

Prepared by Emmons & Olivier Resources, Inc.

Prepared for the City of Norwalk, Iowa, and the Natural Resources Conservation Service,
U.S. Department of Agriculture

**Environmental Assessment: Evaluation of Easement Administration
Action on an Agricultural Conservation Easement Program- Wetland
Reserve Easement (Easement 5461141701K0P) Associated with the
North River Interceptor Sanitary Sewer Extension,
Warren County, Iowa**



**Environmental Assessment: Evaluation of Easement Administration
Action on an Agricultural Conservation Easement Program- Wetland
Reserve Easement (Easement 5461141701K0P) Associated with the
North River Interceptor Sanitary Sewer Extension, Warren, County, Iowa**

Prepared for the City of Norwalk, Iowa
Luke Parris, ACIP, Community Development Director
705 North Avenue
Norwalk, Iowa 50211



Prepared by Emmons & Olivier Resources, Inc.
1002 Quartz Avenue
Boone, Iowa 50036



TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. Location	3
2. PURPOSE AND NEED FOR ACTION	6
3. ALTERNATIVES	8
3.1. No Action Alternative (Alternative 1)	8
3.2. Alignment South of the existing 72-inch WRA Diversion Force Main Sewer Easement (Alternative 2)	8
3.3. Other Alternatives Considered but not Advanced	12
3.3.1. Alignment South of the North River (Alternative 3)	12
3.3.2. Alignment North of the ACEP-WRE Easement/Existing 72-inch WRA Diversion Force Main Sewer (Alternative 4)	12
3.4. Alternatives Carried Forward	12
3.5. Scope of Analysis	12
4. AFFECTED ENVIRONMENT	14
5. ENVIRONMENTAL CONSIDERATIONS	21
5.1. Air Quality and Greenhouse Gas	21
Environmental Effects	22
Environmental Commitments	22
5.2. Airport Hazards	23
Environmental Effects	23
Environmental Commitments	23
5.3. Biological Resources	23
5.3.1. Federally Protected Species	23
Indiana Bat	25
Northern Long-eared bat	26
Tricolored Bat	27
Mead's Milkweed	27
Monarch Butterfly	28
5.3.2. Migratory Birds	28
5.3.3. Bald and Golden Eagles Protection Act	28
5.3.4. State-Protected Species	28
Environmental Effects	29

Environmental Commitments	29
5.3.5. Noxious Weeds	30
(EO 13112, Invasive Species)	30
Environmental Effects	31
Environmental Commitments	31
5.3.6. Coral Reefs	31
Environmental Effects	31
Environmental Commitments	31
5.4. Coastal Zone Management	31
Environmental Effects	32
Environmental Commitments	32
5.5. Contamination and Toxic Substances	32
Environmental Effects	32
Environmental Commitments	33
5.6. Environmental Justice	33
Environmental Effects	35
Environmental Commitments	35
5.7. Farmland Protection	35
Environmental Effects	37
Environmental Commitments	38
5.8. Historical and Cultural Resources	38
5.8.1. National Register of Historic Places	39
5.8.2. Standing Structures and Buildings	39
5.8.3. Archaeological Resources	39
5.8.4. Unmarked Graves and Burials	40
5.8.5. Native American Consultation	40
Environmental Effects	41
Environmental Commitments	41
5.9. Water Resources	41
5.9.1. Floodplain Management	41
Environmental Consequences	42
Environmental Commitments	42

5.9.2.	Water Quality (Sole Source Aquifers)	44
	Environmental Consequences	44
	Environmental Commitments	44
5.9.3.	Wetlands and Waters of the United States	44
	Other Concerns	46
	Environmental Consequences	46
	Environmental Commitments	50
5.10.	Climate Change	50
	Environmental Consequences	51
	Environmental Commitments	51
5.11.	Natural Areas, Scenic Beauty, and Viewsheds	51
5.11.1.	Wild and Scenic Rivers	51
	Environmental Consequences	52
	Environmental Commitments	52
5.11.2.	National Parks, National Monuments, and Battlefields.....	52
	Environmental Consequences	52
	Environmental Commitments	52
5.11.3.	Wilderness Areas, Recreational Rivers, Lake Shores, and Trails	52
	Environmental Consequences	52
	Environmental Commitments	52
5.11.4.	National Wildlife Refuges	53
	Environmental Consequences	53
	Environmental Commitments	53
5.11.5.	Federally Operated lands.....	53
	Environmental Consequences	53
	Environmental Commitments	53
	State-sovereign Lands	53
	Environmental Consequences	53
	Environmental Commitments	53
5.12.	Miscellaneous Issues	53
5.12.1.	Environmental Controversy (Aesthetics)	53
	Environmental Consequences	54

Environmental Commitments	54
5.12.2. Transportation	54
Environmental Consequences	54
Environmental Commitments	54
5.12.3. Noise, Radio, and Television Interference; Human Health and Safety; Socioeconomic and Community Resources 54	
Environmental Commitments	54
5.13. Cumulative Effects.....	55
6. CONCLUSIONS	60
7. AGENCIES AND ASSOCIATED CORRESPONDENCE	61
7.1. PUBLIC INVOLVEMENT	63
8. REFERENCES CITED AND CONSULTED	64
APPENDIX A. SCHLICHTE WETLAND RESERVE PROGRAM DEED.....	67
APPENDIX B. AERIAL OVERVIEW PHOTOGRAPHS	87
APPENDIX C. AIR QUALITY	91
APPENDIX D. AIRPORTS	93
APPENDIX E. BIOLOGICAL RESOURCES	95
Appendix E.1. IPaC Consultation	96
Appendix E.2. Iowa Natural Areas Inventory	115
Appendix E.3. IDNR Correspondence.....	117
APPENDIX F. CONTAMINATED AND TOXIC SUBSTANCES	119
APPENDIX G. EJ SCREENING REPORT.....	120
APPENDIX H. FORM NRCS – CPA – 106 – FARMLAND CONVERSION IMPACT RATING	125
Appendix H.1. FORM NRCS – CPA – 106 – Farmland Conversion Impact Rating -- Sewerline	126
Appendix H.2. FORM NRCS – CPA – 106 – Farmland Conversion Impact Rating – Proposed Commercial and Industrial Development	131
APPENDIX I. CORRESPONDENCE FROM THE IOWA STATE HISTORIC PRESERVATION OFFICE	134
APPENDIX J. WATER QUALITY (SOLE-SOURCE AQUIFERS)	137
APPENDIX K. WILD AND SCENIC RIVERS – IOWA.....	139

LIST OF FIGURES

Figure 1. Location.....	4
Figure 2. Topographic Overview.	5
Figure 3. Alternatives.	9
Figure 4. Environmental Overview -- West.	15
Figure 5. Environmental Overview -- Center.	16
Figure 6. Environmental Overview -- East.	18
Figure 7. Floodplain.....	43
Figure 8. Waters of the U.S. and Wetlands -- West.	47
Figure 9. Waters of the U.S. and Wetlands -- Center.	48
Figure 10. Waters of the U.S. and Wetlands -- East.....	49

LIST OF TABLES

Table 1. Permits and Compliance.	11
Table 2. -- Soils.....	19
Table 3. GHG Emissions.....	22
Table 4. Federally Protected Species under the Endangered Species Act -- Warren County, Iowa.	25
Table 5. Demographic Information for Norwalk, Warren County, and Iowa (2022).	34
Table 6. Farmland Classification.	36
Table 7. Summary of Wetlands.	46
Table 8. Environmental Review Status.	56

ACRONYMS

ACEP – Agricultural Conservation Easement Program	HUD – U.S. Department of Housing and Urban Development
BGEPA – Bald and Golden Eagle Protection Act	IDNR – Iowa Department of Natural Resources
BMPs – Best Management Practices	IDOT – Iowa Department of Transportation
CAA – Clean Air Act	ISHPO – Iowa State Historic Preservation Office
CWA – Clean Water Act	IPaC – Information for Planning and Conservation
CEQ – Council on Environmental Quality	MBTA – Migratory Bird Treaty Act
CZMA – Coastal Zone Management Act	NHPA – National Historic Preservation Act
City – The City of Norwalk, Iowa	National Register – National Register of Historic Places
ESA – Endangered Species Act	NEPA – National Environmental Policy Act
EA – Environmental Assessment	NRCS – Natural Resources Conservation Service
EIS – Environmental Impact Statement	NRISSE – North River Interceptor Sanitary Sewer Extension
EPA – U.S. Environmental Protection Agency	RCARA – Resource Conservation and Recovery Act
EO – Executive Order	SDWA – Safe Drinking Water Act
FPPA – Farmland Protection Policy Act	USACE – U.S. Army Corps of Engineers
FEMA – Federal Emergency Management Agency	USDA – U.S. Department of Agriculture
FONSI – Finding of No Significant Impact	USFWS – U.S. Fish and Wildlife Service
FIRM – Flood Insurance Rate Map	WSRA – Wild and Scenic Rivers Act
FSA – Food Security Act	WRE – Wetland Reserve Easement

1. INTRODUCTION

The City of Norwalk, (City) proposes to construct a 30- to 60-inch, 9,500-foot (1.77 miles) long North River Interceptor Sanitary Sewer Extension (NRISSE) north of the North River within the municipal boundary of Norwalk and portions of currently unincorporated Warren County, Iowa. The installation of the sanitary sewer would require 4.10 acres of permanent sanitary sewer easement and 7.37 acres of temporary construction easement through ground held in a permanent Wetland Reserve Easement (WRE) by the Natural Resource Conservation Service (NRCS) through the Agricultural Conservation Easement Program (ACEP), administered under the *Food Security Act* (FSA).¹ The NRCS holds the 181.12-acre permanent easement (Easement 5461141701K0P) under the ACEP. The proposed action would also include a sewer line servicing a proposed industrial and commercial development to the north.

The proposed project would require less than 2.3 percent of the entire easement for temporary and permanent right-of-way for the proposed sewer line. An Easement Administration Action (EAA) is required to modify the existing easement boundary to accommodate the increase in right-of-way required to construct, maintain, and operate the proposed sewer line. The property was owned by Jason Schlichte when the ACEP-WRE easement was secured by the NRCS in 2017. In 2021, the City purchased the property for use as an open system for the community. The NRCS has received a request to allow the City to proceed with the project to upgrade and modernize the sewer system through easement. The NRCS administers the ACEP program, which assists landowners, land trusts, and other entities to protect, restore, and enhance wetlands or protect working farms and ranches through conservation easements. The NRCS helps restore, protect, and enhance enrolled wetlands while maximizing wildlife habitat as part of the WRE.

Because one of the alternatives initially developed by the City involved the loss of ground enrolled in the easement, the NRCS completed an initial Environmental Evaluation and determined the proposed action (loss and replacement of ground enrolled in the ACEP-WRE program,) would require a review under the *National Environmental Policy Act*.

This EA was prepared as a part of the *National Environmental Policy Act* (NEPA) process and to fulfill requirements of 42 USC § 4332. Relevant Federal and State laws and regulations that may be applicable to the proposed action include the following:

- *Clean Air Act* (42 U.S.C. § 7401 et seq.)
- *Clean Water Act* (Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq.);
- *Consolidated Farm and Rural Development Act* (7 U.S.C. §§ 1927(a)(6)(A)) and 2006e)
- *Coastal Zone Management Act* (16 U.S.C. §§ 1451–1464)
- *Endangered Species Act of 1973* (16 U.S.C. § 1531 et seq.)
- *Farmland Protection Policy Act* of 1981 (7 U.S.C. § 4201 et seq.)

