomolli@ou.edu



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Oklahoma Ecological Services Field Office
9014 East 21st Street
Tulsa, OK 74129-1428
Phone: (918) 581-7458 Fax: (918) 581-7467



In Reply Refer To:
Project Code: 2024-0073096
Project Name: Tulsa Port of Inola

04/04/2024 20:02:15 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, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the 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.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- 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:

Oklahoma Ecological Services Field Office

9014 East 21st Street

Tulsa, OK 74129-1428

(918) 581-7458

PROJECT SUMMARY

Project Code: 2024-0073096
Project Name: Tulsa Port of Inola
Project Type: Wastewater Facility - New Construction
Project Description: Tulsa Port of Inola
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.10299055,-95.55912514222754,14z>



Counties: Rogers County, Oklahoma

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 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 1 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 Fisheries¹, 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
<p>Tricolored Bat <i>Perimyotis subflavus</i></p> <p>No critical habitat has been designated for this species.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> This species only needs to be considered if the project includes wind turbine operations. <p>Species profile: https://ecos.fws.gov/ecp/species/10515</p>	Proposed Endangered

BIRDS

NAME	STATUS
<p>Piping Plover <i>Charadrius melodus</i></p> <p>Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6039</p>	Threatened
<p>Rufa Red Knot <i>Calidris canutus rufa</i></p> <p>There is proposed critical habitat for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/1864</p>	Threatened

REPTILES

NAME	STATUS
<p>Alligator Snapping Turtle <i>Macrochelys temminckii</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/4658</p>	Proposed Threatened

CLAMS

NAME	STATUS
<p>Rabbitsfoot <i>Quadrula cylindrica cylindrica</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/5165</p>	Threatened

INSECTS

NAME	STATUS
<p>American Burying Beetle <i>Nicrophorus americanus</i></p> <p>Population: Wherever found, except where listed as an experimental population</p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/66</p>	Threatened
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/9743</p>	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 Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, 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 likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

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
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 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 (■)

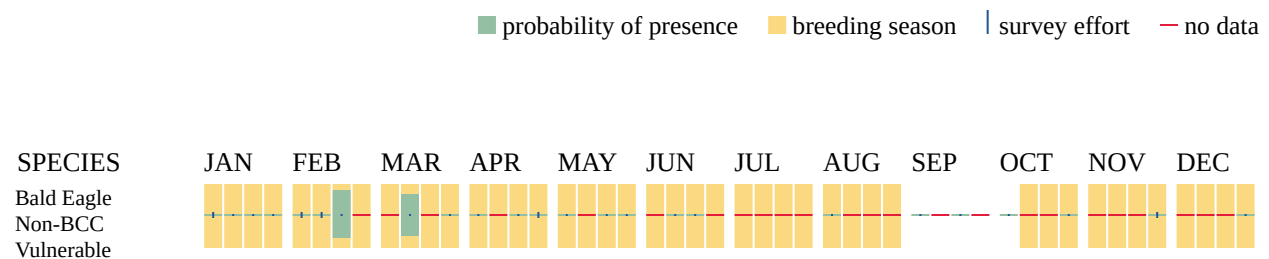
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

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-incidental-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>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ 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
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere

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 (■)

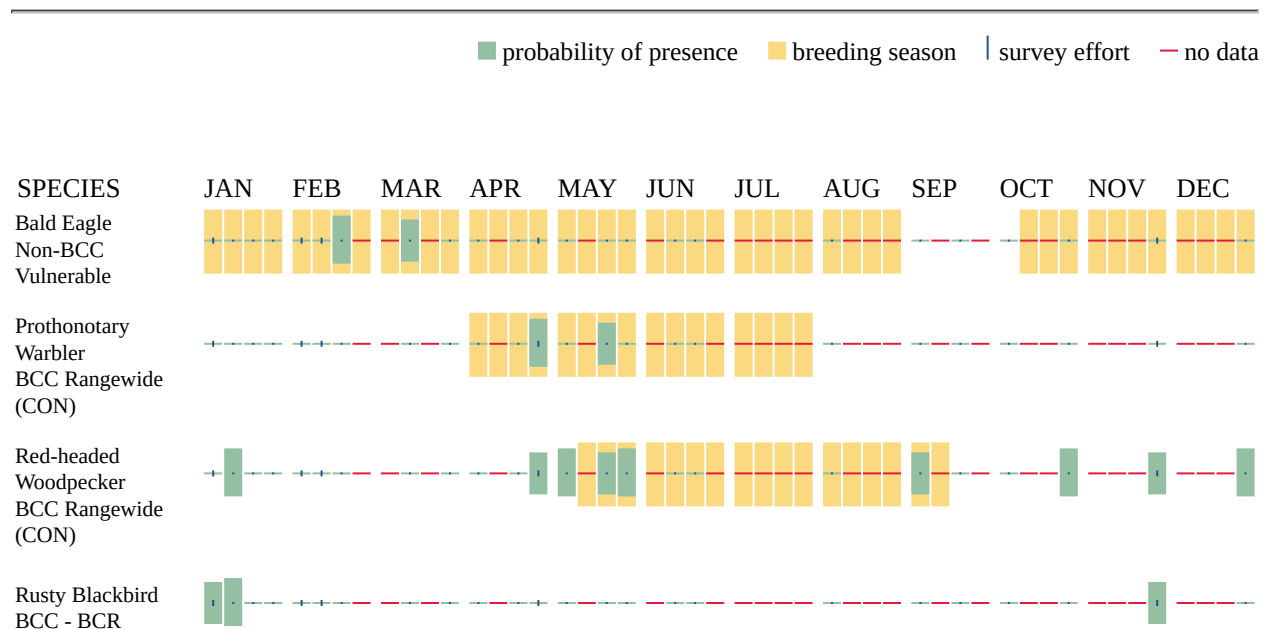
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

