Draft Environmental Assessment

DePue Wastewater Treatment Plant Relocation

EMC-2022-BR-012-0008

Village of DePue, Bureau County, Illinois

October 2024 – DRAFT FOR REVIEW

FEMA

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Region 5
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Table of Contents

Appendices

Figures

Tables

Acronyms and Abbreviations

APE	Area of Potential Effect
BMP	Best Management Practice
CEQ	Council on Environmental Quality
C.F.R.	Code of Federal Regulations
COC	Contaminant of Concern
CWA	Clean Water Act
DAHP	Department of Archaeology and Historic Preservation
dbh	diameter at breast height
EA	environmental assessment
EFH	Essential Fish Habitat
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
IDNR	Illinois Department of Natural Resources
IEMA	Illinois Emergency Management Agency
IEPA	Illinois Environmental Protection Agency
IGPA	Illinois Groundwater Protection Act
MBTA	Migratory Bird Treaty Act
MGD	Millions of gallons per day
mph	miles per hour

NAAQS	National Ambient Air Quality Standards
NATA	National Scale Air Toxics Assessment
NEPA	National Environmental Policy Act
NHMP	Natural Hazards Mitigation Plan
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Natural Resources Conservation Service
NWI	National Wetlands Inventory
OU	Operable Unit
PDM	Pre-Disaster Mitigation
PM	Particulate Matter
PR&G	Principles, Requirements and Guidelines for Federal Investments in Water Resources
RG	Remedial Goals
ROU	Record of Decision
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
TSS	Total Suspended Solids
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

SECTION 1. Introduction

1.1. Project Authority

The Village of DePue proposes to relocate the existing DePue Wastewater Treatment Plant (WWTP) to a location outside of the regulatory floodway in DePue, Bureau County, Illinois. The Village of DePue applied to the Federal Emergency Management Agency (FEMA) through the Illinois Emergency Management Agency (IEMA) for a grant under FEMA's Building Resilient Infrastructure and Communities (BRIC) program. IEMA is the recipient for the grant, and the Village of DePue is the subrecipient. The BRIC program is authorized under Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Title 42, United States Code (U.S.C.) § 5133 (2022).

FEMA prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321–4370h; the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 Code of Federal Regulations [C.F.R.] Parts 1500 to 1508); the U.S. Department of Homeland Security's (DHS) Directive No. 023-01; rev. 1, *Implementation of the National Environmental Policy Act* (October 31, 2014); DHS Instruction Manual No. 023-01-001-01, rev. 1, *Implementation of the National Environmental Policy Act* (November 6, 2014); FEMA Directive No. 108-01, *Environmental Planning and Historic Preservation Responsibilities and Program Requirements* (August 22, 2016); and FEMA Instruction 108-01-1, *Instruction on Implementation of the Environmental and Historic Preservation Responsibilities and Program Requirements* (August 22, 2016). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed project. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement for the proposed project or to issue a Finding of No Significant Impact (FONSI).

In addition, FEMA determined that a Principles, Requirements, and Guidelines for Federal Investments in Water Resources (PR&G) analysis would not be required for this undertaking. The PR&G applies to federal investments that by purpose, directly or indirectly, alter water resources by affecting water quality or quantity, and have at least $10 million in project costs. These water resources projects include projects involving navigation, flood control, water supply, hydropower, ecosystem restoration, or recreation. The PR&G is intended to provide a framework for federal agencies to evaluate proposed water resources projects that balances consideration of economic, social, and environmental objectives. FEMA's PR&G Agency Specific Procedures are found in the FEMA Instruction 108-1-1. FEMA determined that the purpose of the existing wastewater treatment plant would be retained in the exact same form in its new adjacent location and for those reason there would be no direct or indirect change to water quality or quantity.

1.2. Project Location

The proposed project is located on the southwest side of DePue, Bureau County, Illinois, population 1,588 (Census, 2023). The project location is on Village property. The existing wastewater treatment

plant (41.321941, -89.315207) will be demolished, and the new wastewater treatment plant will be constructed outside of the floodway on Village-owned vacant open space to the north-northeast (41.323680, -89.314577). The general location of the project activities is shown in **Figure 1-1.**

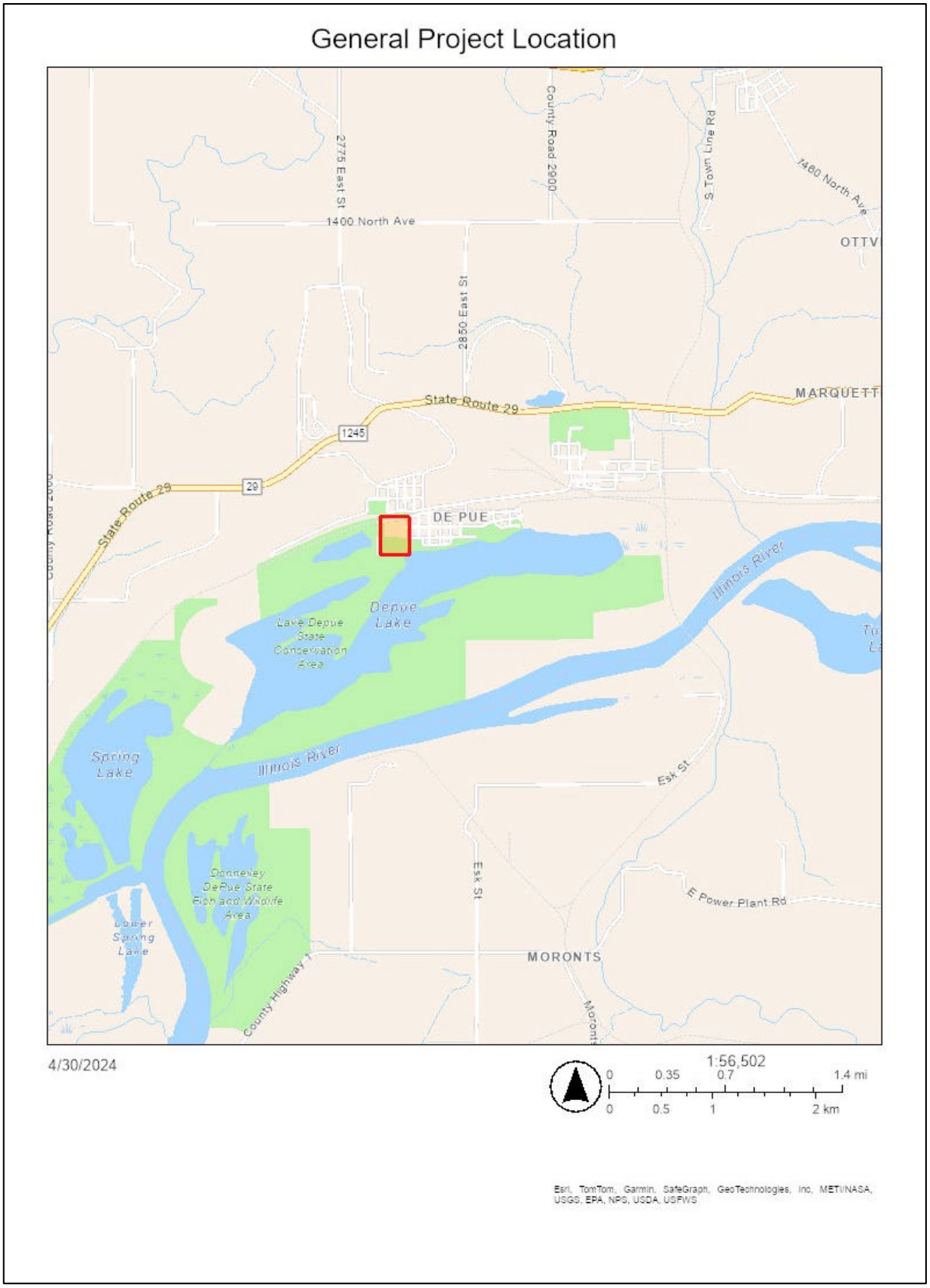

Figure 1-1. General Project Location

1.3. Purpose and Need

The objectives of FEMA's BRIC grant program are to provide technical and financial assistance to tribal, state, and local governments while categorically shifting the federal focus away from reactive disaster spending and toward research-supported, proactive investment in community resilience. Through BRIC, FEMA continues to invest in a variety of mitigation activities with an added focus on infrastructure projects benefitting disadvantaged communities, nature-based solutions, climate resilience and adaption, and adopting hazard resistant building codes.

The purpose of the proposed project is to reduce the flood risk to the Wastewater Treatment Plant (WWTP) in the Village of DePue by relocating the facility outside of the floodway.

The project is needed to ensure this critical facility is properly functioning without disruptions, as the existing WWTP is located within the floodway and is at risk of major flooding. Relocating the WWTP will ensure that the community maintains access to clean water and will help keep untreated sewer water out of floodwaters.

The risk of flooding was identified by the Village in the community risk assessment identified in the 2020 Bureau County Natural Hazards Mitigation Plan (NHMP) and previous NHMPs. By relocating the WWTP this project will greatly protect the WWTP from the floodwaters of the Illinois River and Lake DePue. After extended periods of rain in September 2008 and 2013, the Illinois River rose to record-breaking levels. The water levels at this critical facility of the Village's WWTP reached elevations of 460.36 and 461.67 feet respectively, coming within inches of topping the levee. Village staff and volunteers acted quickly to stack sandbags to prevent the plant from flooding. Their efforts were successful, but a long-term solution is needed to protect against future floods. Due to climate change, the frequency of these events is expected to increase. According to NOAA National Centers for Environmental Information's State Climate Summary for Illinois, Illinois' trend is a not only a continued increase in precipitation, but also an increase in extreme precipitation events (NOAA 2022). *See* Section 8 for references listed by author or agency and year of publication.

If the WWTP is flooded, all operations at the facility will be halted. The pumps and associated equipment would become inoperable, and the water tanks would fill with flood water. However, sewage would continue to flow to the facility via the gravity-fed sewer system. As a result, untreated sewage would have to be pumped and diverted to Lake DePue. Sewer backups throughout the Village would likely occur. The environmental and public health consequences in DePue and downstream would be significant.

SECTION 2. Alternatives

This section describes the no action alternative, the proposed action, and alternatives that were considered but dismissed.

2.1. Alternative 1 – No Action

The No Action Alternative is required to be included in this EA in accordance with the CEQ NEPA implementing regulations. The No Action Alternative is defined by CEQ as maintaining the status quo (baseline conditions) without Federal agency involvement (CEQ 1981). The No Action Alternative is used to evaluate the effects of not performing the pre-disaster mitigation activities and provides a benchmark against which other alternatives may be evaluated.

Under the No Action Alternative, there would be no Federal action, construction activities related to the relocation of the WWTP outside the floodplain would not occur, and no improvements would be made. The DePue wastewater treatment system would remain susceptible to damage and disruption during flood events. The surrounding and downstream communities would continue to face environmental health hazards from the discharge of raw sewage into floodwaters. Residents in DePue would experience delays in access to clean water. No new wastewater treatment improvements would be implemented.

2.2. Alternative 2 – Proposed Action

The Proposed Action would reduce flood risk to the wastewater treatment system by relocating the WWTP outside of the floodway. Ultimately, the proposed action would maintain Village access to clean water during flood events that would have otherwise been compromised due to damaged infrastructure. The risk of floodwater contamination would be reduced, protecting the surrounding and downstream communities from environmental health hazards associated with untreated sewage overflow and discharge into Lake DePue. Two components comprise the Proposed Action: Construction of the new WWTP and demolition of the existing WWTP. These components are discussed in more detail below and shown in Figure 2-1.

2.2.1. CONSTRUCTION OF THE NEW WASTEWATER TREATMENT PLANT

The new WWTP will be constructed outside of the area of 1-percent annual chance of flooding (formerly the 100-year floodplain), approximately 750 feet north and east of the existing wastewater treatment plant. The proposed site is within the northern section of village-owned property that is currently used as open space. The proximity to the existing WWTP allows for gravity-flow of wastewater to the facilities and the reuse of existing collection system trunk sewers. The new WWTP would be primarily located outside the floodplain in Zone X. The Raw Sewage Pump Station on the east side of the new WWTP, will be located in the 0.2 percent annual chance flood zone. All building finished floors and doorways will be constructed above the 500-year flood level.

The proposed WWTP will be constructed largely as an above-ground facility. Excavations will still be required for structural foundations and interconnecting piping. The new facility will be an "extended aeration" activated sludge treatment plant, which will make it resilient to changes in influent quantity and quality and minimizes the urgency of operator intervention in the event of significant treatment conditions such as high flows following storm events. Extended aeration plants are also known for having very low odor levels and for producing relatively small quantities of waste sludge from the process. In addition, the new WWTP will have phosphorus control capabilities to reduce total phosphorus discharges into Lake DePue. The new WWTP will meet DePue's current National Pollutant Discharge Elimination System (NPDES) discharge limits and will be a direct and complete replacement of the existing WWTP and all component parts.

Raw wastewater will arrive at the new facility via two existing 12" trunk sewers from the north and east, similar to the current layout. The existing sewers will be diverted from the existing WWTP to the new site via sewer extensions to the north via trenching approximately 6 feet wide and 6 to 8 feet in depth. The trench depth will increase to approximately 20 feet and a width of about 10 feet as the sewer approaches the pump station. The new trunk sewers will terminate at the Headworks building, which is the first treatment step at the proposed facility. Excavated soil throughout this run will be placed back in the trench and brought to grade.

The new Raw Sewage Pump Station will be constructed in the Headworks building to lift the influent into the new WWTP. Construction of the station will disturb an approximately 50- by 50-foot area and will be installed to a depth of about 25 feet. A force main will be installed in the pump station with a minimum cover depth of 4.5 feet and trench width of approximately 4 feet. Force mains are pipelines that convey wastewater under pressure from the discharge side of a pump to a discharge point. The force main will deliver wastewater from the Lift Station and raise it up to the aeration tanks in the Headworks building, allowing the rest of the process to flow by gravity. Excavated soil from trenching would be temporarily stockpiled on-site, adjacent to the trench. Pipelines would be installed at the bottom of the trench, and excavated soil would be placed back in the trench and brought to grade. The pump stations will utilize three submersible pumps at 15 HP each. In standard operation only one pump will run at a time, the other two are for high flows and redundancy. There will be three 10 HP positive displacement blowers for aeration and two 15 HP positive displacement blowers for digestion.

Once the process is complete, the treated effluent will be discharged from the new WWTP and flow south by gravity through a new 16-inch sewer connecting to the existing outfall on the south side of the existing WWTP. Installation of this sewer connection will occur via trenching at a depth of 6 to 12 feet. Excavated soils would be used to refill the created trench. Any excess soils would be used on site as fill.