¹ There is an existing sanitary sewer right-of-way easement that is superior to the NRCS conservation easement, and the current proposed project calls for increasing the width of that existing right-of-way easement.

- *Federal Noxious Weed Act of 1974* (7 U.S.C. § 2801 et seq.)
- *Food Security Act of 1985* (16 U.S.C. §§ 3801-3862)
- *National Environmental Policy Act of 1969* (42 U.S.C. §§ 4321 et seq.)
- *National Historic Preservation Act of 1966* (16 U.S.C. § 470 et seq.)
- *Safe Drinking Water Act of 1974* (42 U.S.C. § 300f et seq.)
- Executive Order (EO) 11514: Protection and Enhancement of Environmental Quality
- EO 11988: Floodplain Management (g) Floodplains and Wetlands
- EO 11990: Protection of Wetlands
- EO 12898, Environmental Justice for Minority and Low Income Populations
- EO 13112, Invasive Species

Additionally, County zoning, permitting, and health and safety requirements are included in this environmental review.

The City is proposing the project and is the governmental unit responsible for completing this EA. The NRCS, U.S. Department of Agriculture (USDA), is the federal agency requiring this review, as land currently held in a conservation easement under the ACEP-WRE program would be involved in the proposed action and require a modification to the existing easement. Funding is expected to be through an *American Recovery Plan Act* grant managed by Warren County.

The proposed project would increase the existing easement by approximately 4.10 acres of land currently protected under easement in the ACEP. As a result, the NRCS needs to decide whether to modify its ACEP-WRE easement to allow for the planned improvements and modernization of the sewer system. The easement is being held in a permanent easement by NRCS for the purposes of restoring and protecting the functions and values of wetlands – including wildlife habitat and use, water-quality improvement, floodwater retention, groundwater recharge, open space, aesthetics, and education (Appendix A). NRCS policy also requires any impacts be minimized to the greatest extent practicable and any remaining adverse impacts are to be mitigated by enrollment of other lands providing equal or greater conservation functions and values; no net loss of acres; and not encompass more than 10 percent of the easement area. NRCS staff would consider these factors (as well as the environmental impacts) into their decision about allowing portions of the existing easement to be converted into permanent utility right-of-way needed to the construction and operation of the NRISSE project.² Because the impacted area exceeds that typically allowed for a subordination, NRCS staff determined that subordination of the newly requested right-of-way was appropriate to avoid splitting the easement into two non-contiguous parcels when factoring impacts to the overall easement. As a condition of the subordination, replacement acres will be required to be added to the easement, as the impacted area exceeds the normal allowable threshold and to attain equal or greater conservation and economic value to the United States. The NRCS would maintain the easement, but it would be subordinated to the easement issued to the City for construction and operation of the NRISSE.

² The existing sewer has a 30-foot wide perpetual easement centered on the sewer. The proposed 60inch NRISSE would require a 120-foot wide temporary easement for construction and a 40-foot wide permanent easement, which would be adjacent to the southerly of the existing sewer easement. The two easements would not overlap. In all, the future permanent easement width for both sewers corridors would 70 feet.

Because of modification of the easement and the potential loss of wetlands, habitat, and ecological functioning, the City is required to replace the loss associated with the easement with an equal to or greater wetland habitat. The City has identified a 4.18-acre replacement parcel immediately north of the North River for this purpose. The City would purchase the property and place it in a permanent conservation easement as compensation and mitigation for modification of the easement.

This EA is designed to: 1) provide sufficient evidence and analysis for determining whether significant impacts would result from implementing the proposed action and whether the NRCS should prepare an Environmental Impact Statement (EIS); 2) assist the NRCS's compliance with NEPA if no EIS is necessary; and 3) facilitate preparation of an EIS if one is required. If the analysis finds there are no significant impacts, a Finding of No Significant Impact (FONSI) can be issued concluding the NEPA process.

This environmental review identifies and evaluates all relevant impacts, conditions, and issues associated with the proposed alternative in accordance with:

- President's Council on Environmental Quality's (CEQ) Regulations outlined in 40 CFR parts 1500-1508, hereafter referred to as the CEQ regulations
- NRCS procedures for implementing NEPA found at 7 CFR Part 650; *NRCS General Manual* Part 410 and
- *NRCS National Environment Compliance Handbook*

This Environmental Assessment (EA) provides background information:

- Need for the proposed project
- Alternatives considered
- Environmental impacts and commitments
- Agency coordination and public involvement

This document is available for public review and comment in accordance with the requirements of 23 CFR 771.119 (d).

1.1. Location

The western four-fifths of the project corridor and the replacement parcel are in currently unincorporated Warren County, Iowa, and the eastern one-fifth of the corridor is within the municipal boundary of Norwalk. The corridor is located immediately east and west of State Highway 28 (Highway 28) and 75 to 1,500 feet north of the North River (Figure 1). The NRISSE crosses over portions of the S½ SE¼ of Section 23, SW¼ of Section 24, N½ of Section 25, and N½ NE¼ of Section 26, Township 77 North, Range 25 West (Linn Township) and W½ NW¼ of Section 30, Township 77 North, Range 24 West (Greenfield Township) (Figure 2). The 4.18-acre replacement parcel (which would be enrolled into the existing ACEP-WRE easement) is located immediate east of the North River and approximately 3,960 feet west of Highway 28. It is in NW¼ NE¼ of Section 26, Township 77 North, Range 25 West (Linn Township). The replacement parcel is

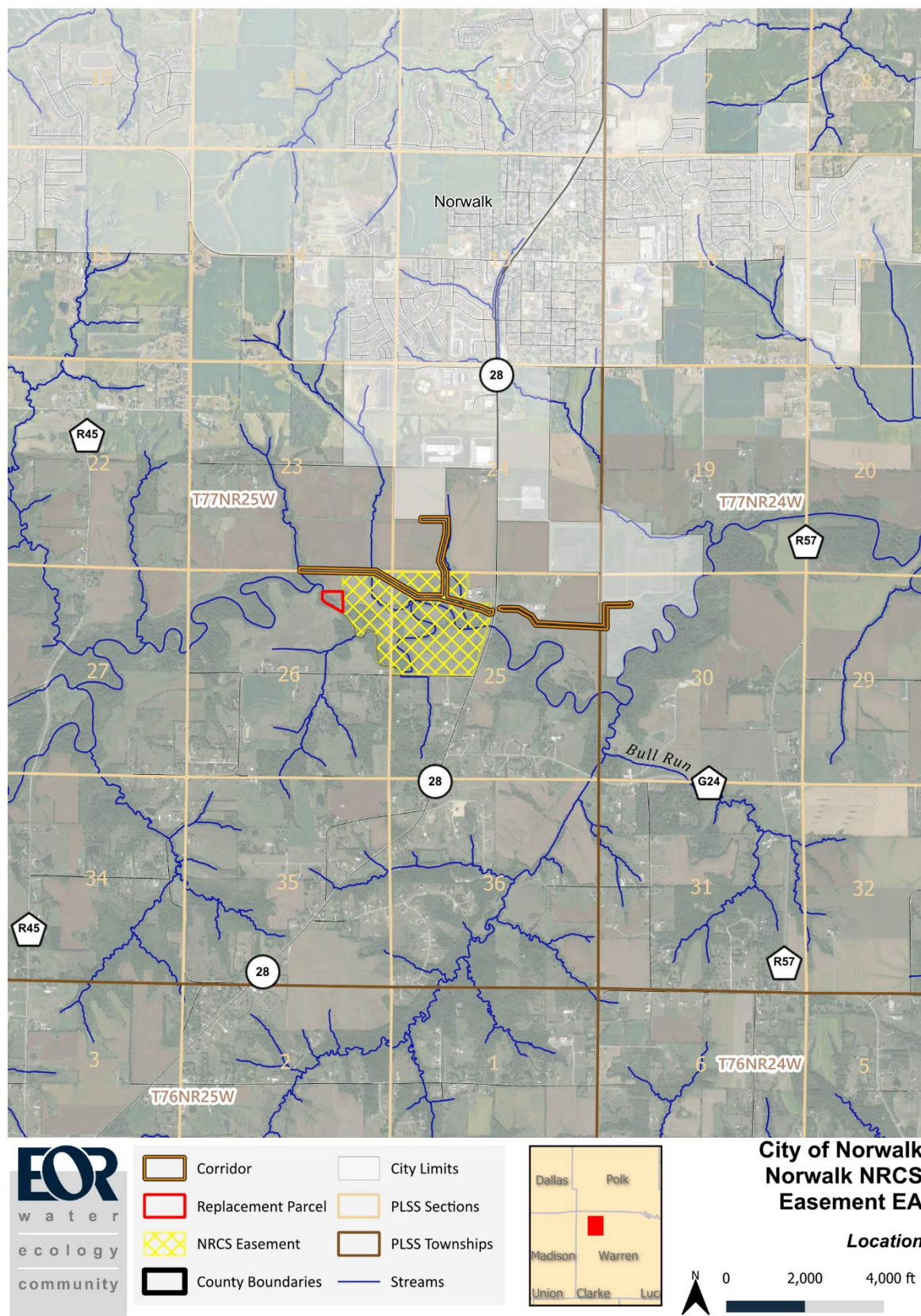


Figure 1. Location.

adjacent to and west of the existing easement and is approximately 500 feet due south of the NRISSE corridor.

1.2. Purpose and Need for Action

The City proposes to construct a new 30- to 60-inch, 9,500-foot long sanitary sewer extension (NRISSE) paralleling and adjacent to the existing 72-inch WRA Diversion Force Main Sewer. The City's recent work on an updated Comprehensive Plan has identified community growth along the North River corridor to Interstate 35 to the west as likely to intensify over the coming years. The proximity to the Des Moines metro area means that growth is likely – whether it be planned urban or unplanned rural growth. Large lot development dots the landscape. Because the area is not served (or is underserved) by a sanitary sewer system, each home relies on septic systems to control their individual sanitary waste, creating future problems for the health of the North River corridor as those systems age and fail.

The proposed NRISSE project has been identified as being critical to the growth of northwest Warren County and Norwalk. The NRISSE would allow the City to ensure that future growth is connected to municipal sanitary sewer under the City's partnership with the Des Moines Metropolitan Wastewater Reclamation Authority (WRA). Further, the City's Future Land Use Planning in this area envisions a greenbelt along the North River corridor. This greenbelt would serve as a buffer between the North River and urban development outside of the floodplain. Finally, as a Municipal Separate Storm Sewer System community, the City is invested in ensuring that new developments is properly managed and release stormwater that will ultimately end up in the North River.

Prior to NRCS acquisition of the easement for the property in 2017, the City had begun internal discussions on the future community growth and the necessary infrastructure improvements to accommodate anticipated growth. City staff initially identified the need for a large interceptor sanitary sewer line along the North River corridor. Preliminary analysis for the sewer identified a service area exceeding 25,000 acres. The interceptor sanitary sewer system would provide service to northwest Warren County, northeast Madison County, Norwalk, Cumming, and West Des Moines. Understanding the potential scope, the City staff initiated discussions with neighboring communities and started the process of a new Comprehensive Plan to understand the growth implications of the potential sewer interceptor along the North River. During that period of study, Mr. Schlichte negotiated the easement with the NRCS for the property along the North River, which is a critical location for the sanitary sewer. The City subsequently purchased the property to expand its park and open space system.

Norwalk, West Des Moines, and Cumming are WRA-member communities. In 2011, the WRA constructed diversion sewer facilities that included the 72-inch WRA Diversion Force Main Sewer along the North River through the subject property with the existing easement. The sewer easement was acquired by the WRA prior to the existence of the Schlichte Easement (the current easement does not appear to recognize the existing sewer easement on the property.).