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>
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- 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

- PUBH
- PUBHh

LAKE

- L1UBHh

FRESHWATER EMERGENT WETLAND

- PEM1C

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency: Burns & McDonnell
Name: Jared Jorgensen
Address: 777 Main Street
Address Line 2: 2500
City: Fort Worth
State: TX
Zip: 76102
Email: jmjorgensen@burnsmcd.com
Phone: 8175700068



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Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com

APPENDIX E-PUBLIC COMMENTS

NOTE: There have been no public comments.

APPENDIX F- NEWSPAPER PUBLIC NOTICE

PUBLIC NOTICE

February 23, 2024

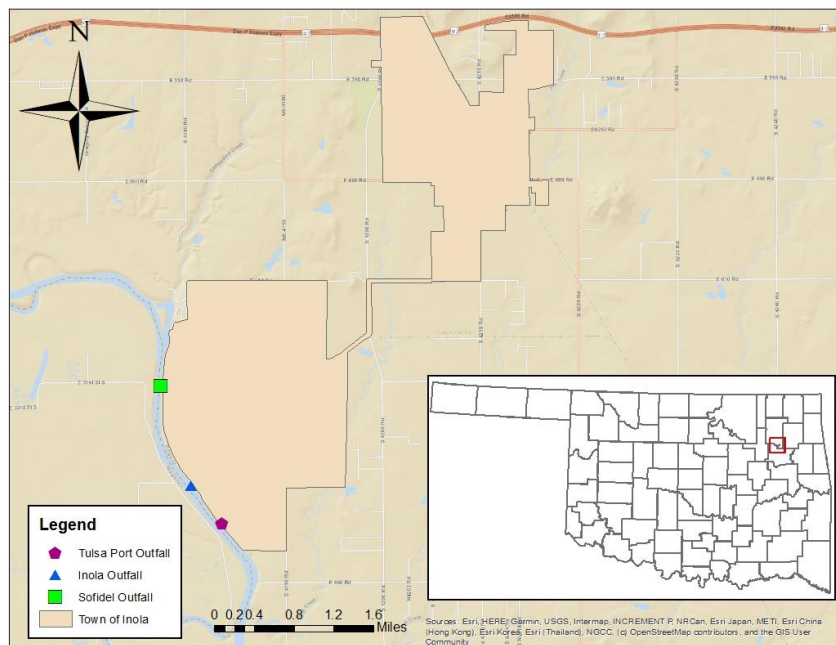
REQUEST FOR PUBLIC COMMENT ON A PROPOSED MODIFICATION TO OKLAHOMA'S WATER QUALITY MANAGEMENT PLAN FOR THE TULSA PORT OF INOLA

Public Comment Period Begins: February 23, 2024

Public Comment Period Ends: April 8, 2024

Permitee: The Town of Inola and Inola Public Works Authority, P.O. Box 249, Inola, OK 74036.
[Facility Legal Description: TBD (New Facility)]

Receiving waters and location: Newt Graham Lake (OK121500020130_00) (Latitude: 36.097717° ; Longitude: -95.558592°).



Burns & McDonnell Engineering Company, Inc. performed a Wasteload Allocation (WLA) study for the Town of Inola and the Tulsa Port of Inola Industrial Park. The proposed industrial park site includes approximately 2,400 acres of undeveloped land located southwest of the intersection of E 620 Road and S 4200 Road located adjacent to the Verdigris River, Oklahoma's corporate boundary. Based on the 20-year population projections for the Town and the Port of

Inola operating at full capacity, the final design flow from the Port of Inola would be 18.72 MGD (1.12 MGD of domestic wastewater, 6.6 MGD of industrial wastewater and 11 MGD of cooling water).