A water main extension of approximately 1,700 linear feet will be included in the project to allow for adequate drinking water service to the new facility, along with providing fire protection. The main will be 6-inch diameter and be installed with a minimum cover of 4.5 feet. An emergency backup generator will be installed to ensure continued operation even during major power outages. IEPA

requires standby power to be available for emergency use. The generator installed will be capable of keeping the entire process operational for uninterrupted service.

Construction of the new plant components will require the excavation of approximately 18,000 cubic yards of soil. Excess excavated material will be repurposed on site either at the new plant or the original plant. Prior to repurposing any material, the soil must be sampled and tested. Material that meets the requirements will be reused per EPA requirements. Unusable material will be properly disposed of at an approved facility.

Minor tree removal on the east side of the open use area will be necessary to allow for WWTP staging and construction.

Temporary staging would occur within the 0.2-percent chance floodplain during construction activities. This area is currently used as open space and will be restored for public use at project completion. Applicant will require that all bid contracts include language to require mobile equipment in case of floods. This location on the Illinois River is not flash flood prone and there would be sufficient time for movement of equipment. Applicant has identified several potential temporary staging locations outside the floodplain including gravel parking areas west of the new WWTP, along 4th Street directly north of the new WWTP, and adjacent to the Village Fire Station on Railroad St. It is anticipated that construction of the new WWTP will take two construction seasons and will be completed in its entirety before demolition of the existing WWTP begins.

2.2.2. ADDITIONAL ACTIONS

This project requires scope elements not tied to the construction or demolition of the WWTP. Soil sampling and testing must be conducted at both construction sites to determine the presence or absence of contaminants of concern (COCs). Soil must meet EPA requirements prior to repurposing. In addition, restoration of the open use area used for staging will occur upon project completion. Restoration is limited in scope to grading and seeding.

2.2.3. DEMOLITION OF THE EXISTING WASTEWATER TREATMENT PLANT

The existing WWTP will be demolished once the new WWTP is completely connected and operational. Demolition will include the removal of all above grade structures, including buildings and tanks, along with below grade structures, pipes, utilities, and foundations. All foundations and pipes will be removed to a minimum depth of approximately 4 feet. Any structures or pipes below this will be abandoned in place using other clean demolition debris and other materials, such as flowable fill. Demolition materials will not have any reusability other than to use as fill within below grade structures such as basements and tanks.

The two, north-south levees adjacent to the existing plant will be leveled to the original ground surface to increase flood water storage. The existing East-West Levees would remain in place since they run parallel to the flow of Illinois River floodwater. DePue anticipates approximately 4,300CY of fill will be generated from the removal of the North-South levees and all of it will be repurposed on site to fill the trench created by the demolition of the existing WWTP. It is anticipated that no off-site

fill will be needed to augment the fill from levee removal. Use of excavated material from the new site will require soil testing prior to reuse. The vacated 2.75-acre site will be restored to riparian habitat using BMPs in accordance with guidelines provided by the Illinois Department of Natural Resources (IDNR). Demolition debris will be hauled and disposed at an accredited Clean Construction and Demolition Debris facility, in accordance with the Illinois Environmental Protection Agency's administrative regulations found in Title 30 of the Illinois Administrative Code Part 1150. It is anticipated that demolition will take one construction season including site restoration.

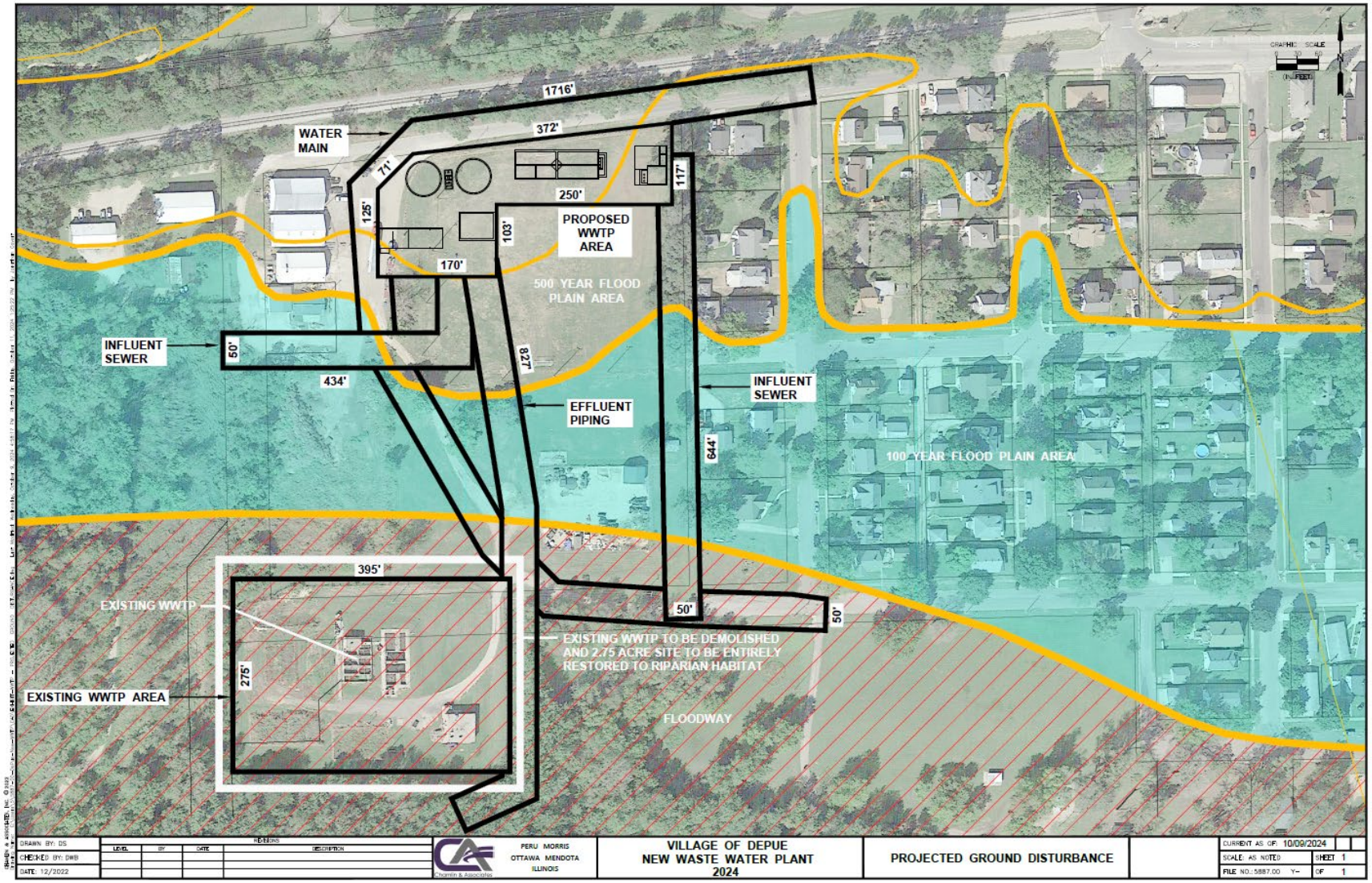

Figure 2-1. DePue WWTP Project Proposed Construction Plans Layout

2.3. Additional Action Alternatives Considered and Dismissed

Alternatives considered included raising the nearby berms, pumping wastewater to another community's WWTP, and constructing a new WWTP on a nearby privately-owned site.

Raising the existing berms may divert high flood waters however, this still leaves the WWTP in the floodway should berm failure occur or if river levels exceed berm height. Because it would provide inadequate protection for the wastewater treatment system, this alternative was dismissed from further consideration.

The nearest community which has capacity to accept the Village wastewaters is the City of Peru, which is over ten miles away. Pumping wastewater this distance is not cost-effective, feasible, or practicable, so this alternative was dismissed from further consideration.

An alternative nearby site was considered for WWTP relocation. However, the site is privately owned and would require the purchase of land. The alternative site was also located north of the railroad tracks, which would require an agreement with the railroad. Therefore, this alternative site was eliminated from further consideration due to the cost and additional complexities.

SECTION 3. Affected Environment and Potential Impacts

This section describes the environment potentially affected by the alternatives, evaluates potential environmental impacts, and recommends measures to avoid or reduce those impacts. When possible, quantitative information is provided to establish potential impacts; the significance of potential impacts is based on the criteria listed in **Table 3.1**. The study area generally includes the project area and access and staging areas needed for the alternatives. If the study area for a particular resource category is different from the project area, the differences will be described in the appropriate subsection.

Table 3.1. Evaluation Criteria for Potential Impacts

Impact Scale	Criteria
None/Negligible	The resource area would not be affected, or changes or benefits would be either nondetectable or, if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, although the changes would be small and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.
Moderate	Changes to the resource would be measurable and have either localized or regional-scale impacts/benefits. Impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary to reduce any potential adverse effects.
Major	Changes would be readily measurable and would have substantial consequences on a local or regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected.

3.1. Resources Considered and Dismissed

The following resources (**Table 3.2**) would not be affected by either the No Action Alternative or the Proposed Action because they do not exist within the project area, or the alternatives would have no effect on the resource. These resources have been removed from further consideration in this EA.

Table 3.2. Resources Eliminated from Further Consideration

Resource Topic	Reason for Elimination
Seismic Hazards	Executive Order (EO) 13717, *Establishing a Federal Earthquake Risk Management Standard,* does not apply because there is low seismic risk in the project area based on seismic hazard maps developed by the U.S. Geological Survey (USGS) (USGS 2018).
Farmland Soils	The Farmland Protection Policy Act (FPPA), 7 U.S.C. §§ 4201 *et seq.*, is not applicable because it does not consider land already in or committed to urban development as farmland (7 C.F.R. § 658.2[a]).
Coastal Barrier Resources System (CBRS)	The Coastal Barrier Resources Act, 16 U.S.C. §§ 3501–3510, is not applicable because the project is not within or near a CBRS unit (USFWS 2019).
Coastal Zone Management	The Coastal Zone Management Act (CZMA), 16 U.S.C. §§ 1451-1464, Ch. 33, is not applicable because the project area is not within a coastal zone. The only coastal zone identified in Illinois is along the shore of Lake Michigan in Lake and Cook Counties and would not be affected by this project (NOAA 2024).
Sole-Source Aquifers	There are no sole-source aquifers regulated by the Safe Drinking Water Act of 1974, 42 U.S.C. §§ 300f *et seq.*, near the project area (EPA 2024a).
Essential Fish Habitat	The Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801 *et seq.*, does not apply because there are no Habitat Areas of Particular Concern and no essential fish habitat areas identified at the project site according to the National Oceanic and Atmospheric Administration Essential Fish Habitat Mapper (NMFS 2024).
Wild and Scenic Rivers	The Wild and Scenic Rivers Act, 16 U.S.C. §§ 1271 *et seq.*, is not applicable because there are no federally designated wild and scenic rivers in the project areas based on a review of the National Wild and Scenic Rivers System (USGS 2024c)

3.2. Physical Environment

3.2.1. GEOLOGY AND SOILS

The Action Area is in Bureau County adjacent to Lake DePue, near the Illinois River. This area is in the Bloomington Ridged Plain of the Till Plains Section of the Central Lowlands Province. Over 90 percent of the State falls within the Central Lowlands Province, characterized by rolling hills, thin glacial drift, and narrow valleys. Underneath the glacial deposits in the Action Area are Shelburn-Patoka Formations that consist largely of shale, sandstone, and limestone (Illinois State Geological Survey 2005).

According to the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the Action Area consists primarily of Orthents (1 to 7 percent slopes),

Minneiska loam and Jasper silt loam (0 to 2 percent slopes). All soils are classified as well-drained or moderately well-drained (NRCS 2024).

The proposed WWTP site lies within Operable Unit (OU) 4 of the DePue/New Jersey Zinc/Mobil Chemical Corp. Superfund Site (EPA 2024). Soil samples have been collected and remediation activities have occurred at the proposed new WWTP location in accordance with the 2017 OU4 Record of Decision (ROD) (EPA 2017). See Section 3.4 of this document for more details.

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation, and no improvements would be made. There would be no direct impact to geology and soils, as current conditions would not change. Any potential hazardous soils would not be disturbed and soil values would remain the same. Implementation of the No Action Alternative would not reduce the risks and associated impacts of flooding, including soil erosion and infrastructure would continue to be at risk during flood events.

Alternative 2 – Proposed Action

Under the Proposed Action, there would be minor short-term impacts on soils during the construction period, which is expected to last up to 36 months. WWTP relocation activities at the proposed Action Area would require earthwork and grading over approximately 4.61 acres. Construction activities would have the potential to generate erosion and disturb potentially hazardous soils. Any required soil remediation would reduce the presence of COCs which would result in minor long-term beneficial impacts in the Action Area. To minimize impacts of soil disturbance, Best Management Practices (BMPs) such as erosion control blankets, inlet and pipe protection, vegetative buffer strips, temporary seeding and sediment barriers, would be implemented. The Proposed Action would comply with NPDES requirements that address both construction activities and long-term prevention of sediment and suspended solids from entering Lake DePue.

Inadvertent releases of chemicals, oils, grease, and solvents from heavy equipment into soils could occur during construction. BMPs would be implemented to minimize the potential for contaminants to be released into the soil.

Erosion and sediment control measures would be implemented in accordance with national, state, and county requirements. Specifically, construction of the Proposed Action would comply with the General Construction Permit, which is required for construction disturbance of one or more acres. In accordance with the General Construction Permit, the County would develop a SWPPP for the Proposed Action, which would require implementation of measures to reduce pollutants in stormwater discharges and prevent sediment from leaving the construction site. Example control measures include minimizing areas of exposed soil, retaining natural buffers around waters, and installing erosion controls.

Bedrock depth is well below the project site, and the geology would not be impacted by the Proposed Action.

Any adverse impacts to geology and soils associated with the construction of the WWTP would be minor short-term impacts and minimized by the implementation of the BMPs listed above. No long-term impacts to geology and soils are expected as a result of the Proposed Action.

3.2.2. WATER RESOURCES AND WATER QUALITY

Water resources include surface water, groundwater, stormwater, and drinking water (wetlands are evaluated in Section 3.3.2). Water quality is the condition of a water body as it relates to purposes such as recreation, scenic enjoyment, human health, and aquatic habitat (EPA 2024e). Water quality is regulated by both the Clean Water Act (CWA) and Illinois state statutes.

The CWA of 1977, 33 U.S.C. §§ 1251 *et seq.*, regulates the discharge of pollutants into water, with various sections falling under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and EPA or as delegated to the state. Section 303(d) of the CWA requires states to identify waters where current pollution control technologies alone cannot meet the water quality standards set for that water body. The Illinois Environmental Protection Agency (IEPA) manages the Total Daily Maximum Load List and the Inventory of Impaired Waters in accordance with Section 303(d) of the CWA.