In 2004, the WRA Facility Plan recognized the need for the NRISSE along the North River to serve multiple communities. In 2018, the WRA Facility Plan was updated and identified the future sewer extension paralleling the 72-inch WRA Diversion Force Main Sewer. The NRISSE has been planned for many years with the corridor for this sewer generally identified along the north side of the North River and south of the existing 72-inch diversion sewer.

The construction of the NRISSE would allow the City to: 1) limit septic system installation; 2) ensure connection to municipal sanitary sewer to properly treat wastewater; 3) provide sewer services to a proposed industrial and commercial development at the southwest corner of Highway 28 and Delaware Street; and 4) properly manage and discharge stormwater from urban development.

2. ALTERNATIVES

As a part of the sewer corridor study completed by the City in 2017, project alternatives initially developed for the project included:

- No Action Alternative (Alternative 1)
- Alignment south of the existing 72-inch WRA Diversion Force Main Sewer (Alternative 2 – Preferred Alternative)
- Alignment South of the North River (Alternative 3)
- Alignment North of the NRCS Easement/Existing 72-inch WRA Diversion Force Main Sewer (Alternative 4)

2.1. No Action Alternative (Alternative 1)

Under this alternative, the sanitary sewer extension would not be constructed. This alternative would not require a modification of the easement. The state purpose and need for the project would not be met under this alternative.

2.2. Alignment South of the existing 72-inch WRA Diversion Force Main Sewer Easement (Alternative 2)

The existing WRA North River Interceptor gravity sewer east of Highway 28 is located on the south side of the existing 72-inch WRA Diversion Force Main Sewer (Figure 3). The sewer alignment needs to be located on the south side of the existing 72-inch sewer easement to be connected to the existing North River gravity sewer. An alignment adjacent to the existing 72-inch sewer easement would minimize the impact to the easement and adjacent landowners. An alignment on the south side of and adjacent to the existing 72-inch sewer was determined to be the most viable option to minimize the impact of construction and to meet the necessary service requirements for multiple communities. Additionally, a 2,650-foot long extension from the main line into proposed industrial and commercial development north of the easement would be part of this alternative.

The North River Interceptor gravity sewer extension west of Highway 28 has been in the planning process for many years. The gravity sewer extension has been planned to be on the south side of the existing 72-inch sewer until the 72-inch sewer turns north near the west end of the City property under the easement. The location on the south side of the existing 72-inch sewer is the most viable option based on physical constraints of the sewer design and the intended service area of the sewer. An alignment adjacent to the existing 72-inch sewer easement would minimize the impact to the easement and other adjacent properties. The sewer would be constructed in a relatively narrow corridor through the easement. During the reclamation phase, disturbed areas would be reclaimed to pre-existing grade – allowing the easement area to re-establish naturally with the required seed mixture.

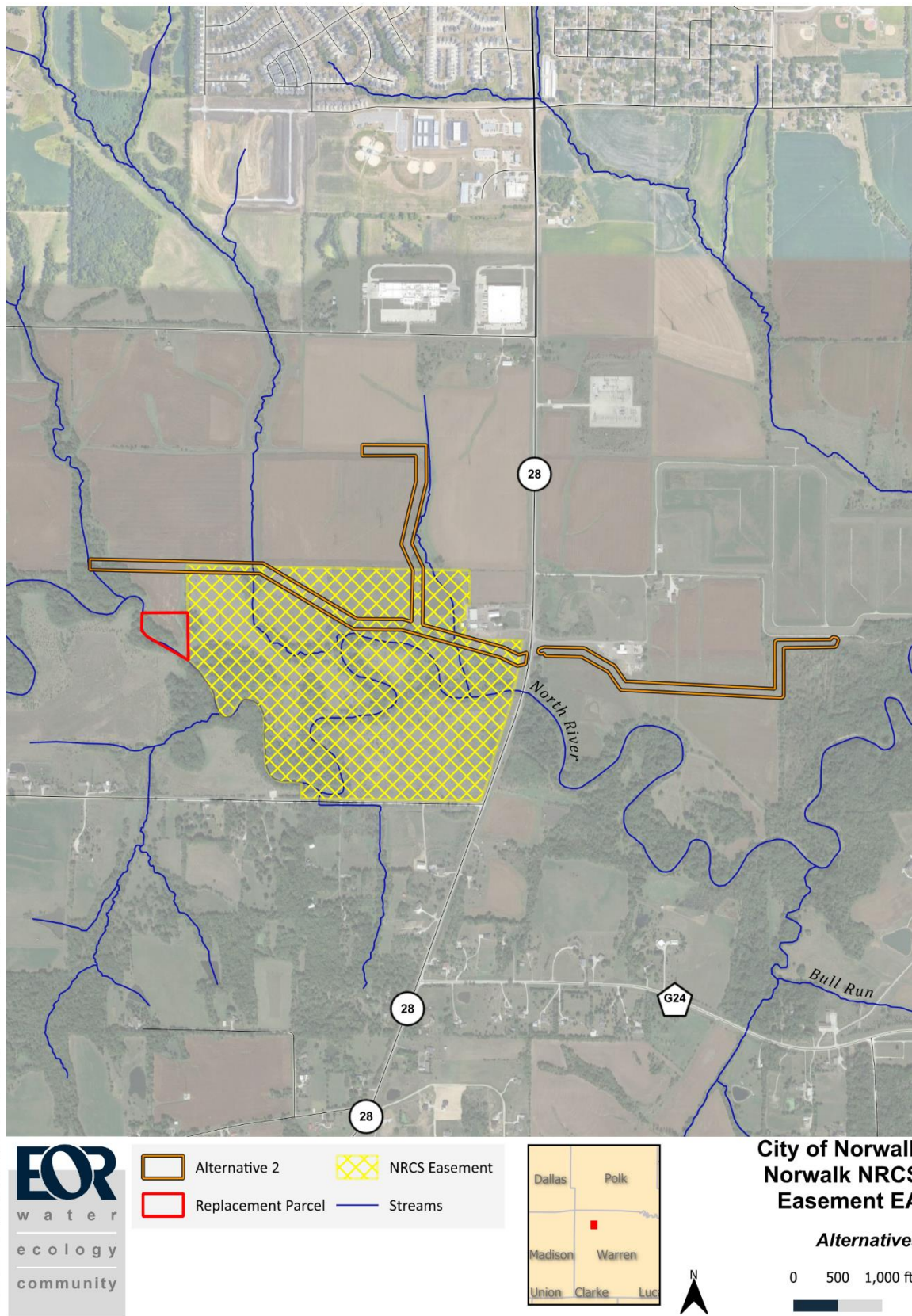


Figure 3. Alternatives.

Project design would follow Iowa Statewide Urban Design and Specifications and construction standards required by the Wastewater Reclamation Authority (WRA) for sewer construction. Both standards are incorporated by reference into this review.

Construction would proceed in five phases: 1) site preparation, 2) pipe layout, 3) trenching, 4) installation and backfilling, and 5) restoration. Construction is anticipated to take 10 to 11 months from start of construction to completion restoration.

To prepare for construction, the selected route would be cleared. A crew surveys and stakes the construction right-of-way to ensure only the pre-approved construction workspace is cleared. All potentially impacted utilities would be located and marked to prevent damage during construction. To ensure the right-of-way is a suitable work area, a clearing and grading crew would prepare the corridor so the construction equipment can operate safely. Site preparation includes clearing the right-of-way by removing trees, brush, and other impediments that may prohibit construction. This crew also prepares a working surface for the construction workers and equipment that would follow. The site preparation crew would install silt fence along edges of streams and wetlands to prevent erosion of disturbed soil. Trees inside the right-of-way would be cut down, and the timber removed or stacked alongside the right-of-way. Brush may be shredded or burned. Topsoil would be stripped to a predetermined depth and stockpiled along the sides of the right-of-way to be returned to its original state during site restoration.

Once the construction right-of-way has been sufficiently cleared to allow construction equipment to gain access, sections of pipe are laid out along the right-of-way (commonly referred to as stringing). The pipe would be transported directly to the right-of-way. After the pipe is delivered, a crew would carefully distribute the various pipe sections as specified in the design plan. A trench would be excavated along the right-of-way to the surveyor's specifications using track hoes, backhoes, or other trenching equipment. Topsoil would be removed from the work area and stockpiled on the trench's non-working side to be used for site restoration. Pipe would be lowered into the trench using track hoes. Once installed, the excavated material would be returned to the trench in reverse order: subsoil followed by topsoil.

The construction right-of-way would be restored as closely as possible to its original condition after completion. The right-of-way would be carefully graded, and erosion-prevention measures would be installed, as necessary. Depending on the location and circumstances, restoration would involve replacing topsoil, re-seeding with appropriate and specified seed mixes, applying fertilizer, and other actions that may be necessary to re-establish vegetation.

The project construction corridor would be 100 to 120 feet wide. The sanitary sewer pipe would be placed in 8 to 12-foot deep trenches. Manholes would be placed at bends where the sewer line changes direction. Project plans are still in the early stage of development and have not been finalized.

Additionally, the City would procure additional acres (4.18 acres) that would be added to the easement as compensation for the modification to the current easement. The 4.18 acres would be placed under a conservation covenant with the Warren County Assessor's Office as part of the larger easement. Agricultural ground would be seeded to an appropriate mix of native grasses,

forbs, sedges, and rushes. The area would be managed as part of the City's open space and green-belt initiative along the North River.

Replacement is not anticipated to be controversial but viewed as necessary to maintain a certain level of infrastructure. When right-of-way vegetation is established, there would be little, if any, change in the use within the remaining easement. This alternative meets the stated purpose and need for the project.

The project would be compliant with the following federal, state, and local regulations outlined in Table 1.

Table 1. Permits and Compliance.

Agency	Permit, Regulatory Compliance, and Coordination
Federal	
U.S. Fish and Wildlife Service (USFWS)	Section 7 of the <i>Endangered Species Act</i> (ESA), <i>Migratory Bird Treaty Act</i> of 1918, and <i>Bald and Golden Eagle Protection Act</i> of 1972
U.S. Army Corps of Engineers (USACE)	Sections 401 and 404 of the <i>Clean Water Act</i> (CAA) and Sections 10 of the <i>Rivers and Safe Harbors Act</i> of 1899
U.S. Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS)	Farmland Conversion Form – Form AD-1066
State	
Iowa Department of Natural Resources	National Pollutant Discharge Elimination System (NPDES) Permit for construction activities.
	Threatened and Endangered Species
	Floodplain Permit
Iowa State Historic Preservation Office and Tribal Historic Preservation Offices	Section 106 consultation
Iowa Department of Transportation	Right-of-Way permit
Local	
Warren County Emergency Management Agency	Floodplain permit if activities occur with the floodplain

2.3. Other Alternatives Considered but not Advanced

The 2017 Sewer Line Corridor study undertaken by the City identified two additional alternatives. Both were determined to be impracticable from an engineering perspective.

2.3.1. Alignment South of the North River (Alternative 3)

The existing WRA North River Interceptor (located on the north side of the North River) currently terminates at an equalization basin east of Highway 28 within the WRA facility. The Alternative 3 alignment was eliminated due to the current facility location and areas where future service area for multiple communities on the north side of the North River are anticipated. The North River Interceptor is also planned to extend west along the Badger Creek corridor, which is a tributary of the North River. The alignment along the south side of the North River is not a practical option for the sewer extension. This alternative would not likely meet the stated purpose and need for the proposed action.