QUAL2Kw water quality model was used to calculate WLA limits during various seasons under regulatory flow condition and a 15% margin of safety (MOS) was applied to model inputs for the Port of Inola. The MOS was applied to CBOD, ammonia and organic nitrogen.

Newt Graham Lake is listed in Appendix A of the Oklahoma Water Quality Standards (OAC 282:730) and its beneficial uses are listed as Aesthetics, Agriculture, Fish and

Wildlife Propagation - Warm Water Aquatic Community (WWAC), Fish Consumption, and Primary Body Contact Recreation (PBCR).

This WLA has been developed in order to ensure that the limits assigned to the discharge are stringent enough to maintain DO standards under critical conditions. The proposed discharge limits for Tulsa Port of Inola are shown below:

Tulsa Port of Inola (New facility)

Design flow: 18.72 MGD
Receiving stream: Newt Graham Lake (WBID: OK121500020130_00)
WLA: Year round: 18 mg/L CBOD₅, 37 mg/L TSS and 2 mg/L NH₃-N

Inola (Permit number: OK0033618)

Design flow: 0.4 MGD (no discharge after transferring wastewater to Tulsa Port)
Receiving stream: Verdigris River (WBID: OK121500020120_00)
WLA: Year round: Lagoon secondary (30 mg/L BOD₅, 90 mg/L TSS)

These limitations are minimum requirements. If a Total Maximum Daily Load (TMDL) is approved for the stream, any more stringent limitations contained in the TMDL will apply. The comment period will be open for 45 days. If you have any concerns regarding these proposed limits, please submit your comments in writing by the end of the workday on **April 8, 2024**, to:

Soojung Lim
Water Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677
(405) 702-8195
E-mail: Water.Comments@deq.ok.gov

You may also request a public meeting in writing. If there is a significant degree of public interest, DEQ will schedule a public meeting. After evaluating comments received and making any necessary changes, the WLA will be submitted to the U.S. Environmental Protection Agency (EPA) for final approval.

FACILITY 208:	Tulsa Port of Inola	CITY/TOWN:	Inola
LEGAL LOCATION:	TBD	COUNTY:	Rogers
POD LOCATION:	¼SE ¼NW S25 T19N R16E	SEGMENT:	121500
POD LATITUDE:	36.097717°	POD LONGITUDE:	-95.558592°
OPDES #:	Pending	FACILITY ID #:	Pending
CURRENT TREATMENT PROCESS:	N/A		
PRESENT AVG. DAILY FLOW (MGD):	N/A		
DESIGN AVG. DAILY FLOW (MGD):	18.72		

FACILITY 208:	Tulsa Port of Inola		CITY/TOWN:	Inola
RECEIVING STREAM:	Newt Graham Lake (WBID: OK121500020130_00)		Stream Class:	Lake
7-day 2-year low flow in MGD (7Q2)	ANNUAL 7Q2	N/A	SPRING 7Q2	620.5
	SUMMER 7Q2	225.6	WINTER 7Q2	172.6
DMA:	Town of Inola & Inola Public Works Authority		DMA STATUS:	Approved
WASTELOAD ALLOCATION*:	Year round: 18 mg/L CBOD ₅ , 37 mg/L TSS and 2 mg/L NH ₃ -N			
Recommended Treatment Alternatives				
A)	Land Application			
B)				
C)				
			EPA Approval Date:	Pending
			Record Last Updated:	1/26/2024

You are receiving this notice because you are either on DEQ's list to receive all public notices about proposed Waste Load Allocations or you are located downstream in an affected watershed. If you are receiving this notice in error, are getting multiple notices, or do not want to receive future notices, please let us know. In addition to notices about new or changes in 208 Plans for facilities, DEQ's Modeling, TMDL, 208 & 303(d) Section sends out public notices about proposed changes in the Integrated Report, proposed TMDLs, 404 projects, 401 Certification requests, and proposed changes in the CPP.

If you would like to receive any or all of these public notices via e-mail, please send your e-mail address to Water.Comments@deq.ok.gov. Also, please let us know if you want to receive notices for the entire State or just for your [watershed](#). **By receiving PDF public notices via e-mail, you will help save money and the environment by reducing the amount of paper we use to mail them.** In addition to helping the environment, you will be able to click on helpful FYI hyperlinks.



Note to newspapers: This notice is for your informational purposes only. Do not publish in the legal section or as a legal notice.



CREATE AMAZING.

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Kansas City, MO 64114
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