Under Section 402 of the CWA, regulation of both point and nonpoint pollutant sources including stormwater and stormwater runoff, has been delegated to the state and is administered by the IEPA. As part of the NPDES permit, a Stormwater Pollution Protection Plan (SWPPP) is required.

Section 404 of the CWA establishes USACE permit requirements for discharge of dredged or fill materials into waters of the United States. Section 404 of the CWA is administered by IEPA. IEPA administers Section 401 of the CWA and issues water quality certifications for federally permitted activities to ensure they will not violate state water quality standards.

The Illinois Groundwater Protection Act (IGPA), 415 Ill. Comp. Stat. § 55/1, protects groundwater as a natural and public resource, with special provisions targeting drinking water wells. The IGPA applies to activities that have the potential to impact groundwater quality, such as hazardous waste handling and storage, solid waste disposal, and pesticide and fertilizer use (IEPA 1988). For these activities, the IGPA requires minimum setback zones of 200 to 400 radial feet around community water supply wells and prohibits new potential primary and secondary sources of contamination and new potential routes of contamination within these areas. Maximum setback zones of 1,000 feet may be required around community water supply wells depending on factors such as the regulated activity or the regional gradient (IEPA 1995; and IEPA 2023).

The closest water wells to the project area are approximately 1,700 feet northwest and 1,800 feet east-southeast from the project area (Illinois State Geological Survey 2024). This places the project area outside of any IGPA-required setback zones.

The project area is within the Lower Illinois-Senachwine Lake watershed with Hydrologic Unit Code 07130001 in the Upper Mississippi water resource region and lies north of the Illinois River (USGS 2024b). A sand and gravel aquifer exists 1.2 miles to the northwest but does not intersect the

project area (Illinois State Geological Survey 2024). As discussed in Section 3.1, the project area is not in or near a sole-source aquifer.

Lake DePue is a 524-acre freshwater lake that feeds into the Illinois River to the south. To the west of Lake DePue, Spring Lake is connected by hydrology and also feeds into the Illinois River. Lake DePue is the waterbody most affected by the proposed project. The existing WWTP currently discharges treated water into Lake DePue through an outfall to the southeast. Lake DePue is listed as a Section 303(d) impaired waterbody by the EPA (2024b). Impaired waters are waterbodies not fully supporting their designated uses under the Clean Water Act. An assessment performed in 2022 identified three areas of impairment at Lake DePue. The study found issues in Aesthetic Quality due to the presence of algae, phosphorus, and total suspended solids (TSS). Aquatic Life was negatively affected by algae, cadmium, dissolved oxygen, endrin, non-native fish/shellfish/zooplankton, phosphorus, sedimentation, silver, TSS, and zinc. Fish Consumption was found impaired due to the detection of aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls (PBCs), and toxaphene. No probable sources of impairment were identified for this waterbody (EPA 2024b).

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. Flood events impacting the existing WWTP would continue to cause operational and system component failure resulting in raw sewage flowing directly into Lake DePue. This would degrade water quality and aquatic habitat and could ultimately impact groundwater, a primary source for public drinking water for the residents of DePue. Implementation of the No Action Alternative would not reduce the impacts of flooding, infrastructure would continue to be at risk during flood events, and moderate long-term adverse effects would be expected.

Alternative 2 – Proposed Action

Under the Proposed Action, there would be minor short-term impacts to water quality from construction-related activities including grading and removal of vegetation. Construction activities would be temporary but could result in the release of pollutants or sediments into Lake DePue. In order to prevent pollutants from entering stormwater runoff, and thus surface waters, construction will be managed in compliance with the Illinois NPDES General Construction Permit, as discussed in Section 3.2.1. A SWPPP would be implemented prior to construction, in accordance with the General Construction Permit.

The Proposed Action would have moderate long-term beneficial impacts to water quality. The new WWTP would be placed outside of the floodway, reducing the risk of operational disruptions that would result in the discharge of untreated sewage into Lake DePue. The new WWTP will also operate as an extended aeration activated sludge treatment plant, which would minimize the volume of sludge produced. Additionally, the new facility would have phosphorus control capabilities to reduce the discharge of eutrophication causing nutrients into Lake DePue. The existing WWTP would remain

operational until the proposed WWTP is completed ensuring normal effluent discharges into Lake DePue during construction.

Under the Proposed Action, minor excavation activities would take place but would occur above the groundwater table; therefore, groundwater would not be encountered during construction activities. The project area is outside the maximum distance for any potential IGPA-required setback zones around the nearest water wells, so related IGPA requirements would not apply for the Proposed Action.

A Public Water Supply Construction Permit for the water main extension was issued by IEPA on April 2, 2024, Permit Number: 0973-FY2024. A wastewater permit issued by IDNR will also be required. The applicant will be responsible for obtaining all necessary federal, state, and local permits.

3.2.3. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988)

Executive Order (EO) 11988 requires federal agencies to take action to minimize occupancy and modification of the floodplain. Specifically, EO 11988 prohibits federal agencies from funding construction in the 1-percent annual chance flood zone (formerly the 100-year floodplain) unless there are no practicable alternatives. FEMA regulations (44 C.F.R. § 9.7) for complying with EO 11988 use the 0.2 percent annual chance flood zone (formerly the 500-year floodplain) as the minimal area for floodplain impact evaluation if the project includes a critical facility.

The Federal Flood Risk Management Standard (FFRMS) is a flood standard that aims to improve the resilience of communities and federal assets against the impacts of flooding. This rule requires projects funded by federal assistance to be built to stricter standards. Because FEMA's full implementation of FFRMS did not occur until September 9, 2024, this project was reviewed under FEMA Policy FP-206-21-0003, *Partial Implementation of the Federal Flood Risk Management Standard for Hazard Mitigation Assistance Program (Interim)* (Aug. 26, 2021). This regulation required that critical actions in the Special Flood Hazard Area meet the elevation requirements from 44 C.F.R. § 9.11 and that critical actions be built at or above the 500-year (0.2 percent annual chance) flood level.

FEMA applies the Eight-Step Decision-Making Process to ensure that it funds projects consistent with EO 11988, which requires the evaluation of alternatives to the use of a floodplain prior to funding the action (See Appendix A).

The Proposed Action is in the Illinois River floodplain, as shown on FEMA's Flood Insurance Rate Map (FIRM) panel 17011C0425C, effective August 2, 2011, see **Figure 3-1** below. The FIRM indicates that the DePue WWTP is in SFHA Zone AE and the regulatory floodway. Implementation of the Proposed Action would remove the existing WWTP site from the floodplain. The new WWTP would be primarily located outside the floodplain in Zone X. The Raw Sewage Pump Station, on the east side of the new WWTP, will be located in the 0.2 percent annual chance flood zone. In compliance with 44 C.F.R. Part 9 and the new FFRMS, all building finished floors and doorways will be constructed above the 500-year flood level.

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impacts to the floodplain, as current conditions would not change. However, the risk of flooding would continue, and moderate long-term adverse impacts could occur from potential floodwater contamination. DePue would continue current flood response activities, including employing sandbagging methods during times of flood. If a flood were to breach or overtop the existing levees, there is the potential for raw, untreated effluent to enter into local waterways and floodplains due to close proximity of the WWTP to Lake DePue. If operations at the WWTP were disrupted, sewage-contaminated floodwaters could back up into basements throughout the city, posing a public health risk.

Alternative 2 – Proposed Action

The Proposed Action would protect critical infrastructure and reduce the risk of sewage contamination being introduced into the environment and into Lake DePue. The site of the existing WWTP is covered with minimal vegetation, so excavation would not have adverse impacts on the area. Moderate long-term beneficial impacts would be expected from the removal of the existing WWTP and subsequent habitat restoration which would improve the natural and beneficial function of the floodplain. The proposed action will provide substantial risk reduction by moving the facility from the high-risk floodway to a lower risk zone above the 500 year or 0.2-percent annual chance floodplain. Temporary staging during construction activities would occur within the 0.2-percent annual chance flood zone and may result in minor short-term impacts. The Proposed Action will require that all bid contracts include language to require mobile equipment in case of floods. This location on the Illinois River is not flash flood prone and there would be sufficient time for movement of equipment.

To minimize impacts to the floodplain, BMPs would be implemented to reduce or eliminate potential soil erosion and run-off impacts. The Proposed Action would comply with NPDES requirements that address both construction activities and long-term prevention of sediment and suspended solids from entering nearby Lake DePue.

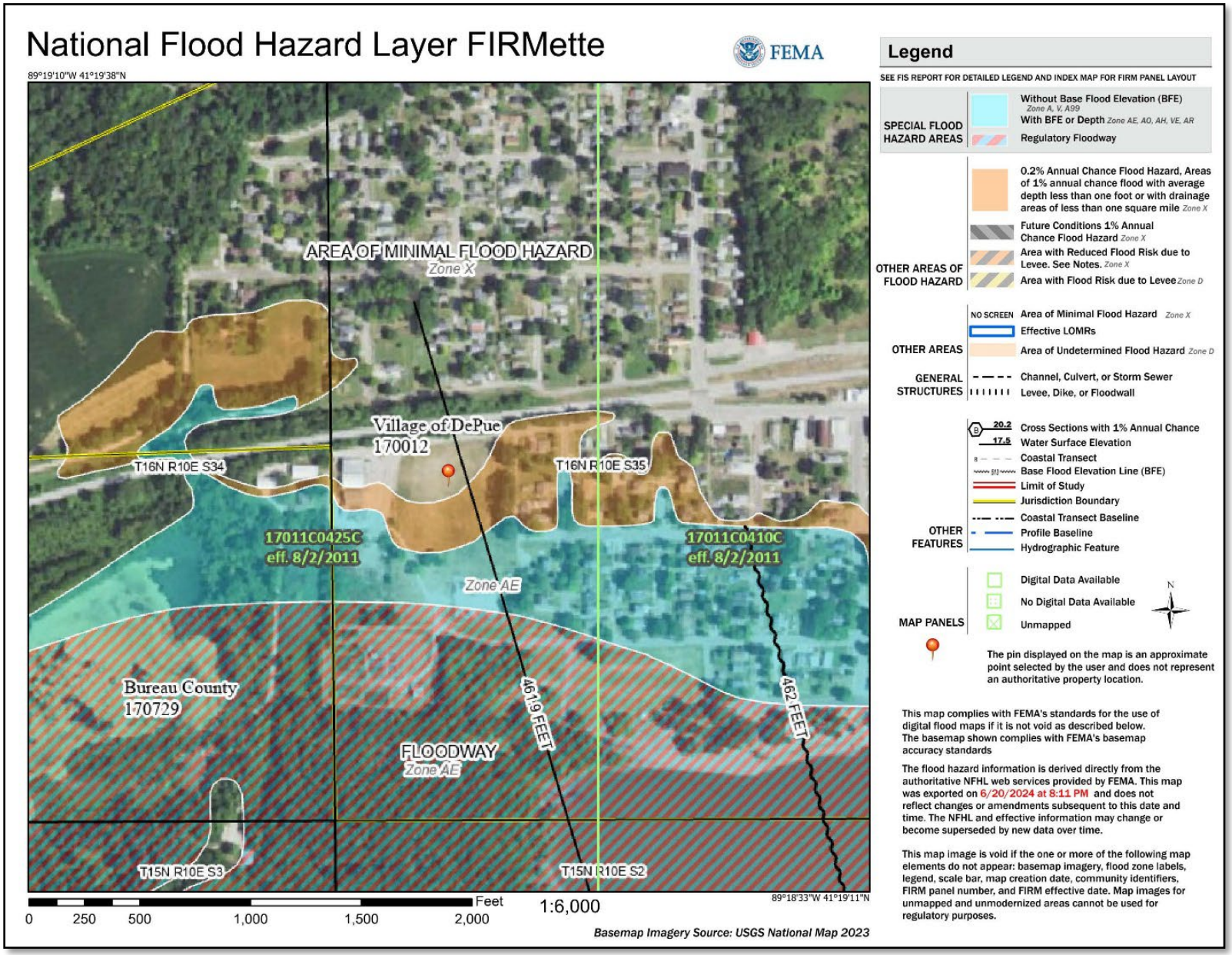

Figure 3-1. Project Area Floodplains

3.2.4. AIR QUALITY

The Clean Air Act, 42 U.S.C. §§ 7401 *et seq*., as amended, requires the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for six pollutants harmful to human and environmental health, including ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter (PM) (including PM that is less than 10 micrometers in diameter [PM10] and fine particulate matter less than 2.5 micrometers in diameter [PM2.5]) (40 C.F.R. Part 50). Fugitive dust, which is considered a component of PM, can also affect air quality. Fugitive dust is released into the air by wind or human activities, such as construction, and can have human and environmental health impacts. Federally funded actions in nonattainment and maintenance areas for these pollutants are subject to EPA conformity regulations (40 C.F.R. Parts 51 and 93) to ensure that emissions of air pollutants from planned federally funded activities would not cause any violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone. Under the general conformity regulations, a determination for federal actions is required for each criteria pollutant or precursor in nonattainment or maintenance areas where the action's direct and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the prescribed de minimis rates for that pollutant. EPA's Green Book provides detailed information about area NAAQS designations, classifications, and nonattainment statuses. According to the Green Book (updated June 4, 2024), Bureau County is in attainment for all criteria pollutants (EPA 2024).

Alternative 1 – No Action

Under the No Action Alternative, temporary construction-related emissions would not occur because the wastewater treatment plant relocation project would not be implemented. Therefore, there would be no short-term adverse impacts on air quality.

In the long term, the wastewater treatment plant would not be relocated outside of the floodplain and would remain at risk of flooding. Periodic flood events could cause the plant to flood and operations to be halted, resulting in sewer backups throughout the Village. Construction equipment would be used to repair flood damage and sewer backups and emissions from this equipment would result in negligible emissions of criteria pollutants within this attainment area. These emissions would not be expected to contribute meaningfully to regional air quality and the region would be expected to maintain attainment of the NAAQS. Therefore, there would be a negligible long-term adverse impact on air quality from emissions resulting from equipment used for flood-related repairs.