2.3.2. Alignment North of the ACEP-WRE Easement/Existing 72-inch WRA Diversion Force Main Sewer (Alternative 4)

The existing WRA North River Interceptor gravity sewer east of Highway 28 is located immediately south of the 72-inch WRA Diversion Force Main Sewer. The NRISSE to the west must connect to the gravity sewer on the south side of the existing 72-inch sewer. The vertical alignment of the existing 72-inch sewer and the proposed NRISSE would not accommodate crossing to the north side of the 72-inch sewer alignment. Other conflicts include an existing development and a pond, which also make the north alignment impractical. This alternative would not likely meet the stated purpose and need for the proposed action.

2.4. Alternatives Carried Forward

Based on the location of existing facilities and planned service area for the sewer. Alternatives 3 and 4 are not carried forward for several reasons related to right-of-way impacts and engineering deficiencies outlined above. Project alternatives carried forward for analysis include the No Action Alternative (Alternative 1) and the Alignment South of the existing 72-inch WRA Diversion Force Main Sewer Easement (Alternative 2 – *Preferred Alternative*).

2.5. Scope of Analysis

The City proposes to construct sewer line extension north of the North River and east and west of Highway 28. A 120-foot wide, 9,500-foot long (9.2 acres) corridor, a 2,650-foot long extension from the main line north into a proposed commercial and industrial development; and the 4.18 acres of land designated as compensatory mitigation of modification of ACEP-WRE easement are included in this analysis. In all, approximately 35.0 acres of temporary construction and permanent right-of-way and mitigation were examined for this analysis.

The analysis also includes the proposed 143.9-acre industrial and commercial development at the southwest corner of Highway 28 and Delaware Street. The City initiated the certification process under the Iowa Economic Development Authority's Certified Site program, and the property

underwent an environmental review as part of the program. However, the status of the certification efforts is uncertain, though the property is expected to be developed regardless if it goes through the certification process.

Because the NRISSE will serve and be connected to the proposed development, it is being analyzed as an indirect impact. Resources studies completed in 2023 for the site certification include wetland, protected-species and habitat, geotechnical, and Phase I Environmental Site Assessment, all of which were prepared in 2023 by Impact7G resource specialists. These resource reports are incorporated into this review by reference. The site is in a currently unincorporated portion of the county and mostly is in row-crop production, except for the northeast corner which contains the farmstead and associated outbuildings. The farmstead is not anticipated to be removed under any circumstance.

An additional sewer line extension of the NRSSE is anticipated in the future, which may allow for future development further west of the current project. Specific plans and timing have not yet been proposed. The City also plans to develop the easement into an open space. A master plan and other details have not yet been developed. Finally, the City anticipates additional real estate purchases on parcels immediately west of the easement to expand the open space and protective riparian buffer along the North River. Because of the uncertainty and vagueness of these proposed developments at this time, they are not considered in this review.

3. AFFECTED ENVIRONMENT

The review area is located at the boundary between intensive suburban development within Norwalk and the Des Moines metropolitan area to the north and rural, agricultural areas to the south. The area has been undergoing intense development over the past 20 to 25 years, changing from a largely agricultural landscape to a mix of agricultural, residential, and commercial uses, especially along the Highway 28 corridor leading north and south of Norwalk. Currently, the general area consists of a mix of row-crop agricultural fields, pasture, public open space along the North River corridor, commercial and light industrial facilities, isolated, single-family residences and farmsteads, densely developed residential neighborhoods, institutional grounds and facilities, a fragmented to nearly continuous forested riparian corridor along the North River, public open and green space, and public right-of-way along city, county, and state roads and highways.

The proposed project corridor is located in an area that is transitioning from agricultural to suburban uses. Recent development north of the review area includes residential subdivisions, isolated, scattered single-family residences, and light industrial and commercial areas. Within the immediate project area, land uses include: 1) recently acquired ground along the North River corridor (which the City manages for its recreational, conservation, and flood-protection and minimization values) west of Highway 28; 2) agricultural ground; and 3) the western edge of the WRA facility. Public right-of-way along the highway bisects the project, and a private utility right-of-way passes through the proposed corridor in a general northeast/southwest direction on its western end (Appendix B). The proposed action is immediately north of the fragmented to nearly continuous forested riparian corridor along the North River. Several channelized and modified ephemeral to intermittent first-order streams drain the uplands immediately north of the review area and flow into the North River a short distance south of the proposed corridor. The City owns and manages the land west of Highway 28, and property east of the highway is privately owned except for the eastern end of the corridor, which is within the WRA facility.

West of Highway 28, the proposed corridor crosses over a series of upland and riparian grassland and wetland communities dominated by invasive grasses mixed with a limited amount of native grasses, forbs, and sedges (Figures 4 and 5). This area was used as production ground or pasture until the early 2000s when the City acquired the property, although some areas were placed in conservation easements under a program administered by the NRCS. A mature stand of bottomland forest fringing an unnamed perennial stream occurs on the western end of the main east/west corridor. This community consists of a well-developed canopy and overstory layer of Silver maples, Black and Green ash, and Hackberry; poorly developed understory and shrub layers; a dense ground layer of native and invasive grasses, forbs, and sedges; and a sparse vine layer. This area contains a number of snags and bat-preferred trees. It is immediately south of an existing and regularly maintained electrical transmission corridor and includes approximately 0.6 acres of relatively intact bottomland forest. A second forest area (0.3 acres) occurs along an unnamed intermittent stream. Trees in this area are small- to medium diameter nuisance trees lacking concavities, exfoliating bark, and snags. An electrical transmission line and maintained utility right-of-way parallels and is adjacent to the western end of the proposed corridor. The proposed

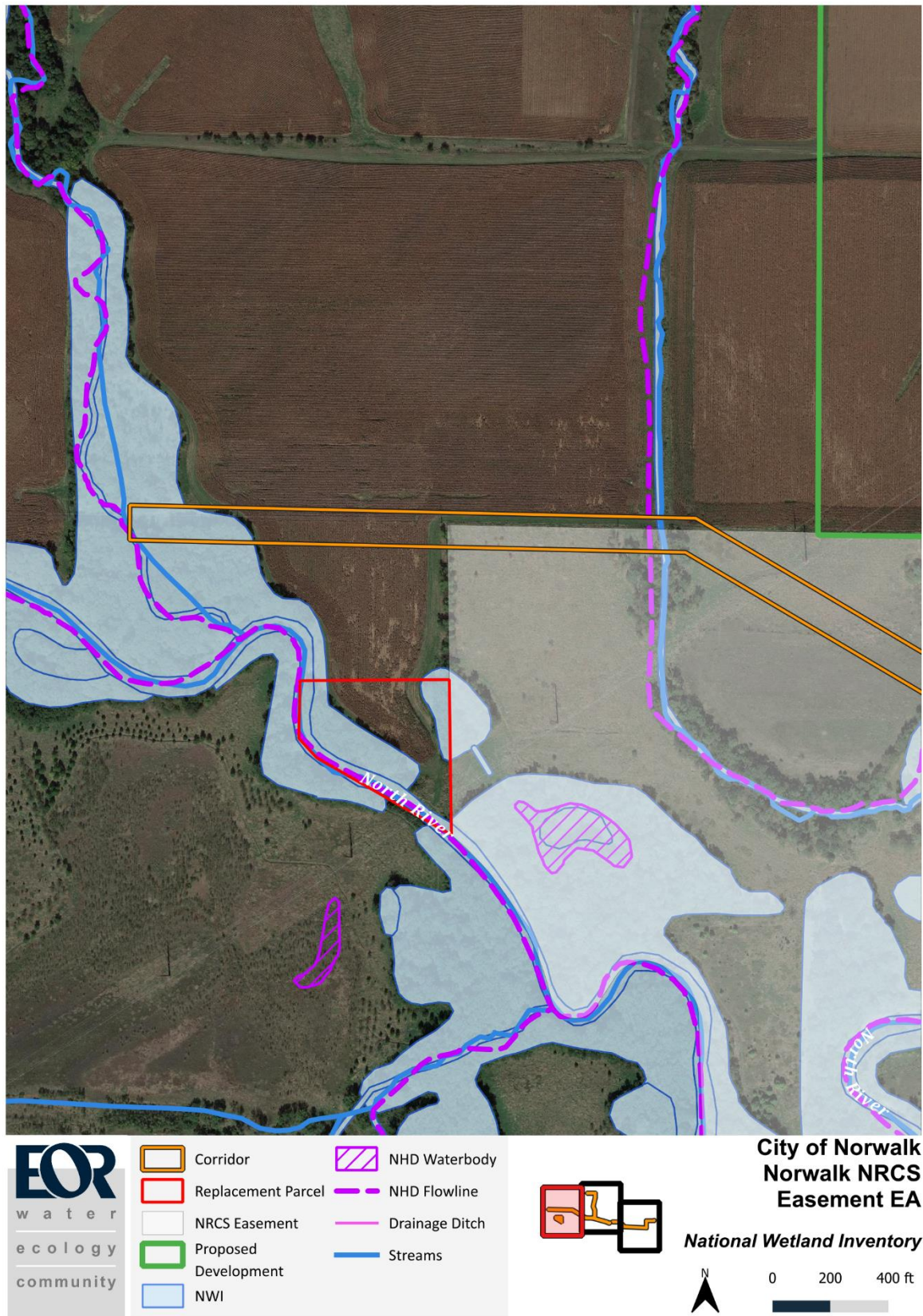


Figure 4. Environmental Overview -- West.

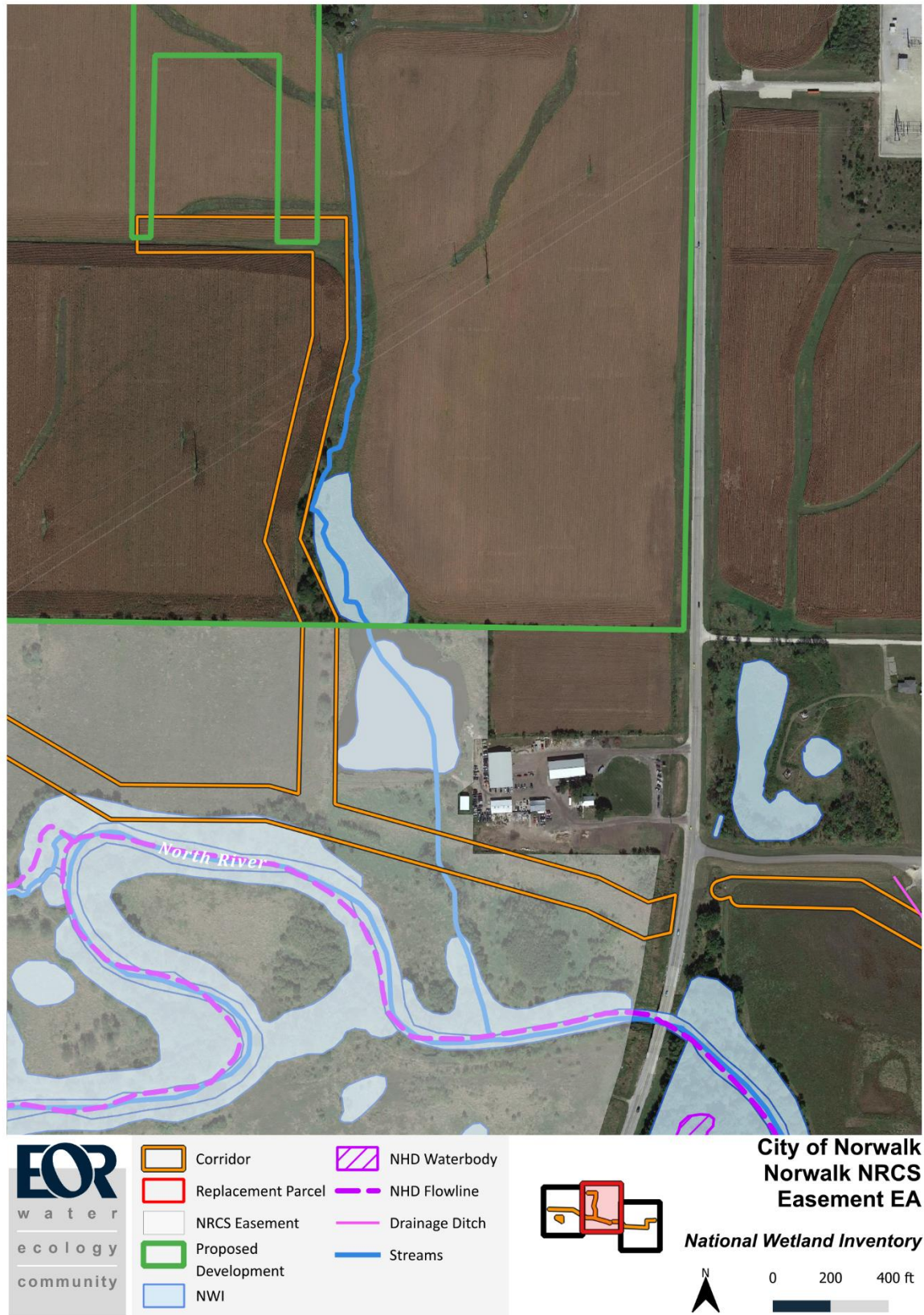


Figure 5. Environmental Overview – Center.

residential and commercial area is privately held property currently used in commodity-crop production. A first-order perennial stream supporting a poor-quality palustrine emergent wetland and scattered trees drains the uplands north of Delaware Street.

East of Highway 28, the proposed corridor would pass through former agricultural fields that have been restored to native prairie communities currently enrolled in a conservation program and the western edge of the WRA facility, which also supports a grassland community (Figure 6). Construction and operation of this facility started in the mid-1960s. The area in the WRA facility was open landscape until the early 2010s, at which time trees began to encroach into the area. The existing 72-inch sewer line would be adjacent to the proposed project corridor. Construction of the existing sewer line cleared trees in this area. Small-diameter nuisance trees (generally less than 3 inches in diameter at breast height) and nuisance trees lacking exfoliating bark, concavities, or snags (all characteristics of bat preferred trees) cover this area. A recently constructed drainage ditch drains upland positions north of the area.

The 4.18-acre replacement parcel is located on a floodplain terrace along the North River on privately held deed ground. It includes the active channel-belt, portions of a forested riparian corridor, agricultural ground used in commodity-crop production fringed with a narrow grass buffer of invasive grasses along the edge of a small, first-order intermittent stream flowing immediately east of the parcel. The riparian forested community consists of an even-aged stand of Silver maples and Cottonwoods in the canopy and overstory layer; a sparse understory layer; a sparse brush layer; and a moderately dense to dense ground layer of native and invasive grasses, forbs, and sedges. An electrical transmission line and maintained utility right-of-way intersects the parcel's southern corner.

The North River is a tributary of the Des Moines River. It is 103 miles (166 km) long and drains an area of 349.2 square miles (904 km²) *via* the Des Moines River, which is part of the larger Mississippi River watershed.

The North River rises northeast of Casey in southern Guthrie County and flows generally eastwardly through Adair, Madison, Warren, and Polk counties, where it joins the Des Moines River 10 miles southeast of Des Moines. The river is a 4th-order, perennial stream as it flows past the project corridor. The reach of the North River adjacent to the review area was listed in 2020 as a 303(d) impaired stream: Bacteria Indicators (*E. coli* – Pollutant-caused impairment) and Low Biological Activity (Low fish).

The review area is within the Southern Iowa Drift Plain (Prior 1991). The Southern Iowa Drift Plain is Iowa's largest physiographic region. Most regional landforms are comprised of Pre-Illinoian tills older than 300,000 years old overlaying Pennsylvanian bedrock. There are four general surfaces associated with this region. The highest landforms (upland summits) are composed of Pre-Illinoian till that was exposed to weathering during the Yarmouth, Illinoian (approximately 130,000–300,000 years ago), and Sangamon (approximately 130,000–30,000 years ago) stages. Below the upland summits is the Late Sangamon Surface, followed on lower portions of hillslopes by a Wisconsinan erosional surface (approximately 30,000–10,500 years ago). These three Pleistocene surfaces are often covered with loess, particularly Peoria Loess, which fell between approximately 12,000 and 25,000 years ago. Holocene (approximately 10,500 years ago–present) alluvial

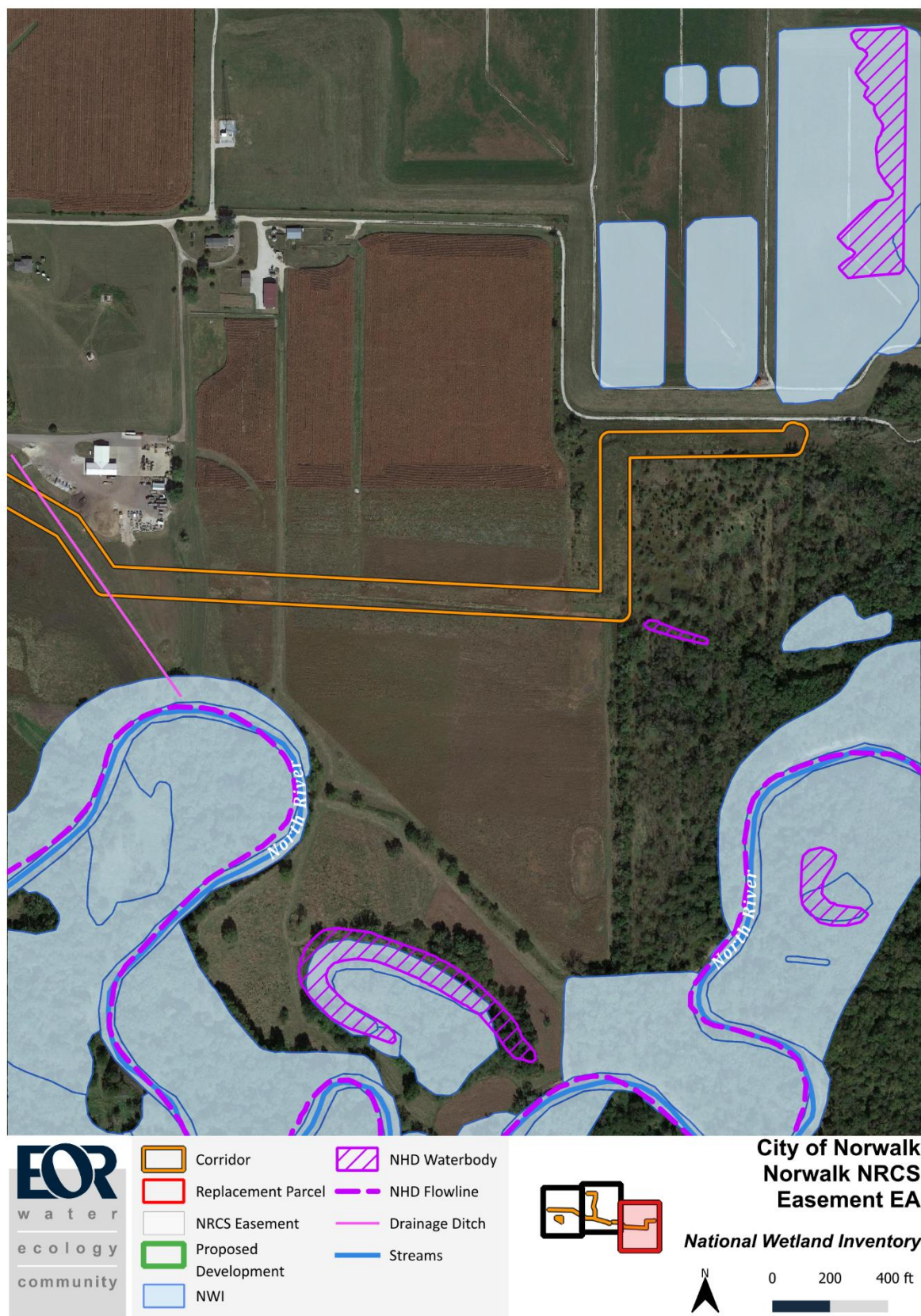


Figure 6. Environmental Overview – East.

landforms are positioned below Pleistocene surfaces and they represent current stream valleys (Prior 1991).

The review area is positioned primarily along the valley floor of the North River. Landform and soil data indicate that the review area resides in upland positions and landforms with soils developed in alluvium. Prior to settlement, vegetative communities would have consisted of wetland and mesic prairie communities, with patches of bottomland hardwood forest present in channel scars, sloughs, and other fluvial features retaining permanent or relatively permanent water. The topography is nearly level to slightly sloping.

Soils are till and loess in upland landscape positions and alluvium along the valley floor and drainageways (NRCS 2020b)(Table 2).

Table 2. – Soils.

Soil	MUM/ Map Symbol	Position	Parent Material	Drainage Class	Hydrologic Soil Group	Hydric Rating
Wiota silt loam, 0-5% slopes	7 7B	Stream terraces	Silty alluvium	Well drained	C	Non-hydric
Zook silty clay loam, 0-2% slopes, occasionally flooded	54	Floodplains	Alluvium	Poorly drained	D	Hydric
Givin silt loam, 0-2% slopes	75	Flats	Loess	Somewhat poorly drained	C/D	Non-hydric
Ladoga silt loam, 2-9% slopes	76B 76C 76C2	Interfluves	Loess	Moderately well drained	C	Non-hydric
Wabash silty clay, 0-2% slopes	172	Floodplains	Clayey alluvium	Very poorly drained	D	Hydric
Wabash silty clay loam	248	Floodplains	Clayey alluvium	Very poorly drained	D	Hydric
Sharpsburg silty clay loam, 2-9% slopes	370B 370C2	Ridges	Loess	Moderately well drained	C	Non-hydric
Armstrong-Gara loams, 9-14% slopes, moderately eroded	993D2	Hillslopes	Red paleosol and underlying subglacial till	Somewhat poorly drained	D	Non-hydric

Soil	MUM/ Map Symbol	Position	Parent Material	Drainage Class	Hydrologic Soil Group	Hydric Rating
Munterville silt loam, 9-14% slopes	1313D	Ridges	Loess	Moderately well drained	C	Non-hydric
Colo, occasionally flooded-Ely silty clay loams, dissected till plain, 2-5% slopes	Y11B	Drainageways	Fine-silty alluvium	Poorly drained	C/D	Hydric
Ely silty clay loam, dissected till plain, 2-5% slopes	Y428B	Alluvial fans	Colluvium	Somewhat poorly drained	C/D	Non-hydric

4. ENVIRONMENTAL CONSIDERATIONS

The following section describes the environmental consequences of Alternative 1 (No-Action Alternative) as compared to Alternative 2 (Preferred Alternative).

4.1. Air Quality and Greenhouse Gas

(*Clean Air Act* [CAA], Sections 176(c) and (d), and 40 CFR Parts 6, 51, and 93)

The CAA, its amendments, and NEPA require air quality impacts be addressed in the preparation of environmental documents. The U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for six “criteria” pollutants:

- Carbon monoxide (CO)
- Nitrogen dioxide (NO₂)
- Ozone (O₃)
- Particulate matter (PM₁₀ and PM_{2.5})
- Sulfur dioxide (SO₂)
- Lead

The NAAQS also define the allowable concentrations that may be reached (but not exceeded) in a given time period to protect human health (primary standard) and welfare (secondary standard) with a reasonable margin of safety.