Alternative 2 – Proposed Action

Under the Proposed Action, the proposed wastewater treatment plant relocation would have minor short-term adverse impacts on air quality. During construction, on-site construction equipment and off-site construction-related hauling/delivery and worker commute vehicles would produce emissions that could increase the levels of some pollutants, including carbon monoxide, volatile organic compounds, nitrogen dioxide, ozone, and PM. On-site construction equipment would be predominantly diesel-fueled. EPA mandates the use of ultra-low sulfur diesel fuel for all highway and

nonroad diesel engines, thus, sulfur dioxide emitted from the Proposed Action's construction activities would be negligible. On-site earthmoving, excavation, demolition, grading, and other ground-disturbing activities would generate dust and would be the primary construction-related sources of PM. Off-site hauling/delivery vehicles would be predominantly diesel-fueled while worker commute vehicles would be predominantly gasoline-fueled. Gasoline engines produce relatively high levels of carbon monoxide as compared to other combustion sources. Construction of the Proposed Action would take up to 31 months, so vehicle and equipment use, as well as ground-disturbing activities, would be temporary and localized.

Applicable best management practices (BMPs) from EPA's Construction Emission Control Checklist (see Appendix B) would be implemented to mitigate air quality impacts. BMPs include, but are not limited to, the following:

- Keep vehicles and equipment idling times as short as possible.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures.
- Cover or wet areas of exposed soils to reduce fugitive dust.
- Prevent spillage of soil and excavated material and limit speeds to 15 miles per hour (mph) when hauling material and operating non-earthmoving equipment on areas of exposed soil within the project area. Limit speed of earthmoving equipment to 10 mph.

Because of the short-term nature of air quality impacts and implementation of BMPs, the potential emissions from implementation of the Proposed Action would not be expected to contribute meaningfully to regional air quality and the region would be expected to maintain attainment of the NAAQS. Therefore, construction of the Proposed Action would have negligible short-term adverse impacts on air quality. Moreover, since the project is located within an attainment area for all criteria pollutants, General Conformity would not apply, and a conformity determination would not be required.

There would be no long-term impacts on air quality from the implementation of the Proposed Action, as the new wastewater treatment plant would be expected to install air quality control devices to limit emissions such that they are comparable to or less than the emissions from the existing wastewater treatment plant.

3.2.5. CLIMATE

Climate change is defined by the EPA as any change in global or regional climate patterns due to human-caused increased levels of atmospheric greenhouse gases. Climate change exacerbates existing environmental stressors and disrupts natural, economic, and social systems through extreme temperature fluctuations and changes to weather patterns.

Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, directed federal agencies to review and address regulations that conflict with national objectives, such as reducing greenhouse gas (GHG) emissions, strengthening climate resilience, and prioritizing environmental justice (EJ) and public health. The Council on Environmental Quality published *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* on January 9, 2023. This guidance provides best practices for climate change analyses in the context of NEPA, including the consideration of GHG emissions and climate change impacts during the identification of alternatives, quantification of a proposed action's projected GHG emissions or reductions using best available data, and contextualizing GHG emissions based on their social cost, a metric which translates an individual action's GHG emissions into a dollar value representing the costs of global climate change-related damage. The social cost of GHG emissions (SC-GHG) is based on the action's contribution to total global GHG emissions and the anticipated total global damages that may be anticipated to result from climate change (88 Fed. Reg. 1196 (Jan. 9, 2023)). SC-GHG estimates represent the societal value or cost of GHG emissions changes resulting from actions that impact cumulative global emissions in a small or marginal way. EPA's Report on the SC-GHG was published in November 2023. The report provided new estimates for SC-GHG, which reflect recent advances in the scientific literature on climate change and its economic impacts and incorporate recommendations made by the National Academies of Science, Engineering, and Medicine. EPA offers three discount rate paths (1.5 percent, 2 percent, and 2.5 percent), to account for the relationship between economic growth and discounting, as well as recognizing uncertainty surrounding discount rates over long time horizons (EPA 2023a). For this analysis, the median discount rate 2 percent was assumed to avoid overestimating or underestimating the SC-GHG dollar values.

According to U.S. Climate Data, which collects data on average climate conditions in cities around the country, the temperature in Princeton, Illinois, about 5 miles northwest of the Village of DePue, ranges from an average low of 16 degrees Fahrenheit in January to an average high of 85 degrees Fahrenheit in July (U.S. Climate Data 2024). The area receives an average of approximately 40 inches of precipitation annually, which falls throughout the year, with the highest precipitation levels occurring in late spring and lowest in winter (U.S. Climate Data 2024). The area receives an average of approximately 26 inches of snowfall annually, which falls throughout winter and early spring, with the highest snowfall levels occurring in winter and no snowfall in summer and fall (U.S. Climate Data 2024).

The climate across the United States is changing, including in the Midwest. Between 1900 and 2010, temperatures increased in the region by over 1.5 degrees Fahrenheit. Temperatures are projected to continue increasing across the Midwest at an accelerating rate. In addition to increasing temperatures, climate change is intensifying storm systems and leading to greater precipitation across the region. U.S. Global Change Research Program projections indicate that precipitation will continue to increase, particularly in the winter and spring seasons (EPA 2014).

Alternative 1 – No Action

Under the No Action Alternative, temporary construction related to GHG emissions would not occur because the wastewater treatment plant relocation would not be implemented.

However, as discussed previously, climate change is anticipated to increase the frequency and intensity of precipitation events in the Midwest, resulting in higher intensity storm systems and increased frequency of flooding and storm events. Thus, while the No Action Alternative would not result in new sources of GHG emissions contributing to global climate impacts, the No Action Alternative would not effectively protect against the effects of exacerbated climate hazards on the wastewater treatment plant and its service area and would result in moderate long-term adverse climate-related impacts.

Alternative 2 – Proposed Action

Under the Proposed Action, the wastewater treatment plant relocation would have short-term construction impacts related to GHG emissions. The Proposed Action would result in temporary GHG emissions from the operation of vehicles and equipment with diesel and gasoline engines. **Table 3.3** presents a breakdown of GHG emissions, and the total social cost based on the construction equipment that would be expected to be needed during construction of the Proposed Action. Construction of the Proposed Action is expected to produce approximately 2,988 metric tons of CO_2e emissions. These GHG emissions are comparable to emissions from other common sources and are roughly equivalent to the GHGs generated by the operation of 711 gasoline-powered passenger vehicles driven for one year, or the electrical demand of 590 homes over one year (EPA 2023b). Additionally, applicable BMPs would be implemented to mitigate air quality impacts and would also serve to reduce GHG emissions from construction activities. A detailed breakdown of assumptions, GHG, and SC-GHG calculations is provided in Appendix B.

Table 3.3. Short-Term Construction Greenhouse Gas Emissions

Equipment Type	Carbon Dioxide Emissions (metric ton)	Methane Emissions (metric ton)	Nitrous Oxide Emissions (metric ton)	CO_2e[1] Emissions (metric ton)
On-road	247	<1[2]	<1	253
Off-road	2,728	<1	<1	2,736
Total[3]	**2,975**	**<1**	**<1**	**2,988**

Notes:

[1] *CO_2e is the mass of carbon dioxide emissions with the same global warming potential as one unit of mass of another GHG.*

[2] *< is less than.*

[3] *Totals may not be exact because of rounding.*

The total SC-GHG were estimated, in adjusted 2023 dollars, based on projected GHG emissions from construction. The total SC-GHG for the Proposed Action were estimated to be approximately

$719,500, as shown in **Table 3.4**. Social costs represent an estimate of the dollar value of global climate-related damage attributable to the project's incremental contribution to global GHG emissions. **Table 3.4** summarizes the SC-GHG for the on-road and off-road equipment that would be used to construct the Proposed Action.

Table 3.4. Social Cost of Greenhouse Gas Emissions Summary in 2023 Dollars of Global Climate-Related Damage

Source of GHG Emissions[1]	Social Cost of GHG in Adjusted 2023 Dollars[2]
Emissions in 2024	
CO_2	$162,683
CH_4	$38
N_2O	$787
Emissions in 2025	
CO_2	$338,114
CH_4	$56
N_2O	$1,268
Emissions in 2026	
CO_2	$215,611
CH_4	$43
N_2O	$893
Total social cost of GHG[3]	**$719,493**

Notes:

[1] *Social cost of GHG are global damage cost estimates and may not represent project-related climate damage costs or cost reductions to communities in the project area specifically. While projections are based on the best available science at the time of publication, social cost of GHG estimates may underestimate actual climate damage costs because of various climate damage categories not being considered (such as ocean acidification).*

[2] *U.S. Bureau of Labor Statistics does not have complete 2024 dollar value data currently. Values from 2023 were used as a surrogate.*

[3] *Total may not be exact because of rounding.*

The BMPs described in the Air Quality Section would be implemented to reduce emissions from equipment use. GHG-generating construction activities would be temporary and would last up to 31 months. Thus, the Proposed Action would have minor short-term adverse impacts related to GHG emissions during construction.

The Proposed Action would not be a long-term source of GHG emissions. The Proposed Action would not increase or exacerbate climate impacts on underserved communities in the project area in the

long term. Additionally, the Proposed Action would strengthen DePue's resilience to increased precipitation events due to climate change by relocating the WWTP outside of the floodplain and reducing the risk the WWTP would be flooded, and operations would be halted, impacting people in the plant's service area. Thus, the Proposed Action would result in minor long-term benefits by increasing community resilience to climate change impacts.

3.3. Biological Environment

Biological resources are native or naturalized plants and animals and their habitats. Protected and sensitive biological resources include federally listed (endangered or threatened), proposed, and candidate species designated under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531 - 1544. Critical habitat is protected under the ESA, and other State or Federal designations protect sensitive ecological areas. These habitats may include wetlands, plant communities that are unusual or of limited distribution, or important seasonal use areas for wildlife, such as bird migration routes.

3.3.1. TERRESTRIAL AND AQUATIC ENVIRONMENT

The project area is in the Illinois/Indiana Prairies ecoregion, which is characterized by glaciated, flat to rolling plains with terminal and recessional moraines, prairie potholes, and old lake beds (EPA 2006). These areas are mostly converted to cropland, however potential natural vegetation can consist of a mosaic of bluestem prairie and oak-hickory forest. In the early 19th century, mesic prairie (dominants: big bluestem, Indian grass, prairie dropseed, switch grass, and little bluestem), wet prairie (dominants: prairie cord grass, sedges, and bluejoint grass), and, on gravel moraines, kames, and loess-covered river bluffs, dry upland prairie (dominants: little bluestem and side-oats grama) were common; additionally, oak-hickory forest (dominants: black oak, white oak, and shagbark hickory) grew on dry, upper morainal slopes, and maple-oak forest (dominants: red oak, sugar maple, and American elm) were found on more mesic sites. Prairie groves contained bur oak, American elm, and hackberry, and were subjected to recurrent fires. Sycamore, silver maple, and cottonwood are native to floodplains. Bulrushes, sedges, cattails, and common reed dominated prairie potholes and marshes (EPA 2006).

The Illinois River is 332 miles long, and the Fox River at Ottawa is a major tributary (IDNR, 2011). The Illinois River is divided by locks and dams into separate navigation reaches, and riverbanks are interspersed with lakes and backwaters (IDNR, 2011). The Illinois River fishery includes recreational species such as crappie (Pomoxis spp.), bass (Morone spp.), bluegill (*Lepomis macrochirus*), catfish (Ictalurus spp.), carp (Cyprinus carpio), and bullheads (Ameiurus spp.) (IDNR, 2016a). Wildlife areas near to the Action Area are the Marseilles State Fish and Wildlife Area, LaSalle State Fish and Wildlife Area, Illini State Park, and Buffalo Rock State Park. Typical wildlife in LaSalle and Bureau Counties include bats, mice, ground and tree squirrels, Eastern cottontail (*Sylvalagus floridanus*), red fox (*Vulpes vulpes*), river otter (*Lontra canadensis*), striped skunk (*Mephitis mephitis*), and white-tailed deer (*Odocoileus virginianus*) (UIE, 2017).

DePue's WWTP consists of 20 percent impervious surfaces, with buildings and treatment facilities, and a dirt entryway. Vegetated areas are primarily landscaped lawn. Nine sludge beds are

overplanted with reeds and other wetland species to aid in stabilization and dewatering. To the north and northeast, a landscaped area separates the WWTP from storage facilities and residences. Lake DePue is to the south and west of the WWTP, separated by a forested riparian corridor.

EO 13112, *Invasive Species,* requires federal agencies to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health impacts that invasive species cause.

Federally listed plant species that may occur in the vicinity of the proposed project areas are discussed in **Section 3.3.4.**

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. Infrastructure would continue to be at risk during flood events. The terrestrial and aquatic environment could be adversely impacted during a flood event from sewage overflow at the existing WWTP. If WWTP relocation did not occur, the current location would not be restored to riparian habitat and no new native vegetation would be planted.

Alternative 2 – Proposed Action

Under the Proposed Action, there would be minor short-term adverse impacts from staging and construction activities resulting in the removal of vegetation on and around existing berms which includes mostly landscaped grasses. Mature trees and other vegetation at the site of the new WWTP site would be removed if within the construction footprint. In the long-term, there would be minor beneficial impacts on vegetation at the existing WWTP site as it would be re-seeded with native species allowing new vegetation to take hold. The area would be left open and unmaintained which would result in a net positive amount of greenspace.

3.3.2. MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA), 16 U.S.C. §§ 703–712, protects migratory birds. The Mississippi Flyway covers the entire State of Illinois and serves as a pathway for large numbers of migratory birds (Flyways, Undated).

The Bald and Golden Eagle Protection Act of 1940, 16 U.S.C. §§ 668 *et seq.*, prohibits the take, possession, sale, or other harmful action of any bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*), alive or dead, including any part, nest, or egg (16 U.S.C. § 668[a]).

The project area lies just outside of the Lake DePue State Fish and Wildlife Area managed by the IDNR (IDNR 2024a). The wildlife area, which includes Lake DePue, is a 3,015 acre Important Bird Area, and a resting and feeding stop for migratory waterfowl. It supports populations of wading birds, and the region is also used by bald eagles. (NAS, Undated)

All native birds are protected by the MBTA, and existing habitat in the project vicinity has the potential to support a variety of native bird species. Several migratory bird species could occur in the project area, including species such as the American golden-plover (*Pluvialis dominica*), black-billed cuckoo (*Coccyzus erythropthalmus*), chimney swift (*Chaetura pelagica*), eastern whip-poor-will (*Antrostomus vociferus*), lesser yellowlegs (*Tringa flavipes*), pectoral sandpiper (*Calidris melanotos*), prothonotary warbler (*Protonotaria citrea*), red-headed woodpecker (Melanerpes erythrocephalus), rusty blackbird (*Euphagus carolinus*), and wood thrush (*Hylocichla mustelina*) (USFWS 2024b). The nesting season for migratory birds is generally March through July, depending on the species.