Primary and secondary standards for NAAQS have been established for most of the criteria pollutants. The EPA is authorized to: 1) designate those locations that have not met the NAAQS as non-attainment (not in compliance/violation of any of the NAAQS for the six criteria pollutants); and 2) classify these non-attainment areas according to their degree of severity. States are required to submit an annual monitoring network plan to EPA. The network plans provide for the creation and maintenance of monitoring stations, in accordance with EPA monitoring requirements specified in 40 CFR Part 58. The State of Iowa’s most recent Monitoring Network Plan was approved by EPA Region 7 in December 2015 (USEPA, 2020a).

Two areas within Iowa have been designated as non-attainment areas under the NAAQS developed under the CAA. These two areas include the 1-hour sulfur dioxide (SO₂) non-attainment area in Muscatine in Muscatine County and the lead non-attainment area in Council Bluffs in Pottawattamie County. Respectively, these two areas are well outside the project area. Warren County is considered an attainment area for all criteria pollutants listed above (Appendix C) (USEPA, 2020b and 2020b).

Neither alternative would require an installation permit, construction permit, operating permit, or indirect sources permit in accordance with the CAA (42 U.S.C. 7400 Section 176 & 171). Any increase in impacts to air quality (including the introduction of greenhouse gases) resulting from construction would be limited to the 10- to 11-month construction period.

Greenhouse gases (GHGs) are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth’s atmosphere. GHGs are both naturally occurring and generated by human activity and include carbon dioxide (CO₂) – the most abundant GHG – methane, nitrous oxide, and other less-common gases. Major GHG sources include transportation, industrial

activities, electric power generation, commercial and residential land uses, and agriculture. Increased atmospheric concentrations of GHGs are considered a main contributor to global climate change.

GHG emissions from the project will result from operation of construction equipment. Emissions from construction equipment emissions were calculated using methods identified in the from the EPA's Greenhouse Gas Emission Factors Hub (<https://www.epa.gov/climateleadership/ghg-emission-factors-hub>). Project construction is estimated to take 220 days to complete and require the use of five diesel construction vehicles per day (two excavators, one skidsteer, one bulldozer, and one tractor). Fuel consumption at an average of four gallons per hour and eight-hour working days was used to calculate total fuel use of 35,200 gallons: Fuel use = days * hours * fuel use per hour * number of vehicles

Emissions were calculated using this equation from the EPA guidance document: Tons CO₂ = fuel use in physical units *CO₂ Emission Factor (kg CO₂/physical unit of fuel use) * conversion of kg to short tons. Emissions rates in Table 3 were retrieved from the Emissions Factors for Greenhouse Gas Inventory (EPA, 2023) for diesel nonroad construction vehicles.

Table 3. GHG Emissions.

CO ₂ (kg/gallon)	CH ₄ (grams/gallon)	N ₂ O (grams/gallon)
10.21	1.01	0.94

Total emissions from construction equipment equate to 408.0 short tons of carbon dioxide equivalents (CO₂e), which were calculated using the appropriate global warming potential (GWP) for each GHG and the appropriate unit conversion factor.

Environmental Effects

The *No Action Alternative* would not affect non-attainment areas regulated under CAA, because no sewer system improvements and upgrades would occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect non-attainment areas regulated under CAA, as it is not within a defined non-attainment area. Air quality would be temporarily impacted during the construction of the new sewer line due to increased dust and engine emissions from construction-related vehicles. Upon completion of the proposed action, air quality would return to its preconstruction condition. The proposed action would have no adverse impact related to GHG emissions and to global climate change, as the pollutant production from equipment would contribute only a small fraction to global greenhouse gas emissions.

Environmental Commitments

Dust-control measures should be incorporated into project plans to minimize fugitive dust during construction.

4.2. Airport Hazards

(Clear Zones and Accident Potential Zones, 24 CFR Part 51D)

The National Plan of Integrated Airport Systems was reviewed for civilian and commercial service airports near the program area, as program sites located within 2,500 feet of a civil airport or 15,000 feet of a military airport would require consultation with the appropriate civil airport operator (Appendix D).

The Des Moines International Airport is approximately 4.9 miles north of the project area. There are no military airports in Iowa.

Environmental Effects

The *No Action Alternative* would not affect airport operations, because no sewer system improvements and upgrades would occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect airport operations, as it is outside the exclusion zone.

Environmental Commitments

BMPs are not proposed.

4.3. Biological Resources

4.3.1. Federally Protected Species

(*Endangered Species Act* [ESA], 50 CFR Part 402)

The ESA was enacted to protect endangered and threatened species and to provide a means to conserve critical habitat. All Federal agencies are mandated to protect species and preserve their habitats by ensuring Federal actions do not jeopardize the continued existence of listed species. When a species is designated as threatened with extinction, a recovery plan includes restrictions on cropping practices, water use, and pesticide use is developed to protect the species from further population declines. All Federal agencies are required to implement the ESA by ensuring Federal actions do not jeopardize the continued existence of listed species.

The USFWS and the National Marine Fisheries Service are mandated the responsibility to ensure other agencies plan or modify Federal projects, so that they would have minimal impact on listed species and their habitats. Section 7 of the ESA requires project areas to be checked against USFWS and State listings of critical habitat and threatened and endangered species.

The ESA defines an endangered species as one in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future. Threatened and Endangered designations may be applied to all species of plants and animals except pest insects. A species may be threatened at the state level. However, that same designation does not automatically apply nationwide, because species numbers may be greater in other states.

The ESA also requires the delineation of the *Critical Habitat* of sensitive species. Critical Habitat is defined by the ESA as areas “essential” to the conservation of listed species. Private, city, and State lands are generally not affected by critical habitat until the property owner needs a Federal permit or requests Federal funding. Consultation with USFWS would be required when *Critical Habitat* is encountered.

Section 7 of the ESA (referred to as Interagency Consultation) is the mechanism by which Federal agencies ensure the actions they take (including those they fund or authorize) do not jeopardize the existence of any listed species. Under Section 7, consultation with USFWS is initiated when any action the agency carries out, funds, or authorizes may affect a threatened and endangered species or critical habitat. This process usually begins as an informal consultation. In the early stages of project planning, a Federal agency approaches USFWS and requests informal consultation. Discussions between the two agencies may include which types of listed species may occur in the proposed action area and what effect the project may have on those species.

If the Federal agency, after discussions with USFWS, determines the Preferred Alternative is not likely to affect any listed species in the review area and if USFWS concurs, the informal consultation is complete and the project moves ahead. If it appears the agency’s action may affect a listed species, that agency may then prepare a Biological Assessment (BA) to assist in its determination of the project’s effect on a species.

When a Federal agency determines (through a BA or other review) its action is likely to adversely affect a listed species, the agency submits a request to USFWS for formal consultation. During formal consultation, the USFWS and NRCS would share information about the project and the species likely to be affected. Formal consultation may last up to 90 days, after which USFWS would prepare a Biological Opinion on whether the activity would jeopardize the continued existence of a listed species. The NRCS would have 45 days after completion of formal consultation to write the opinion.

Using the USFWS’s Information for Planning and Conservation (IPaC) system, five federally threatened or endangered species are listed as having potential habitat in Warren County (Appendix E.1) (USFWS 2020a). The review area is not *Critical Habitat* for any of the five federally protected species. Four federally threatened or endangered species and one candidate species are listed as having potential habitat within this portion of Warren County (Table 4).

Indiana Bat

The Indiana bat (*Myotis sodalis*) is an endangered mammal. Warren County is not within the final defined critical habitat for the species.

The range of the Indiana bat includes much of the eastern half of the United States, including Iowa. Indiana bats migrate seasonally between winter hibernacula and summer roosting habitats. Winter hibernacula include caves and abandon mines. For hibernation, they require cool, humid caves with stable temperatures, under 50° F but above freezing. Very few caves within the range of the species have these conditions. Hibernation is an adaptation for survival during the cold winter months

Table 4. Federally Protected Species under the Endangered Species Act – Warren County, Iowa.

Common Name	Scientific Name	Status	Habitat
Indiana bat¹	<i>Myotis sodalis</i>	Endangered	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in mature upland forests and along corridors during late spring and summer.
Northern long-eared bat¹	<i>Myotis septentrionalis</i>	Endangered	Hibernates in caves, mines - swarming in surrounding wooded areas in autumn. Forages in mature forests and along corridors. Roosts in trees ≥3 inch diameter trees in cracks, crevices, and beneath exfoliating bark during late spring and summer.
Tricolored bat¹	<i>Perimyotis subflavus</i>	Proposed Endangered	Hibernates in caves, mines and culverts - swarming in surrounding wooded areas in autumn. Roosts and forages in mature upland forests and along corridors during late spring and summer.
Mead's milkweed¹	<i>Asclepias meadii</i>	Threatened	Mesic to dry mesic, upland tallgrass prairie, characterized by vegetation adapted for drought and fire. Populations are generally restricted to full sun in late-successional or virgin grassland, though they may also persist in partial shade (edges of glades or barrens which are being encroached upon by woody vegetation).
Monarch butterfly¹	<i>Danaus plexippus</i>	Candidate	Not specified.

¹ Project is not within areas defined as Critical Habitat.

when no insects are available for bats to eat. Bats must store energy in the form of fat before hibernating. During the six months of hibernation the stored fat is their only source of energy. If bats are disturbed or cave temperatures increase, more energy is needed, and hibernating bats may starve.

After hibernation (late March to early April), Indiana bats migrate to their summer habitat in wooded areas where they usually roost under the loose tree bark of several preferred species and on dead or dying trees. Males roost alone or in small groups, while females roost in larger groups of up to 100 bats or more. Indiana bats also forage in or along the edges of forested areas. During this period, the Indiana bat frequents the corridors of small streams with well-developed riparian woods, as well as mature upland forests. It forages for insects along stream corridors; within the canopy of floodplain and upland forest; over clearings with early successional vegetation (old

fields); along the borders of croplands; along wooded fence rows; and over farm ponds in pastures. Females form nursery colonies under the loose bark of trees (dead or alive) and/or cavities, where each female gives birth to a single young in June or July. A maternity colony may include from one to 100 individuals. A single colony may use a number of roost trees during the summer – typically a primary roost tree and several alternates. Some males remain in the area near the winter hibernacula during summer months, but others disperse throughout the range of the species and roost individually or in small numbers in the same types of trees as females.

Disturbance and vandalism of caves, improper cave gates and structures; natural hazards such as flooding or freezing; microclimate changes; land-use changes in maternity range; and chemical contamination are the leading causes of population decline in the Indiana bat.

There are no known hibernacula or roost trees within the project area. Suitable habitat is present within the western edge of the project corridor. This area includes large-diameter trees with concavities and exfoliating or peeling bark and numerous snags. Similar habitat is present in the replacement parcel along the North River. Both areas are assessed as high-quality habitat.

Northern Long-eared bat

The Northern long-eared bat (*Myotis septentrionalis*) is an endangered mammal with no established critical habitat.