Bald eagles (*Haliaeetus leucoephalus*) winter along the Illinois River, typically arriving in December and remaining in residence until migrating north in March (IDNR, 2017a). Bald eagles typically use large trees or in close proximity to waterbodies for nesting and roosting (USFWS 2024c). Suitable habitat for nesting and roosting bald eagles occurs immediately south southwest and southeast of the project area in the forested sections along Lake DePue, Spring Lake, and the Illinois River. However, Illinois Natural Heritage Inventory data on bald eagle nests do not record any nests within 660 feet of the proposed project area (IDNR 2024a). Given this information, it is concluded that the proposed project will have no effect on Bald eagles.

Golden eagles (*Aquila chrysaetos*) nest in large trees, or on cliff ledges, rocky outcrops, or human-made structures such as towers. Golden eagles typically avoid nesting near urban habitat and do not generally nest in densely forested habitat. They are more often found in open country in the vicinity of hills, cliffs, and bluffs (USFWS 2024c). Suitable habitat for golden eagles does not occur within or adjacent to the proposed project area. Given this information, it is concluded that the proposed project will have no effect on Golden eagles.

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impacts on migratory birds, as current conditions would not change. The existing WWTP site would continue operation and would not be converted to potential new habitat for fish and wildlife.

Alternative 2 – Proposed Action

The Proposed Action may have minor construction-related short-term adverse impacts on fish and wildlife present in the area. This can include noise, vibrations, and clearing of vegetation like trees. Migratory birds are not expected to occur in the project area. However, the project is adjacent to suitable habitat for bald eagles. The trees poised for removal stand on their own on the east side of the new WWTP site, outside of the forested areas. The trees on the property are not ideal habitat, they are shorter, not immediately along a waterway and stand close to human activity.

In the long-term, the Proposed Action could have a minor beneficial impact on fish and wildlife as the existing WWTP site will be cleared and restored to riparian habitat, creating suitable habitat for various species.

3.3.3. WETLANDS (EXECUTIVE ORDER 11990)

Wetlands are areas inundated or saturated by water that normally support vegetation requiring wet conditions such as swamps, marshes, bogs, and similar areas (40 C.F.R. § 230.3(t) (1993)). EO 11990, *Protection of Wetlands*, requires Federal agencies to take action to minimize the loss of wetlands. NEPA compliance requires Federal agencies to consider direct and indirect impacts to wetlands, which may result from federally funded actions. Activities that disturb wetlands may also require a permit from USACE under Section 404 of the CWA.

According to the National Wetlands Inventory (NWI), no mapped wetlands intersect the project area (USFWS 2024b). Forested wetlands with a NWI designation of PFO1A (Palustrine, Forested, Broad-Leaved Deciduous, Temporary Flooded) exist outside the southern half of the existing WWTP along the western side (USFWS, 2016). A wetland delineation was not conducted for this project. See mapped wetlands in the project vicinity in **Figure 3-2** below. Project location indicated in red.

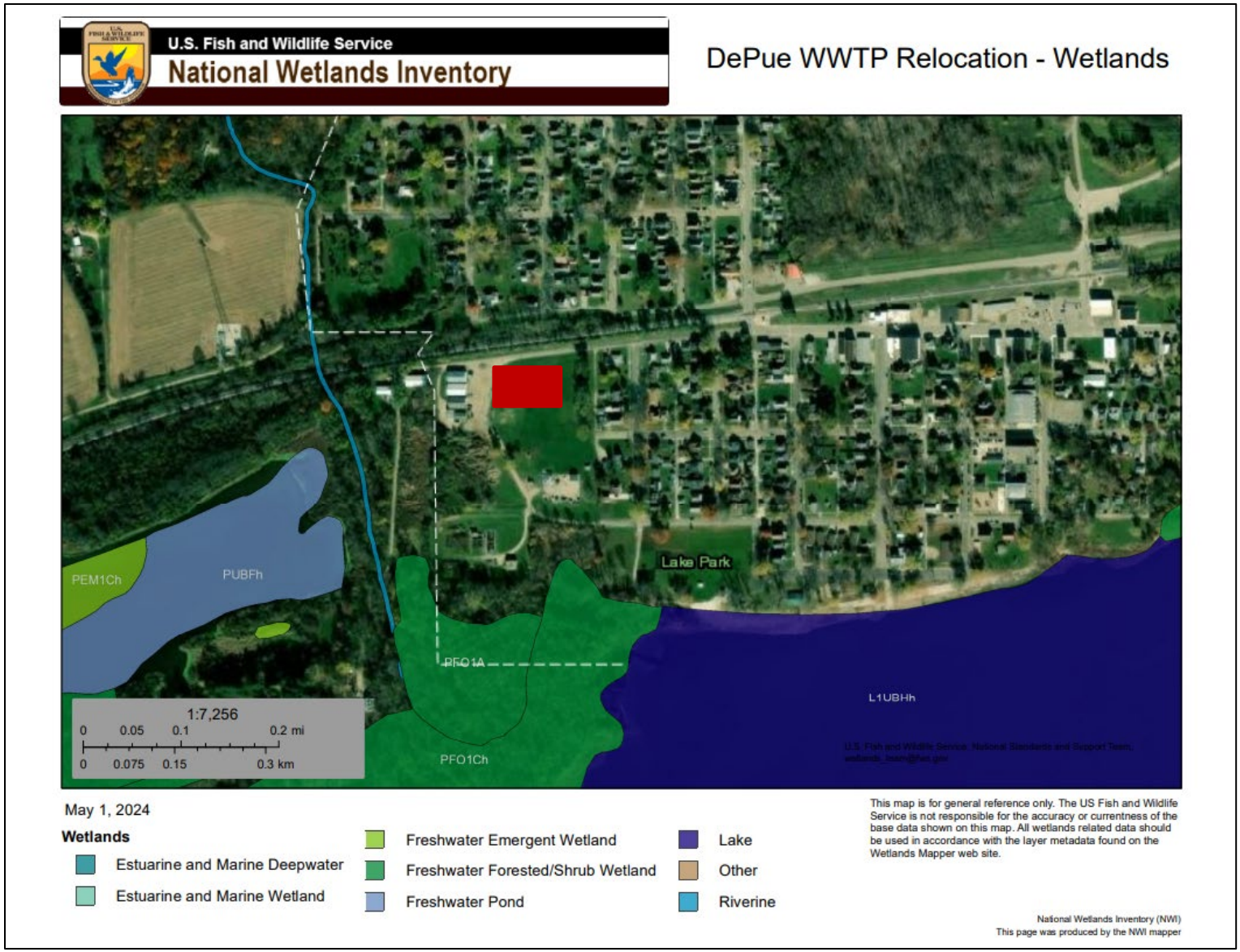

Figure 3-2. Project Area Wetlands

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would continue to be the possibility of adverse impacts on wetlands, as current conditions would not change. Flood events could continue to result in raw sewage flowing directly into wetlands, which would degrade wetland habitat and water quality. The existing WWTP site would not be restored to riparian habitat and infrastructure would continue to be at risk during flood events.

Alternative 2 – Proposed Action

Under the Proposed Action, there would be no wetland impacts at the site of the new WWTP, as there are no mapped wetlands in the project area. To minimize impacts to adjacent wetlands at the current WWTP, BMPs would be implemented to reduce or eliminate potential run-off impacts.

The Proposed Action would comply with NPDES requirements that address both construction activities and long-term prevention of sediment and suspended solids from entering Lake DePue. Therefore, any potential impacts to wetlands would be minor and short-term.

In the long term, the Proposed Action would have minor beneficial effects on wetlands as riparian habitat at the existing WWTP will be restored to its natural state.

3.3.4. THREATENED AND ENDANGERED SPECIES

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 1531 – 1544, the project area was evaluated for the potential occurrences of federally listed threatened and endangered species. The ESA requires any federal agency that funds, authorizes, or carries out an action to ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened species (including plant species) or result in the destruction or adverse modification of designated critical habitats.

In the federal regulations implementing sections 7(a) – (d) of the ESA, the term “action area” is defined as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action” (50 C.F.R. § 402.02). Therefore, the action area where effects on listed species must be evaluated may be larger than the project area where project activities would occur.

Information on the presence of threatened and endangered species was obtained from a review of the USFWS Information for Planning and Consultation (IPaC) system (USFWS 2024b) and the Illinois Natural Heritage Inventory Database (IDNR 2024a). Project information submitted to IPaC on 07/31/2024 resulted in the identification of the threatened and endangered species noted in the Official Species List and overlap of the project area within critical habitat for Indiana bat (Appendix C). Based on this review, five federally listed or proposed listed species have the potential to be present in the action area, as presented in **Table 3.5** below.

Table 3.5. Federally Listed Species and With the Potential to Occur in the Project Area

Species	Scientific Name	Federal Status
Indiana bat	Myotis sodalis	Endangered
Northern long-eared bat	Myotis septentrionalis	Endangered
Tricolored bat	Perimyotis subflavus	Proposed Endangered
Decurrent false aster	Boltonia decurrens	Threatened
Eastern prairie fringed orchid	Platanthera leucophaea	Threatened

The Indiana bat is a small, insectivorous, migratory bat that hibernates colonially in caves and mines in the winter. Indiana bats are active during summer months between April to September for breeding, roosting, and foraging. They are known to roost in wooded areas under loose tree bark and within crevices or cracks of dead or dying trees. Suitable summer habitat for these species may be defined as patches of forest of half an acre in size or greater with potential roost trees that are 5 inches in diameter at breast height (dbh) and containing cavities, loose bark, hollows, or split limbs; or single and small patches of trees of those same characteristics and within 1,000 feet of forested areas. Outside of summer months, these species hibernate in caves and mines called hibernacula, and require cool, humid caves with stable temperatures, under 50 degrees but above freezing (USFWS 2024c). Suitable habitat for the NLEB exists in the vicinity of the project as the surrounding area is generally forested with trees that are greater than 5 inches dbh. Therefore, there is potential for the Indiana bat to occur within the project area.

The Northern Long-eared Bat (NLEB) is a medium-sized bat found across the eastern and north-central United States. Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for this species include live and standing dead trees 3 inches dbh that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. NLEBs have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses. In the winter, NLEBs hibernate in caves, rock crevices and abandoned mines (USFWS 2024c). Suitable habitat for the NLEB exists in the vicinity of the project as the surrounding area is generally forested with trees that are greater than 3 inches dbh. Therefore, there is potential for the NLEB to occur within the project area.

The tricolored bat is one of the smallest bats native to North America and has a wide range across the eastern and central United States and portions of southern Canada, Mexico, and Central America. During the winter, tricolored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. They

have also been observed within artificial roosts like barns, beneath porch roofs, bridges, and concrete bunkers. During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. The listing status of this species is "proposed endangered" but may officially be listed as endangered during the construction period of the Proposed Action, so it has been included in the environmental review. Dense forested area is present in the vicinity of the project, there is potential for the tricolored bat to occur within the project area.

The decurrent false aster is a perennial plant found in moist, sandy floodplains and prairie wetlands particularly along the Illinois River, but can also occur in old fields, roadsides, mudflats, and lake shores. Although not very tolerant to prolonged flooding, this plant relies on periodic flooding to scour away other plants that compete for the same habitat. It blooms from July to October and bears seeds from August to October (USFWS 2024c). The project area is in the floodplain and near the Illinois River. Additionally, the soil types in this area are described as having occasional flooding. Therefore, there is some potential for the decurrent false aster to occur within the project area.

The eastern prairie fringed orchid (EPFO) occurs throughout the Great Lakes region and northern Maine in a variety of wet or mesic prairie habitats and wetland communities including sedge meadows, fens, and marsh edges. Suitable habitat typically consists of grass- or sedge-dominated areas with a high proportion of native species (USFWS 2024c). The project area is currently mowed and maintained and does not contain wetland or prairie habitats. The surrounding area is largely forested. Therefore, the eastern prairie fringed orchid is not expected to occur within or adjacent to the project area.

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impact to threatened and endangered species, as current conditions would not change.

Alternative 2 – Proposed Action

The greatest potential disturbances associated with the Proposed Action include noise and vibrations from heavy equipment, minor tree removal on the east side of the new WWTP site, and general movement of construction vehicles.

FEMA made the following determinations for threatened and endangered species:

- The Proposed Action will have no effect on the Northern Long-Eared Bat. Minor tree removal would occur, but would not take place directly within any large, forested areas and would not be suitable habitat for roosting. In addition, the project area is not within any buffer zone of northern long-eared bat occurrences in available Natural Heritage Inventory data (IDNR 2024a).

- The Proposed Action will have no effect on the Indiana bat. Minor tree removal would occur, but would not take place directly within any large, forested areas and would not be suitable habitat for roosting. In addition, the project area is not within any buffer zone of Indiana bat occurrences in available Natural Heritage Inventory data (IDNR 2024a).

- The Proposed Action will have no effect on the tricolored bat. Minor tree removal would occur, but would not take place directly within any large, forested areas and would not be suitable habitat for roosting. As a note, there is no other occurrence data available for the tricolored bat.

- The Proposed Action will have no effect on the decurrent false aster. This project area is currently actively mowed and maintained and is not within any buffer zone of decurrent false aster occurrences in available Natural Heritage Inventory data (IDNR 2024a). Additionally, the project area is outside of mapped wetlands and would not be suitable habitat. The demolition of the existing WWTP may have a beneficial effect on the decurrent false aster by increasing habitat availability.

- The Proposed Action will have no effect on the eastern prairie fringed orchid as project activities are occurring in an area that is actively mowed and maintained.

Implementation of the Proposed Action is anticipated to have no impact on listed species or critical habitat as they are absent from the affected areas. Based on the proposed action and in accordance with Section 7 of the Endangered Species Act (ESA) and its implementing regulations, 50 C.F.R. Part 402, FEMA made a no effect determination for the impacts of the Proposed Action and documented its determination in a memo (Appendix C).

USFWS concurrence with no effect determinations is not needed, however, FEMA contacted the USFWS Illinois-Iowa Ecological Services Field Office on June 27, 2024, and received concurrence that the impacts of the proposed project would be no effect via phone conference.

3.4. Hazardous Materials

Hazardous materials and wastes are regulated under several federal laws, including the EPA's regulations concerning Hazardous Waste Management System, 40 C.F.R. Part 260; the RCRA of 1976; the Solid Waste Act; the Toxic Substances Control Act; the CERCLA as amended by the Superfund Amendments and Reauthorization Act; and the Clean Air Act of 1970. The RCRA, 42 U.S.C. §§ 6901 *et seq.,* administered by EPA, manages the generation, transportation, treatment, storage, and disposal of hazardous wastes. The Hazardous and Solid Waste Amendments of 1984, Pub. L. 98-616 (Nov. 8, 1984), 98 Stat. 3221, amended the RCRA and provided additional requirements for the disposal of hazardous waste. CERCLA, 42 U.S.C. §§ 9601 *et seq.,* also known as the Superfund Act, provides funds to remediate abandoned or uncontrolled hazardous waste sites, also known as Superfund sites. CERCLA also grants EPA with the authority to hold responsible parties accountable for hazardous waste releases at closed or abandoned waste sites. Further, Occupational Safety and Health Administration standards under the Occupational Safety and Health

Act, 29 U.S.C. §§ 651 – 678, seek to minimize adverse impacts on worker health and safety (29 C.F.R. Part 1926).