The Northern long-eared bat is a forest-dependent species, generally relying on forest features for both foraging and roosting during the summer months (USFWS 2013). In particular, the Northern long-eared bat appears to be a forest interior species that requires adequate canopy closure for both roosting and foraging habitat. The wing morphology of the Northern long-eared bat makes it ideally suited for the high maneuverability required for gleaning-type foraging within a cluttered forest interior. Northern long-eared bats roost singly, or in colonies, underneath bark, in cavities, or in crevices of both live and dead trees. Cooler roost locations such as caves and mines may be used by non-reproductive females and males. In general, these bats are opportunistic in selecting roosts and using tree species that retain bark, provide cavities, or crevices. Rarely, Northern long-eared bats have been found roosting in structures such as barns and sheds; however, structures that may be used for roosting are likely located close to wooded habitat that would be used for foraging. Additionally, riparian areas are considered critical resource areas for many species of bats because they support higher concentrations of prey; provide drinking areas; and act as unobstructed commuting corridors. While Northern long-eared bat is typically associated with forest habitats, they also have been documented in agricultural settings where forest habitats are highly fragmented. Studies in landscapes dominated by agricultural activities have also found that Northern long-eared bat may use woodlots and riparian zones with very few acres of actual forest cover as traveling and commuting habitat.

There are no known hibernacula or roost trees within the project area. Suitable habitat is present within the western edge of the project corridor. This area includes large-diameter trees with snags, concavities, and exfoliating or peeling bark, and it contains numerous snags. Similar habitat is present in the replacement parcel along the North River. Both areas are assessed as high-quality habitat.

Tricolored Bat

The Tricolored bat (*Perimyotis subflavus*) is proposed for listing as an endangered mammal with no established critical habitat.

The Tricolored bat is one of the smallest North American bats, and is distinguishable and named for its tricolored fur, which is dark at the base and tip of each strand and light colored in the middle. This is a forest-dependent species that is believed to prefer roosting habitat within larger contiguous forest habitat and is generally understood to rely heavily on available foraging areas over waterways and forest edge habitat during the summer months (USFWS *n.d.*). During the spring, summer, and fall, tricolored bats primarily roost in leaf clusters of live or recently dead hardwood deciduous trees; however, these bats have also been documented roosting on pine needles and pinecones, in eastern red cedar (*Juniperus virginiana*) trees and in human-made structures such as within barns, beneath porches, bridges, bunkers, and road-associated culverts. These bats have also been documented roosting on lichen and in Spanish moss in the northern and southern portions of its range, respectively. Neither male or female bats typically utilize cave habitats during the summer season, with male bats roosting singly, and females forming maternity colonies. Winter hibernaculum habitat includes caves, mines, tree cavities, abandoned wells, and road-associated culverts in the southern portion of the range where caves are sparse. Both males and females exhibit high roost site fidelity during both summer and winter seasons, returning to the same roosting areas year after year.

Riparian areas are considered critical resource areas for many species of bats because they support higher concentrations of prey; provide drinking areas; and act as unobstructed commuting corridors. While tricolored bats are typically associated with forest habitats, recent research indicates these species are especially dependent on structured forest habitat with natural openings and riparian areas for roosting and foraging area. Studies in landscapes dominated by agricultural activities have also found that many bats may use woodlots and riparian zones with very few acres of actual forest cover as traveling and commuting habitat.

The status of the tricolored bat was proposed to be listed as endangered on September 13, 2022, with an anticipated decision to occur within 12 months. Please note, as of the date of this report, no official federal regulations regarding this species are required.

There are no known hibernacula or roost trees within the project area. Suitable habitat is present within the western edge of the project corridor. This area includes large-diameter trees with snags, concavities, and exfoliating or peeling bark, and numerous snags are present. Similar habitat is present in the replacement parcel along the North River. Additionally, scattered trees of various sizes – mostly less than 5 inches in diameter – occur within the proposed sewer line corridor.

Mead's Milkweed

Mead's milkweed is a threatened species with no defined Critical Habitat.

Mead's milkweed is a long-lived perennial herb that may persist indefinitely in stable habitat of late-successional prairie. Impacts from herbicides have been explicitly noted in species recovery documents. Mead's milkweed currently is known to occur in over 100 sites within 34 counties in

eastern Kansas, Missouri, south-central Iowa, and southern Illinois. The species preferred tall grass prairie habitat has been destroyed in much of its historical range. The primary habitat of Mead's milkweed is mesic to dry mesic, upland tallgrass prairie, characterized by vegetation adapted for drought and fire.

Mead's milkweed populations are generally restricted to full sun in late-successional or virgin grassland. However, plants may also persist in partial shade such as in edges of glades or barrens that are being encroached upon by woody vegetation.

The review area is on the northern edge of the range of a known concentration of the species (EPA 2023). An examination of the historical aerial imagery suggests that the area was used as pasture and forage production through most of the 20th century, with little evidence of any portion of the corridor being intact, undisturbed prairie. The IDNR has no record of the species within the immediate project area.

An examination of the corridor on July 31, 2023, did not identify the species. Three other milkweed species were noted: Common milkweed (*S. syriaca*), Rose milkweed (*S. incarnata*), and butterfly milkweed (*Asclepias tuberosa*).

Monarch Butterfly

Specific habitat requirements have not been defined for this candidate species. Over 20 individuals of this species were noted during the examination of the review area on July 31, 2023.

4.3.2. Migratory Birds

Migratory Birds Treaty Act (MBTA)

ACEP objectives include protecting, restoring, and enhancing wetlands for “migratory bird habitat” and “species of concern” (Title 440 Part 528.100 B. (i)), and the MBTA prohibits harm to the species it protects. The USFWS IPaC identified 11 migratory birds of conservation concern within the proposed project area, though they were not specified in the IPaC document generated for this study.

4.3.3. Bald and Golden Eagles Protection Act

Bald and Golden Eagles Protection Act (BGEPA)

Bald eagles are known to occur within the region, especially along the larger rivers. While no longer listed as a threatened species under the ESA, the project proponent would contact the USFWS for assistance in complying with the BGEPA if a bald eagle is found on or near the project area. No Bald eagles or nests were observed in or near the study corridor during an on-site visit in late July 2023.

4.3.4. State-Protected Species

Iowa's endangered and threatened species law was enacted in 1975. The current law, entitled *Endangered Plants and Wildlife* is Chapter 481B of the Code of Iowa. The Natural Resource Commission and the Director of the IDNR are responsible for administration of Chapter 481B. The IDNR maintains a database of Endangered, Threatened, and species of Special Concern, as well as

significant natural communities (IDNR 2020b). Based on a review of their records, IDNR staff did not identify any species of concerns within the proposed project area.

Endangered species means any species of fish, plant life, or wildlife in danger of extinction throughout all or a significant part of its range. Threatened Species means any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Special Concern means any species about which problems of status or distribution are suspected but not documented. Not protected by the Iowa Threatened and Endangered Species law *per se*, many animal species listed as Special Concern are protected under other state and federal laws addressing hunting, fishing, collecting, and harvesting.

State-protected species present in Warren County are listed by the Iowa Department of Natural Resources Natural Areas Inventory included as Appendix E.2. A record search of the database was requested as part of this review. The IDNR had no records of state-protected species within the review area (Appendix E.3).

No suitable habitat for state- or federally protected species was identified in the potential commercial and industrial site at the southwest corner of Highway 28 and Delaware Street (Dursky 2023).

Environmental Effects

The *No Action Alternative* would not affect state- or federally protected species, because no sewer system improvements and upgrades would occur with the selection of this alternative.

Given the presence of suitable habitat on the western end of the main east/west corridor and within the replacement parcel, the *Preferred Alternative* may not affect – but not adversely affect the Indiana, Northern long-eared, and Tri-colored bats. Other federally (Mead’s milkweed) and state-protected species would not be directly or indirectly affected by the proposed action, as suitable habitat is not present within the proposed corridor. The corridor is dominated by aggressive, invasive grasses, and intact prairie and wetland communities are generally absent. Existing protection through the existing ACEP-WRE easement – which would be expanded to include the replacement parcel – would have a positive affect by protecting potential habitat for a range of species – most notably the three federally protected bat species.

Environmental Commitments

The following BMPs should be integrated into the project plans to minimize or reduce impacting the Indiana, Northern long-eared, and Tricolor bats.

Given the presence of potential bat-preferred trees, any tree clearing activities should be completed during winter hibernation periods, extending from October 1 to March 31 of a given year, to avoid a “take” as defined by the *Endangered Species Act*. Additional survey efforts will likely be required should tree clearing activities fall outside the winter schedule.

The Interim Consultation Framework for the Northern long-eared bat was released on March 23, 2023. This release stated that the Section 4(d) rules are going to be used for the 2023 field season and are therefore valid from March 31, 2023, through April 1, 2024, for any project within a

federal nexus. Section 4(d) has no tree clearing restrictions for the Northern long-eared bat unless there is a known maternity roost tree. If there is a known roost, tree clearing is restricted within 150 feet of the maternity roost during pup-rearing season extending from June 1 through July 31. Revised habitat modification restrictions and/or assessment approaches will likely be required should project activities extend beyond the 2024 breeding season for the Northern long-eared bat.

The status of the Tricolored bat was proposed to be listed as endangered on September 13, 2022, with an anticipated decision to occur within 12 months. Due to the pending federal status of the Tricolored bat, the following recommendations pertaining to the species are therefore optional and are provided to the City for informational purposes. Timing construction activities to occur during winter during bat hibernation is recommended. Revised habitat modification restrictions and/or assessment approaches will likely be required should project activities extend beyond the 2024 breeding season for the Tricolored bat.

In terms of the Monarch butterfly – which is currently listed as a Candidate species – regulatory agencies have not developed BMPs for this species. The following recommendations pertaining to the Monarch butterfly are optional and are provided to the City for informational purposes. Clearing or mowing of observed milkweed within the project footprint prior to the spring season would reduce potential adverse impacts to the species by removing desirable habitat for egg-laying adults. This would reduce potential negative impacts incurred by the project on larval populations. The USFWS encourages all agencies and organizations to take advantage of any opportunity they may have to conserve the species.

4.3.5. Noxious Weeds

(EO 13112, Invasive Species)

Non-native invasive plants are species that have the ability to spread into natural habitats where they can alter plant communities by displacing native species. Non-native invasive plant species are introduced into the United States from other geographic regions, so there are few biological agents to control their populations. “Noxious weeds” are non-native invasive plants designated by state and county weed laws that are injurious to public health, agriculture, recreation, wildlife or any public or private property. In sufficient numbers, they can:

- Reduce biological diversity;
- Increase fire risk;
- Poison humans, wildlife, and livestock; and
- Reduce the quality of forage.

Management of invasive plants is regulated by the *Federal Noxious Weed Act* of 1974, as amended (7 U.S.C 2801 et seq.), requires cooperation with state, local, and other federal agencies in the application and enforcement of all laws and regulations relating to management and control of noxious weeds. Executive Order 13112 (1999) directs federal agencies to reduce the spread of invasive plants. Iowa's noxious weed law is included in Chapter 317 of the Iowa Code.

Environmental Effects

The *No Action Alternative* would not result in any additional weed pressures in the immediate study area, as no construction activities would occur with the selection of this alternative.

The *Preferred Alternative* could result in conditions favorable for weed establishment as a consequence of ground clearing and grubbing necessary for construction. Impacts would be limited to the construction right-of-way and replacement easement and would be limited to the duration of construction and re-establishment.

Environmental Commitments

Restoration should be consistent with the requirements for vegetation management found in Part III, sections B and D of the 2018 conservation easement (see Appendix A). The following BMPs should be incorporated into the final project design:

- Disturbed ground should be reseeded as soon as possible with an appropriate seed mix meeting current specifications.
- Current agricultural ground within the replacement easement should be seeded using a native “ecotype” seed mix to match on-site conditions (soil type, hydrological conditions, and other factors).

4.3.6. Coral Reefs

There are no coral reefs in Iowa.