Evaluating hazardous substances and wastes includes consideration of whether any hazardous material would be generated by the proposed activity and/or already exists at or in the general vicinity of the site (40 C.F.R. § 312.10).

IEPA implements portions of the RCRA. Illinois state regulations pertaining to management of hazardous wastes are included in Title 35 Ill. Admin. Code, Parts 700-739. These regulations include standards for hazardous waste generators and require permits for the treatment, transportation, storage, and disposal of hazardous waste within the state.

The proposed project is located within an active Superfund site. The DePue/New Jersey Zinc/Mobil Chemical Corp. Superfund Site is a 950-acre area that had at one time contained a zinc smelting facility and a phosphate fertilizer plant. The site is contaminated with elevated levels of metals that includes arsenic, cadmium, lead, and manganese. These chemicals are known as contaminants of concern (COC) and elevated levels can cause environmental and human health issues. EPA often divides large, complex sites like the DePue/New Jersey Zinc/Mobil Chemical Corp. site into smaller sections, called Operable Units (OU). The DePue WWTP is located in the South Subarea of OU4, Off-Site Soils (EPA 2024b). OU4 includes soils from residential, commercial and public areas of the Village of DePue. Soil samples were collected from OU4 up to 18 inches below ground surface and tested for contaminants. COCs were detected above remedial goals in Area 7 and Area 9 of OU4. See Figure 3-3 below. Remediation work was conducted in accordance with the *2017 OU4 Record of Decision* (ROD) and included the removal of contaminated soil to a depth of 12 inches below ground surface, backfill with clean off-site soil, and restoration of the property to its existing conditions. Contaminated areas found in the project location were remediated to standards set forth in the 2017 OU4 ROD and per EPA guidance the parcels require no further clean-up at this time.

Alternative 1 – No Action

Under the No Action alternative, there would be no Federal action and construction activities related to WWTP relocation would not occur. There would be no short-term impacts from hazardous materials, as current conditions would not change. No improvements would be made which may result in minor long-term adverse impacts from flooding that could lead to the dispersal of hazardous materials.

Alternative 2 – Proposed Action

The EPA has requested that the Village of DePue provide the project's Draft Construction Workplan, Health and Safety Plan and any other relevant workplans for comment. The Village of DePue will provide this to the EPA prior to beginning work. Soil removed from the site during the construction of the WWTP would be sampled and tested for hazardous materials. The Village of DePue will hire experts to analyze data from the site. If hazardous materials are discovered during construction, appropriate measures would be taken to identify, remove, and dispose of these materials offsite at a

licensed Subtitle C or Subtitle D Landfill. Implementation of the Proposed Action is anticipated to have minor short-term adverse impacts from the potential removal of hazardous material should it be discovered during construction activities. Minor long-term benefits would result from reduced risk of flooding and dispersal of hazardous materials.

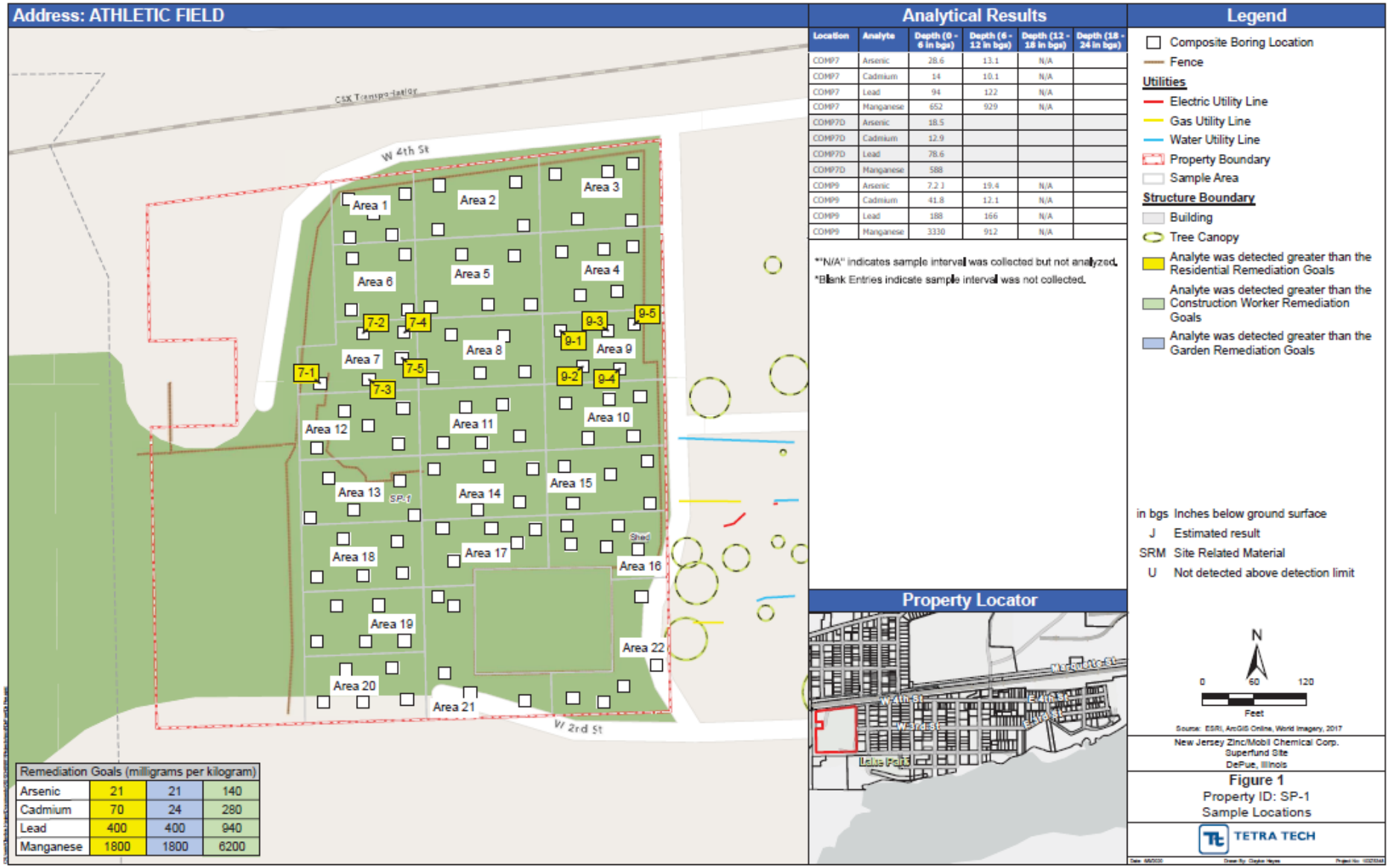

Figure 3-3. EPA Soil Samples OU4

3.5. Socioeconomics

3.5.1. LAND USE AND ZONING

The project area is located in DePue, Illinois in Bureau County and consists of a mixture of developed open space and developed low and medium intensity land cover (EPA 2024b). The location of the proposed WWTP is owned by the Village of DePue and is primarily used as open space This area is subject to the *Zoning Ordinance For Bureau County, Illinois* (Bureau County 2023). The existing WWTP is currently zoned as Public Land (Wenzlaff, 2017). The proposed land use is consistent with the existing adjacent land use (NCICG, 2020).

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impact on land use or zoning, as current conditions would not change. Infrastructure would continue to be at risk during flood events.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would occur on previously developed land and land currently designated as open space. The north end of the Action Area would be permanently converted for operation of the new WWTP however, area to the south would remain as open space. The site of the existing WWTP would be restored to open riparian habitat. Implementation of the Proposed Action is anticipated to have negligible impacts to land use and zoning.

3.5.2. NOISE

Noise is traditionally defined as unwanted sound and is measured in decibels (dB). Audible sounds range from 0 dB (threshold of hearing) to about 140 dB (threshold of pain) (OSHA, 2016). For example, conversational speech is measured at about 55 to 60 A-weighted dB, whereas a band playing loud music may be as high as 120 A-weighted dB. Noise is federally regulated by the Noise Control Act (NCA), 42 U.S.C. § 4901 *et seq.* (1972) and is administered by the EPA. Although the NCA gives the EPA authority to prepare guidelines for acceptable ambient noise levels, it only charges those Federal agencies that operate noise-producing facilities or equipment to implement noise standards. The EPA's guidelines state that outdoor sound level in excess of 55 dB are "normally unacceptable" for noise-sensitive land uses such as residences, schools, and hospitals.

The IEPA regulates noise as described in the Illinois Environmental Protection Act, 415 Ill. Comp. Stat. § 5 (IEPA, 2014). The IEPA regulations for noise, 35 Ill. Admin. Code§§ 901 and 902, establish maximum noise limits for vehicles and other sources (IPCB, 2013).

Typical noise surrounding the Action Area is produced from industrial facilities, roads, rail lines, and residential activities that generate intermittent noise and vibrations of varying intensity. Sensitive

receptors of noise in the project area include residences to the east, open use areas, and potential wildlife in the surrounding area.

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impact resulting from noise, as current conditions would not change.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would occur over a period of up to 36 months and would result in a minor short-term increase in noise levels in the Action Area. To minimize noise impacts, construction would be restricted to normal business hours to the maximum extent possible. Heavy equipment, machinery, and vehicles used at each project site would meet all Federal, State, and local noise requirements. Any adverse impacts to noise associated with the construction of the floodwalls would be short-term and minimized by the measures described above. Once the facility is online, all machinery will be located inside the building, eliminating any operational noise. No long-term impacts to noise are expected as a result of the Proposed Action.

3.5.3. PUBLIC SERVICES AND UTILITIES

The project area is within the southwestern corner of the Village of DePue in Bureau County, Illinois. The public service providers in DePue include the DePue Police Department, DePue Fire Company 1, and DePue Unit School District #103. Utility providers in DePue include Ameren Illinois, Frontier Communications, and Comcast. Additionally, the Village of DePue operates a water treatment system and WWTP (Village of DePue, 2017b).

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to the WWTP relocation would not occur, and no improvements would be made. Infrastructure would continue to be at risk during flood events resulting in minor to moderate long-term impacts from flood-related damages and service disruptions. As the WWTP uses a gravity-fed system, untreated sewage may have to be pumped into Lake DePue (Village of DePue, 2016).

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would not result in adverse modifications or loss of public services and utilities as the existing plant will not be decommissioned until the new WWTP is fully operational. Therefore, no short-term impacts are anticipated with the implementation of the Proposed Action.

Relocation of the existing WWTP would reduce the likelihood and intensity of damages to public services and utilities caused by flooding. Therefore, the Proposed Action is anticipated to have moderate long-term beneficial impacts on public services and utilities in the Action Area.

3.5.4. TRAFFIC AND CIRCULATION

The existing WWTP is on the northwest shore of Lake DePue, adjacent to the Illinois River, just off West 2nd Street, and less than half a mile west of downtown DePue. The north end of the project area is bordered by 4th street with no outlet to the west that connects to other municipal roads or highways. On the south end, 2nd street splits into an unnamed utility road in the center of the project area and leads either south to the existing WWTP or north to 4th Street. The public is not expected to regularly use these roads.

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impact on traffic and circulation, as current conditions would not change.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities could result in a temporary increase in traffic volume and vehicle movement on streets near the Action Area. To minimize traffic and circulation impacts, construction would be restricted to normal business hours to the maximum extent possible. Appropriate signage would be posted to notify the public of the construction activities and any potential road closures and detours. Placement and maintenance of traffic control devices would be in accordance with the State of Illinois "Standard Specifications for Road and Bridge Construction" (2016) and the "Illinois Manual of Uniform Traffic Control Devices" (2021). Any short-term adverse impacts to traffic and circulation associated with the construction of the floodwalls would be minor and minimized by the measures described above. No long-term impacts to traffic and circulation are expected as a result of the Proposed Action.

3.5.5. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER 12898)

Executive Order 14096 *Revitalizing Our Nation's Commitment to Environmental Justice for All* defines Environmental Justice (EJ) as the "just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other federal activities that affect human health and the environment." 88 Fed. Reg. 25251, 25253 (Apr. 26, 2023). EO 14096 builds upon EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, which requires agencies to identify and address any disproportionately high and adverse human health or environmental effects its activities may have on minority or low-income populations. The EPA's Environmental Justice Screening Tool (EJ Screen), which was used to complete this analysis, defines people of color as all people other than non-Hispanic white-alone individuals and low-income persons as those whose household income is less than or equal to twice the national poverty threshold (EPA 2024d).

EJ Screen also presents 13 EJ Indexes that provide a measure of how environmental factors may be affecting EJ populations in an area.

In accordance with the FEMA's guidance entitled *EO 12898 Environmental Justice: Interim Guidance for FEMA EHP Reviewers*, environmental justice populations are defined by demographic indicators using the following criteria:

- The population of people of color and/or low-income in the study area equals or exceeds the 50th percentile compared to the state average.
- One or more of the 13 EJ Indexes for the study area equals or exceeds the 80th percentile compared to the state average.

The affected environment reviewed for this analysis includes locations where project-related impacts would likely occur. The study area includes the project location and access and staging areas within a 0.3-mile radius. For the purposes of this analysis, EJ populations are identified using demographic indicators and EJ Indexes.

Table 3.6 presents the EJ demographic indicators and EJ Index values within the affected environment.

Table 3.6. Environmental Justice Demographic Indicators

EJ Demographic Indicator	Percentile in State
Minority	**75**
Low-Income	**68**

Note: Values in bold meet or exceed the criteria for identifying EJ populations.
Source: EPA (2024d)

Table 3.7 presents the EJ index indicators and EJ Index values within the affected environment. Appendix D provides the complete EJ Screen report.

Table 3.7. Environmental Justice Indexes

EJ Index	Percentile in State
PM-2.5	30
Ozone	32
Diesel Particulate Matter	14
Air Toxics Cancer Risk	0
Air Toxics Respiratory Risk	0
Toxic Releases to Air	23

Traffic Proximity	3
Lead Paint	**81**
Superfund Proximity	**99**
Risk Management Plan Facility Proximity	31
Hazardous Waste Proximity	11
Underground Storage Tanks	15
Wastewater Discharge	45

Note: Values in bold meet or exceed the criteria for identifying EJ populations.
Source: EPA (2024d)

As shown in **Table 3.6 and Table 3.7**, the study area meets the criteria for containing environmental justice populations based on thresholds for minority populations, low-income populations, lead paint, and Superfund proximity.

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to the relocation of the WWTP would not occur, and no improvements would be made. There would be no direct impact on socioeconomic conditions, as current conditions would not change. However, the No Action Alternative would leave the community's infrastructure at risk during flood events and low-income/minority residents could be disproportionately and adversely affected from the disruption of critical services and discharge of untreated sewage. Therefore, minor to moderate long-term adverse impacts on EJ populations may occur.

Alternative 2 – Proposed Action

Under the Proposed Action, temporary minor adverse impacts from construction noise and air quality may impact those close to the work location, including low-income and minority residents. However, implementation of BMPs discussed in Section 3.2.4 and Section 3.5.2 would minimize air quality and noise impacts during construction. The new facility will be an "extended aeration" treatment plant, which are known for having very low odor levels. Once the facility is online, all machinery will be located inside the building, eliminating any operational noise. This project is not expected to have a disproportionately high and adverse effect on minority and low-income populations but would instead result in beneficial effects from reduced risk of compromised infrastructure during flood events. Therefore, the Proposed Action is anticipated to have a long-term beneficial impact on socioeconomic conditions in the Action Area.

3.5.6. SAFETY AND SECURITY

Safety and security issues considered in the EA include the health and safety of nearby residents and the protection of construction personnel. Flooding events pose safety risks to nearby residents who are affected by inadequate flood protection and associated infrastructure failures.

To minimize risks to safety and occupational health, all construction activities would be performed using BMPs and qualified personnel trained in the proper use of the appropriate equipment including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner in accordance with Occupational Safety and Health Act (OSHA) 29 U.S.C. § 651 *et seq.*, and OSHA regulations.

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to the relocation of the WWTP would not occur, and no improvements would be made. There would be no direct impact on safety and security from construction activities, as current conditions would not change. However, flood events impacting nearby residents and central infrastructure would continue to negatively impact public health resulting in moderate long-term adverse impacts.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would result in negligible short-term safety hazards from the use of heavy equipment and machinery. All construction activities would be performed using BMPs and qualified personnel trained in the proper use of the appropriate equipment including all appropriate safety precautions. Additionally, construction activities would be conducted in a safe manner in accordance with OSHA regulations.

Vehicles and equipment will be staged on-site in the open space adjacent to the new facility. Construction activities will not block any public roads or access to facilities. Both police and fire stations are within 1 mile of the project site and will have clear access to the project location if needed. Residents will have full, uninterrupted access to their neighborhoods. Appropriate signage would be posted to notify the public of the construction activities and security gates and fencing would be installed to prevent unauthorized entry and ensure public safety. The security fencing will be locked and secured when workers are not present. A privacy fence will be installed on all sides of the property to allow for visual privacy for residential areas as well as security for unauthorized entry. The Proposed Action would also result in minor long-term benefits from reducing the risk of flooding that would threaten life and property.

3.6. Historic and Cultural Resources

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, 54 U.S.C. §§ 300101–307108, requires that federal agencies consider the potential effects on cultural resources of actions it proposes. Cultural resources are defined as prehistoric or historic archaeology sites, historic standing structures, historic districts, objects, artifacts, cultural properties of historic or traditional significance—referred to as Traditional Cultural Properties—that may have religious or cultural significance to federally recognized Indian tribes (tribes), or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons.

Cultural resources listed, eligible for listing, or potentially eligible for listing on the National Register of Historic Places (NRHP) are subject to protection from adverse impacts resulting from a federally funded undertaking.

Pursuant to 36 C.F.R. § 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect cultural resources. Within the APE, impacts on cultural resources are evaluated for both historic structures (above-ground cultural resources) and archaeology (below-ground cultural resources).

In addition to the NHPA, FEMA must also comply with other federal laws that relate to historic and cultural resources:

- The Archaeological and Historic Preservation Act of 1974, 54 U.S.C. ch. 3125, provides for the survey, recovery, and preservation of significant scientific, prehistoric, archaeological, or paleontological data when such data may be destroyed or irreparably lost because of a federal, federally licensed, or federally funded (in part or whole) project.

- American Indian Religious Freedom Act of 1978, 42 U.S.C. § 1996, which provides for the protection and preservation of American Indian sites, possessions, and ceremonial and traditional rites.

Secretary of the Interior (SOI) qualified FEMA staff conducted archaeological background research, which included a check of the Illinois Inventory of Archaeological Sites, the Illinois Archaeology Cultural Resources Management Database, and the State Historic Preservation Office (SHPO) Historic and Architectural Resources Geographic Information System (HARGIS). It also included a review of the Illinois National Register Master List, the National Park Service's National Register Database, historic aerial photographs, and topographic maps.

To comply with the NHPA, a literature review and archaeological sensitivity assessment was completed in April 2024 (Richard Grubb & Associates 2024). Based on the proposed scope of work, FEMA has determined that the APE for this undertaking includes all construction-related impacts from the proposed project, including demolition of the existing structures and infrastructure and construction of the new WWTP and its appurtenances, and all locations where the undertaking may result in ground disturbance. The APE measures 4.61 acres.

3.6.1. HISTORIC STRUCTURES

Secretary of the Interior (SOI) qualified FEMA staff conducted a review of HARGIS and cross referenced the properties in the APE with both the Illinois National Register Master List and the National Park Service's database of National Register listings. SOI-qualified FEMA staff also consulted historical USGS topographic maps, historical aerials, Sanborn Fire Insurance Maps, and the Library of Congress's digital archives to identify potential historic properties in the APE. There are no listed or eligible historic buildings, structures, or districts within or adjacent to the APE. In addition, there are no buildings or structures over 45 years of age within the APE that are considered potentially eligible for listing in the National Register of Historic Places.

Alternative 1 – No Action

Under the Proposed Action, there would be no impact on historic structures listed or eligible for listing in the NRHP because none were identified in the APE.

Alternative 2 – Proposed Action

Under the Proposed Action, there would be no impact on historic structures listed or eligible for listing in the NRHP because none were identified in the APE.

3.6.2. ARCHAEOLOGICAL RESOURCES

The purpose of the literature review and archaeological sensitivity assessment is to determine whether the APE has low, medium, or high potential to contain archaeological resources and to make recommendations for any further studies, if warranted.

The literature review and archaeological sensitivity assessment methods included background research, environmental review, an assessment of archaeological sensitivity, and reporting. Research was conducted using the Illinois Historic and Architectural Resources Geographic Information System (HARGIS) and the Illinois Inventory of Archaeological Sites (IIAS) websites to identify the locations of previously recorded archaeological sites and previous cultural resources surveys within a 1.6-kilometer (1.0-mile) radius of the APE. HARGIS was also used to determine if previously identified resources listed in or eligible for listing in the National Register of Historic Places (NRHP) are present within or near the APE, including both archaeological sites and historic properties. In order to develop cultural contexts for the interpretation of such resources, background research was conducted, including a review of pertinent secondary sources, historic maps, atlases, and local and county histories. Other tasks performed for the survey consisted of report writing including management recommendations. All project documents are stored at RGA headquarters in Cranbury, New Jersey.

The APE is located on a low-lying terrace overlooking Lake DePue, an Oxbow Lake associated with the Illinois River. Background research indicated that the APE lies on the outskirts of the Village of DePue and was undeveloped until the twentieth century. A prior Phase I archaeological and geomorphological survey conducted adjacent to the APE determined that the area consisted of deep twentieth-century refuse deposits and fill layers associated with constructing the existing WWTP. No buried soil horizons were identified. This correlated with information from the EPA regarding infilling of the area. Based on this, the APE is considered to have a low potential to contain any archaeological resources. As a result, it is recommended that no further archaeological survey is necessary.

Based on the background research and Phase I archaeological survey, FEMA determined that the Proposed Action would result in No Historic Properties Affected. FEMA initiated consultation with the Illinois SHPO on May 29, 2024. The SHPO concurred with the finding of No Historic Properties Affected on June 11, 2024.

Alternative 1 – No Action

The No Action alternative would have no impact on known archaeological resources because no construction or ground disturbance activities would occur, and no archaeological sites were identified in the APE.

Alternative 2 – Proposed Action

The Proposed Action would have no impact on any archaeological sites or resources because no significant cultural materials or archaeological sites were identified during the archaeological assessment. The following project conditions, also included in Section 6.2, would provide protection in case of inadvertent discovery of archaeological sites:

- The contactor will monitor ground disturbance during the construction phase. Per FEMA standard project condition, should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and the Village of DePue will notify the coroner's office (in the case of human remains), the recipient (Illinois Emergency Management Agency), and FEMA. FEMA will notify the SHPO and the Office of the State Archaeologist. FEMA will then notify the Forest County Potawatomi Community and the Miami Tribe of Oklahoma Tribal Historic Preservation Offices.

- All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

3.6.3. TRIBAL COORDINATION AND RELIGIOUS SITES

EO 13175, *Consultation and Coordination with Indian Tribal Governments*, directs federal agencies "to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes." 65 Fed. Reg. 67249 (Nov. 9, 2000).

Requests for information on the presence or absence of known archaeological and Native American religious sites within the proposed project area were submitted to federally recognized tribal nations with potential interests in the project. On October 30, 2023, FEMA initiated consultation with the following tribal nations:

- Citizen Potawatomi Nation

- Forest County Potawatomi Community of Wisconsin

- Hannahville Indian Community

- Ho–Chunk Nation
- Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
- Kickapoo Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Osage Nation
- Pokagon Band of Potawatomi Indians
- Prairie Band Potawatomi Nation
- Sac and Fox Nation
- Sac and Fox Nation of Missouri in Kansas and Nebraska
- Sac and Fox Tribe of the Mississippi in Iowa
- Shawnee Tribe
- Winnebago Tribe of Nebraska

FEMA sent a letter to each tribe with details about the project location and proposed activity and requested comments from each tribal government within 30 days of the date of the letter. FEMA received responses from three tribal nations.

The Forest County Potawatomi Community responded that they are "pleased to offer a finding of No Historic Properties affected of significance to the Forest County Potawatomi Community, however, we do wish to remain as a consulting party for this project." In addition, they stated, "in the event an Inadvertent Discovery occurs at any phase of a project or undertaking as defined, and human remains, or archaeological materials are exposed as a result of project activities, work should cease immediately, and the Tribe(s) must be included with the SHPO in any consultation regarding treatment and disposition of the find."

The Miami Tribe of Oklahoma Tribal Historic Preservation Officer responded that they had "no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Illinois, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act, 25 U.S.C. §§ 3001 – 3013, or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery."

The Citizen Potawatomi Nation responded that the undertaking is not in the Tribe's area of interest.

Alternative 1 – No Action

The No Action alternative would have no impact on known archaeological or Native American religious sites because no construction or ground disturbance activities would occur.

Alternative 2 – Proposed Action

The Proposed Action would have no impact on known archaeological or Native American religious sites. If any human or archaeological remains are encountered during project construction, work will stop immediately and FEMA and SHPO will be notified. FEMA will then notify the Forest County Potawatomi Community and the Miami Tribe of Oklahoma Tribal Historic Preservation Offices.

3.6.4. VISUAL RESOURCES

Visual resources influence the human experience of a landscape. Various aspects combine to create visual resources, such as color, contrast, texture, line, and form. Features such as mountain ranges, city skylines, lake views, unique geological formations, and rivers as well as constructed landmarks such as bridges, memorials, cultural resources, and statues are considered visual resources. The Federal government does not have a single definition of what constitutes a visual resource; therefore, this EA will use the general definition of visual resources used by the Bureau of Land Management, "the visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features)." (BLM, 1984)

In Bureau County, landscapes with scenic value along the Illinois River are considered in County Planning Policies for protection or conservation (Bureau County Regional Planning Commission, 2014). Due to the nature of the proposed project, the land within the Action Area is previously developed with limited natural scenic resources. Visual resources surrounding the area contain a variety of landscapes: lake views, forest, open space, developed, and industrial areas.

Alternative 1 – No Action

Under the No Action Alternative, there would be no Federal action, construction activities related to WWTP relocation would not occur, and no improvements would be made. There would be no direct impact on visual resources, as current conditions would not change.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would occur on previously developed land which have already had the natural scenic resources removed or altered. Temporary visual impacts on the viewshed could occur during construction of the new WWTP and removal of the existing WWTP. Therefore, any potential temporary impact to visual resources from construction activities would be less than significant. The long-term impacts to visual resources from the relocation of the WWTP would be minimal and offset by wetland restoration at the site of the existing WWTP.

3.7. Comparison of Alternatives

Table 3.8 provides a summary of the potential environmental effects from implementing the Proposed Action, any required agency coordination efforts or permits, and any applicable proposed mitigation or BMPs.

Table 3.8. Summary of Impacts and Mitigation

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Geology and Soils	• No short or long-term impacts on geology and soils.	• Minor short-term adverse impacts on soils and topography from earthwork and grading. • No short or long-term impacts to geology or soils.	Implement Conditions 1 and 3 in Section 6.2.
Water Resources and Water Quality	• No short-term impact on surface or groundwater quality. • Moderate long-term adverse impact on surface water and groundwater quality from the risk of the periodic discharge of untreated sewage.	• Minor short-term adverse impact on surface and groundwater quality due to potential erosion and runoff during construction • Moderate long-term benefits on surface and groundwater quality from water treatment improvements and reduced risk of the discharge of untreated sewage	Implement Conditions 1, 3 and 5 in Section 6.2.
Floodplain Management	• No short-term impact on the floodplain. • Moderate long-term adverse impacts from the continued occupation of the floodplain and potential for contamination in floodwaters.	• Minor short-term adverse impacts from staging of construction equipment in the floodplain. • Moderate long-term benefits on the floodplain by removing contamination risk and restoring the natural function of the floodplain at the existing WWTP site.	Implement Conditions 1, 3, and 4 in Section 6.2.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Air Quality	• No short-term impact on air quality. • Negligible long-term adverse impact on air quality from periodic equipment emissions for flood-related repairs.	• Minor short-term adverse impacts from construction equipment emissions and exposed soils. • No long-term impact on air quality.	Implement Conditions 8, 9, and 10 in Section 6.2.
Climate	• No short-term impact on climate. • Moderate long-term adverse impacts as climate change would increase flood risk and community resilience to climate change would not be strengthened.	• Minor short-term adverse impacts from construction equipment GHG emissions. • Minor long-term benefits from wetland restoration and increasing community resilience to climate change.	Implement Condition 8, 9, and 10 in Section 6.2.
Terrestrial and Aquatic Environment	• No short-term impacts. • Negligible long-term adverse impacts from periodic flooding and associated sediment and pollutant deposition in project area.	• Minor short-term adverse impacts from vegetation clearing and other construction activities. • Minor long-term benefits from restoration of habitat and unmaintained space.	Implement Conditions 1 and 3 in Section 6.2.
Migratory Birds	• No short- or long-term impacts.	• No short-term impacts on migratory birds, negligible short-term impacts on bald eagles from construction. • Minor long-term benefits on migratory birds from the restoration of the hemi-marsh wetland, no long-term impacts on bald eagles.	Implement Condition 11 in Section 6.2.
Wetlands	• No short-term impacts. • Negligible long-term adverse impacts from periodic	• No short-term impacts with avoidance measures implemented.	Implement Conditions 1, 3 and 6 in Section 6.2.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
	flooding and associated sediment and pollutant deposition in project area.	• Minor long-term beneficial impacts from restoration of existing WWTP area to riparian habitat and natural floodplain.	
Threatened and Endangered Species	• No Effect on listed species. • No short- or long-term impacts.	• No effect on listed species.	None required
Hazardous Materials	• No short-term impacts. • Minor long-term impacts from flooding that could lead to the dispersal of hazardous materials.	• Minor short-term impact from use of construction equipment and the potential for inadvertent exposure to unknown hazardous materials. • Minor long-term benefit from reduced risk of flooding and dispersal of hazardous materials.	Implement Conditions 12 and 13 in Section 6.2.
Land Use and Zoning	• No short-term impacts. • No long-term impacts	• Minor short-term impact to land use due to construction activity. • Negligible long-term impact to land use and zoning from new WWTP relocation to area currently used as open space. New open space will be created to compensate for loss.	None required
Noise	• No short-term impacts. • No long-term impacts.	• Minor short-term adverse impacts associated with construction. • No long-term impacts	Implement Condition 14 in Section 6.2.
Public Services and Utilities	• No short-term impacts. • Minor to moderate long-term impacts from flood-related damage and service disruptions.	• Moderate long-term benefit on utilities from reduced risk of flooding.	None required

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Traffic and Circulation	• No short-term impacts. • No long-term impacts.	• Negligible short-term impact from construction traffic. • No long-term impacts.	Implement Conditions 15 and 16 in Section 6.2.
Environmental Justice	• No short-term impacts. • Minor to moderate disproportionately high and adverse impacts on EJ populations from periodic flooding.	• Minor short-term adverse impacts from construction (not disproportionately high and/or adverse). • Minor long-term benefits from reduced risk to the wastewater treatment system in the community.	Implement Condition 14 in Section 6.2.
Safety and Security	• No short-term impacts. • Moderate long-term adverse impacts from future flood events.	• Negligible short-term impacts from construction. • Minor long-term benefits from reducing the risk of flooding that would threaten life and property.	Implement Conditions 17 and 18 in Section 6.2.
Historic Structures	• No Impact	• No Impact	None required
Archaeological Resources	• No impact	• No impact	Implement Conditions 19 and 20 in Section 6.2.
Tribal and Religious Sites	• No impact	• No impact	Implement Condition 19 in Section 6.2.

SECTION 4. Cumulative Effects

This section addresses the potential cumulative effects associated with the implementation of the Proposed Action. As defined by the Code of Federal Regulations, cumulative effects are effects on the environment that result from the incremental effects of a proposed 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 those other actions (40 C.F.R. § 1508.1(i)(3) (2022)). CEQ's regulations for implementing NEPA require an assessment of cumulative effects during the decision-making process for federal projects. The Code also states that cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

In September 2022, The Village of DePue received FEMA funding for a Phase I engineering study for the construction of a new flood tunnel. The new flood tunnel would run adjacent to south down East Street and then turn West on Railroad Street, adjacent to the proposed location for the new WWTP. The new tunnel would reduce risk of flash flooding and tunnel collapse. FEMA funding was limited to scoping, design, engineering, and BCA analysis. The design is on hold while the proposed action is under project review. No further design work can occur until input is received. The applicant has not applied for, and FEMA has not disbursed funds for construction of the new flood tunnel. Applicant stated there are no plans for additional state, county, or other federally funded projects in the area at this time.

This EA concludes that the Proposed Action would result in short-term, construction-related, negligible to minor impacts on geology, soils, water resources and quality, floodplains, air quality, climate, terrestrial and aquatic environments, wetlands, threatened and endangered species, migratory birds, hazardous materials, noise, traffic and circulation, EJ, and safety and security.

The Proposed Action would result in negligible to moderate long-term benefits on water resources and quality, floodplains, climate, terrestrial and aquatic environments, wetlands, threatened and endangered species, migratory birds, wetlands, hazardous materials, public services and utilities, EJ, and safety and security.

SECTION 5. Agency Coordination and Public Involvement

This section provides a summary of the agency coordination efforts and public involvement process for the proposed DePue Wastewater Treatment Plant Relocation project. In addition, an overview of the permits that would be required under the Proposed Action is included in Section 6.1.

5.1. Agency Coordination

FEMA initiated consultation with the USEPA on September 14, 2023, for comments on potential impacts, required permitting, recommended project conditions, or other best construction practices related to the Proposed Action. USEPA responded on September 14, 2023 and said they would review FEMA's Environmental Review Letter and evaluate whether EPA has any comments. USEPA followed up on October 11, 2023. The seven-page response provided results of soil testing for COCs and remediation activities performed at the proposed action area including the excavation of contaminated soil 12 inches below ground surface and backfill with clean soil as required by the 2017 OU4 ROD The EPA stated that no further clean up of the project area is required at this time under the ROD. The response included a letter sent to the Village of DePue with general information regarding designing sampling strategies for the Superfund Site and provided a list of approved Subtitle C and Subtitle D landfills for waste disposal. The EPA also requested that the Village of DePue provide the Draft Construction Workplan and Health and Safety Plan for comment prior to work commencing.

FEMA initiated consultation with the IDNR and USACE on September 14, 2023 for comments on potential impacts, required permitting, recommended project conditions, and riparian habitat restoration related to the Proposed Action. USACE replied on October 17, 2023, and stated that they anticipate issuing a Nationwide Permit for the project. USACE again responded on January 5, 2024, requesting documentation of ESA and Section 106 consultations along with final construction drawings to determine if a permit for the WWTP outfall is required. FEMA provided USACE with the requested information and USACE responded August 12, 2024 and stated that the proposed project will not need a permit from the Corps Regulatory Division since the existing outfall will not be impacted and no new outfall structure will be installed to discharge into the Illinois River.

FEMA initiated consultation with the Illinois SHPO on May 29, 2024. SHPO concurred with the finding of No Historic Properties Affected on June 11, 2024 and stated that they have no objection to the undertaking proceeding as planned.

On June 27, 2024, USFWS concurred with the finding of no effect on endangered species from the proposed project.

5.2. Public Participation

The Village of DePue Board of Trustees Meeting was open to the Public on January 9th, 2023. The Board presented the "Resolution of Support and Commitment of Local Funds for FEMA HMA Grant Application for Relocating the Waste Water Treatment Plant" that was passed 12/12/2022, along with a proposal to apply for a FEMA Advance Assistance (AA) grant for project design. The Board of Trustees supported the motion with a vote of 6-0.

A Public Notice announcing the proposed action was posted in the Bureau County Republican on December 23, 2023 (See Appendix E). The notice was also placed on a statewide public notice website as required by 5 ILCS 5/2.1. Public participation and comments were encouraged. No responses were received.

In accordance with FEMA's NEPA procedures, FEMA is releasing this draft EA to the public and resource agencies for a 30-day public review and comment period. Comments on this draft EA will be incorporated into the final EA, as appropriate. This draft EA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action; however, FEMA will take into consideration any substantive comments received during the public review period to inform the final decision regarding grant approval and project implementation. If no substantive comments are received from the public and/or agency reviewers, this draft EA will be assumed to be final and a FONSI will be issued by FEMA.

The Village of DePue will make the draft EA available on its website at Village of Depue - DePue, Illinois. The draft EA also will be available on FEMA's website at Environmental Assessment for DePue Wastewater Treatment Plant Relocation Project, DePue, Bureau County, Illinois, EMC-2022-BR-012-0008, 2024 | FEMA.gov. Hard copies of the draft EA will be made available at DePue Village Hall at 111 W. Second Street, DePue, IL. The comment period for the draft EA will start when the public notice of EA availability is published and will extend for 30 days. The public is invited to submit written comments via email to fema-r5-environmental@fema.dhs.gov or via mail to:

FEMA Region 5
c/o Duane Castaldi, Regional Environmental Officer
536 South Clark Street, 6th Floor
Chicago, IL 60605-1521

SECTION 6. Permits and Project Conditions

6.1. Permits

The Village of DePue is required to obtain and comply with all required local, state, and federal permits and approvals prior to implementation of the Proposed Action Alternative.

Permits that may be required include the following:

Issuing Agency	Resource	Permit Title	Applicable Regulation/Law	Status
IEPA	Water Resources and Water Quality	Permit for Stormwater Discharges from Construction Site Activities (General NPDES Permit No. ILR10)	CWA Section 402	Not complete. To be obtained by Village of DePue following project award and prior to starting construction.
IEPA	Water Resources and Water Quality	Public Water Supply Construction Permit	CWA Section 402	Issued by IEPA on April 2, 2024. Permit type: Water Main Extension. Permit Number: 0973-FY2024
IDNR	Floodplain Management	Permit for Floodway Construction	Illinois Rivers Lakes and Stream Act	Not complete. To be obtained by Village of DePue following project award and prior to starting construction.
IEPA	Hazardous Waste	Permit for Transporting and Managing Hazardous Waste	Title 35 Ill. Admin. Code, Parts 700-739	Not complete. To be obtained by Village of DePue following project award and prior to starting construction.

6.2. Project Conditions

The Village of DePue is responsible for compliance with federal, state, and local laws and regulations, including obtaining any necessary permits prior to beginning construction activities, and adhering to any conditions laid out in those permits. Any substantive change to the scope of work will require re-evaluation by FEMA for compliance with NEPA and any other laws or EOs. Failure to comply with FEMA grant conditions may jeopardize federal funding.

General Project Conditions

1. The Village of DePue is responsible for obtaining and complying with all required local, state, and federal permits and approvals.
2. If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or any other unanticipated changes to the physical environment, the Village of DePue must contact FEMA so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.

Soils, Water Resources and Quality, Floodplain Management, Terrestrial and Aquatic Environment, and Wetlands

3. Place excavated material, excess fill, and debris in a licensed location that does not impact surface waters, wetlands, or floodplains.
4. Conduct any activities that would occur within the floodplain in accordance with local floodplain management regulations. Coordinate with the local floodplain administrator and IDNR about any necessary permits to conduct activities within the floodplain.
5. If applicable, the sub-recipient must have in place and comply with National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permits from EPA.
6. The sub-recipient shall ensure that best management practices are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990.
7. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service. The application for operating permit and supporting documents can be emailed to EPA.PWSPermits@illinois.gov. The final approved permit should be emailed to fema-r5-environmental@fema.dhs,gov.

Air Quality, Climate, and Environmental Justice

8. To reduce the emission of criteria pollutants, construction equipment engine idling will be minimized to the extent practicable, and engines will be kept properly maintained.
9. Implement applicable BMPs from EPA's Construction Emission Control Checklist.
10. Establish and design hauling routes to minimize the effect of short-term emissions on homes, schools, daycare centers, and playgrounds.

Threatened and Endangered Species and Migratory Birds

11. Implement a seasonal work restriction; tree and vegetation removal and thinning would only occur during the winter months (between November 1 and March 30).

Hazardous Materials

12. Handle and dispose of any hazardous materials in accordance with applicable local, state, and federal regulations. Soil removed from the site must be sampled and tested for contaminants and sent to a permitted landfill for controlled management and disposal.
13. Village of DePue must provide the Draft Construction Workplan, Health and Safety Plan, and any other relevant work plan to the EPA for comment prior to beginning construction. (E-mail guardino.rose@epa.gov cc: fema-r5-environmental@fema.dhs.gov)

Noise and Environmental Justice

14. Keep heavy machinery and equipment well maintained. Use sound-control devices and mufflers.

Traffic and Circulation

15. Use traffic control devices, such as flag people and signs, to mitigate and guide traffic as needed during construction.
16. Place and maintain traffic control devices in accordance with the State of Illinois "Standard Specifications for Road and Bridge Construction" (2016) and the "Illinois Manual of Uniform Traffic Control Devices" (2021).

Safety and Security

17. Complete all construction activities with qualified personnel trained in the proper use of equipment, including all safety precautions.
18. Use appropriate signage and barriers prior to construction activities to alert pedestrians and motorists of project activities.

Archaeological Resources and Tribal and Religious Sites

19. The contactor will monitor ground disturbance during the construction phase. Per FEMA standard project condition, should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and the Village of DePue will notify the coroner's office (in the case of human remains), the recipient (Illinois Emergency Management Agency), and FEMA. FEMA will notify the SHPO and the Office of the State Archaeologist. FEMA will then notify the Forest County Potawatomi Community and the Miami Tribe of Oklahoma Tribal Historic Preservation Offices.
20. All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

SECTION 7. List of Preparers

The following is a list of preparers who contributed to the development of the DePue Wastewater Treatment Plant Relocation draft EA for FEMA. The individuals listed below had principal roles in the preparation of this document. Many others contributed, including senior managers, administrative support personnel, and technical staff, and their efforts in developing this EA are appreciated.

Federal Emergency Management Agency

Reviewers	Role in Preparation
Barnhart, Rachel	Contributing Historic Preservation Specialist
Castaldi, Duane	Project Monitor, Regional Environmental Officer
Nagle, Donna	Contributing Historic Preservation Specialist
Grafton, Jack	Contributing Environmental Protection Specialist
Richards, Emily	Project Lead
Urbanek, Aubri	Endangered Species Specialist
Schroeder, Leslie	Contributing Environmental Protection Specialist

CDM Smith

Preparers	Experience and Expertise	Role in Preparation
Argiroff, Emma	Environmental Planner	NEPA Documentation
Gilbride, Jeremy	Chemical Engineer/Technical Review	NEPA Documentation, Air Quality
Giordano, Brock	Senior Cultural Resources Specialist	NEPA Documentation, Cultural Resources
Pham, Nicholas	Environmental Engineer	NEPA Documentation, Air Quality

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SECTION 9. Appendices

Hard copies of Appendices listed below are available upon request.

Appendix A: 8-step Checklist for Wetlands and Floodplains

Appendix B: Climate Calculations and Construction Emission Checklist

Appendix C: IPaC Official Species List and No Effect Memo

Appendix D: EPA Environmental Justice Screening Report

Appendix E: Public Notice