Environmental Effects

The *No Action Alternative* would not affect coral reefs, because no sewer system improvements and upgrades would occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect coral reefs, as coral reefs are absent in Iowa.

Environmental Commitments

BMPs are not proposed.

4.4. Coastal Zone Management

(*Coastal Zone Management Act [CZMA]*, Sections 307(c) and (d))

CZMA is the main Federal law that applies to the management of a nation’s coastal resources. CZMA established the planning and management program for U.S. coastal land and water resources and directs Federal agencies to preserve, protect, develop, and (where possible) restore or enhance the resources of the nation’s coastal zone. Coastal zones include coastal waters, adjacent shore land, islands, transitional and intertidal areas, marshes, wetlands, and beaches.

No coastal zone management zones or programs are in Iowa, as detailed in information provided by the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management (NOAA, 2020).

Environmental Effects

The *No Action Alternative* would not affect coastal management zones, because sewer system improvements and upgrades would not occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect any coastal management zones, as coastal management zones are absent in Iowa.

Environmental Commitments

BMPs are not proposed.

4.5. Contamination and Toxic Substances

(*Resource Conservation and Recovery Act [RCRA]*, 24 CFR Part 58.5(i)(2))

As defined by the RCRA, hazardous wastes are defined as a solid waste (or combination of solid wastes) that: 1) causes or significantly contributes to an increase in mortality; 2) increases serious irreversible or incapacitating reversible illness; or 3) poses a substantial hazard or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed. Hazardous materials and wastes are regulated in Iowa through a combination of Federal and State laws. Federal regulations governing the assessment and disposal of hazardous wastes include RCRA, the RCRA Hazardous and Solid Waste Amendments, Comprehensive Environmental Response, *Compensation and Liability Act*, *Solid Waste Act*, and *Toxic Substances Control Act*.

No Contaminated, Underground Storage Tank (UST), Leaking Underground Storage Tank (LUST), Tier 2 Chemical Storage Facilities, National Priority Sites (Super Fund), or National Non-Priority Sites (Brownfields) are reported with the study corridor or proposed replacement parcel (IDNR, 2020c, 2020d, 2020e, and 2020f; USEPA 2020b and 2020c).

A Phase I Environmental Site Assessment conducted for the project concluded that there are no recognized environmental conditions, historical recognized environmental conditions, or controlled recognized environmental conditions on the review area (Appendix F).

Environmental Effects

The *No Action Alternative* would not affect contaminated or toxic sites or produce any hazardous waste, because no sewer system improvements and upgrades would occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect contaminated or toxic sites or produce any hazardous waste, as evidenced by the absence of recognized environmental conditions, historical recognized environmental conditions, or controlled recognized environmental conditions. A Phase I Environmental Site Assessment for the potential commercial and industrial developed at the southwest corner of Highway 28 and Delaware Avenue identified asbestos in the farmstead on the northeast corner of the property. The farmstead would not be removed as part of this potential development.

Environmental Commitments

If a hazardous substance is discovered during construction activities, the IDNR should be contacted at 712.262.4177. Work within the sensitive area should not resume until IDNR personnel indicate no further assessment is needed.

4.6. Environmental Justice

(EO 12898)

Title VI of the *Civil Rights Act* of 1964 (Title VI) ensures that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, national origin, age, sex, and disability (42 USC 2000d et seq.). EO 12898 on environmental justice directs that programs, policies, and activities do not result in a disproportionately high and adverse human health or environmental effect on minority and low-income populations (59 FR 7629).

In 2022, Norwalk is home to 14,177 people and 4,818 households according to the U.S. Census Bureau. Median home value is \$91,610 (2022). The Norwalk has a relatively homogenous population dominated by *White alone* (95.9 percent). Represented minorities include *Black or African American alone* (1.3 percent), *Native Hawaiian or Other Pacific Islander alone* (0.5 percent), *Hispanic or Latino* (1.9 percent), and *Two or More Races* (2.1 percent). This evaluation was conducted to ensure that no minority and/or low-income population in the area were disproportionately affected due to activities from this project.

As defined in Executive Order 12898 and CEQ guidance, a minority population occurs where one or both of the following conditions are met within a given geographic area:

- The American Indian, Alaskan Native, Asian, Pacific Islander, Black, or Hispanic population of the affected area exceeds 50 percent.
- The minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

A minority population also exists if more than one minority group is present and the aggregate minority percentage meets one of the above conditions. The selection of the appropriate unit of geographic analysis could be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit (Note that the Hispanic/Latino population is a multi-racial group, which may overlap with other minority groups.).

Executive Order 12898 does not provide criteria to determine if an affected area consists of a low-income population. For this assessment, the CEQ criteria for defining a minority population has been adapted to identify whether or not the population in an affected area constitutes a low-income population. An affected geographic area is considered a low-income population (or below the poverty level, for purposes of this analysis) where one or both of the following conditions are met within a given geographic area:

- The poverty rate of the total population is above 50 percent.

- The percentage of individuals in poverty is meaningfully greater than in the general population or other appropriate unit of geographic analysis.

Both Norwalk (5.9 percent) and Warren County (7.2 percent) have a lower minority population lower than and Iowa (16.3 percent). Norwalk (4.0 percent) and Warren County (5.4 percent) also have a lower percentage of its population below the poverty level than the state average of 11.0 percent. A summary of the population demographics is shown in Table 5. This demographic information was confirmed using the USEPA's environmental justice tool available on their website (<https://www.epa.gov/ejscreen>). This tool identifies environmental justice communities and their associated demographics (Appendix G).

Table 5. Demographic Information for Norwalk, Warren County, and Iowa (2022).

Category	Norwalk	Warren County	Iowa
Total Population	14,166	54,327	3,200,517
Under 18 years	28.8%	24.2%	22.6%
Under 5 years	6.3%	5.7%	5.8%
White (not Hispanic or Latino percent)	94.1%	92.8%	83.7%
Black or African American	1.3%	1.2%	4.4%
American Indian and Alaska Native	0.0%	0.3%	0.6%
Asian	0.5%	0.9%	2.8%
Native Hawaiian and Other Pacific Islander	0.0%	0.1%	0.2%
Hispanic or Latino¹	1.9%	3.7%	6.9%
Two or more races	2.1%	1.6%	2.2%
High School Graduate and Higher	98.3%	95.8%	92.8%
Bachelor's Degree or Higher	40.0%	32.3%	29.7%
Median Household Income	\$91,610	\$85,189	\$65,429
Below Poverty Level	4.0%	5.4%	11.0%

¹ – Hispanics can be any race and are included in applicable race categories

In terms of social justice and evaluating potential impacts, it was analyzed if construction of the recommended alternative would have a disproportionate impact to minorities, low-income households, or children (or under the age of 18). To evaluate potential disproportional impacts to minority populations or to low-income households, socioeconomic data from Iowa was compared to socioeconomic data for Norwalk and Warren County. Additionally, the EPA's environmental

justice screening and mapping tool was consulted to determine if the review area was in an environmental justice census block.

Approximately 5.9 percent of the population in Norwalk and 7.2 percent in Warren County are comprised of minority individuals. This does not exceed the minority population of the Iowa (11.0 percent). In terms of poverty, 4.0 percent of households in Norwalk and 5.4 percent in Warren County are below the poverty line compared to 11.0 percent for the state. Lastly, approximately 28.2 percent of the population of Norwalk and 24.2 percent of the population of Warren County are children under the age of 18, which is slightly higher than the state average of 22.6 percent. Neither Norwalk nor Warren County appear to have a disproportionate number of minority individuals, households below the poverty line, or children under the age of 18 in relation to the state. No minority or disadvantage community or population would be relocated or displaced by the NRSSI project.

Environmental Effects

The *No Action Alternative* would not affect any low-income or minority communities or individual households, because no sewer system improvements and upgrades would not occur with the selection of this alternative.

The *Preferred Alternative* would not significantly alter the demographic characteristic of the community; would not disproportionately impact low-income or minority populations or the public in general; would not displace any individuals or families; and would not significantly increase or decrease employment opportunities. This alternative would have a positive impact for the greater community and inherently for vulnerable (minority and low-income) populations by providing a newer and safer sanitary sewer system.

Environmental Commitments

BMPs are not proposed.

4.7. Farmland Protection

(Farmland Protection Policy Act [FPPA], 7 CFR Part 658)

The FPPA was enacted in 1981 (P.L. 98-98) to minimize the unnecessary conversion of farmland to nonagricultural uses as a result of Federal actions. In addition, the act seeks to ensure that Federal programs are administered in a manner that would be compatible with State and Local policies and programs that have been developed to protect farmland. The policy of the NRCS is to protect significant agricultural lands from conversions that are irreversible and that result in the loss of essential food and environmental resources. The NRCS has developed criteria for assessing the efforts of Federal actions on converting farmland to other uses, including Farmland Conversion Impact Rating form AD-1066 that documents a site-scoring evaluation process to assess its potential agricultural value. In accordance with Section 1541 of the FPPA, the alternatives were reviewed for potential impacts on prime farmlands (Table 6).

Table 6. Farmland Classification.

Soil	Farmland Classification	Hydrologic Soil Group	Hydric Rating
Wiota silt loam, 0-5, 0-2% slopes	Prime farmland	C	Non-hydric
Zook silty clay loam, 0-2% slopes, occasionally flooded	Prime farmland if drained	D	Hydric
Ladoga silt loam, 2-9% slopes	Prime farmland	C	Non-hydric
Wabash silty clay, 0-2% slopes	Prime farmland if drained	D	Hydric
Wabash silty clay loam	Prime farmland if drained	D	Hydric
Sharpsburg silty clay loam, 2-5% slopes	Prime farmland	C	Non-hydric
Munterville silt loam, 9-14% slopes	Not prime farmland	C	Non-hydric
Ely silty clay loam, dissected till plain, 2-5% slopes	Prime farmland	C/D	Non-hydric
Givin silt loam, 0-2% slopes	All areas are Prime farmland	C/D	Non-hydric
Armstrong-Gara loams, 9-14% slopes, moderately eroded	Farmland of statewide importance	D	Non-hydric
Colo, occasionally flooded-Ely silty clay loams, 2-5% slopes	Prime farmland if drained	C/D	Hydric

Based on review of historical aerial photographs, the review area has been used primarily for agricultural production (including pasturage and forage production) since at least the late 1930s.

The Des Moines metropolitan area – including the areas in and around Norwalk – have experienced major development of the past 15 to 20 years. This development has resulted in the conversion of prime agricultural ground to residential and commercial uses. According to the 2022 Census of Agriculture, over 25,880,000 acres of land in Iowa were devoted to agricultural production, with a 2.5 percent decrease in the total since 2017. Between 2001 and 2016, an estimated 77,200 acres of cropland was lost to development in Iowa (American Farmland Trust 2024).

Prime farmland soils, as defined by the USDA, are those soils that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and are available for agriculture. They have the quality, growing season, and moisture supply needed to economically produce sustained high yields of crops. Prime farmland soils may be in use as cropland, pastureland, range land, forestland, or other uses, but do not include soils under urban or built-up areas.

The conversion of these soils to industrial and other nonagricultural uses essentially precludes farming them in the foreseeable future. Continued conversion of prime farmland to nonagricultural uses prompted enactment of the FPPA (FPPA - 7 U.S.C. 4201 et seq.). This act requires all federal agencies to identify prime farmland proposed to be converted to nonagricultural use and evaluate the impact of the conversion. A Farmland Conversion Impact Rating (Form AD-1006) is used to determine whether a site is farmland and subject to the FPPA. The impact rating is based on soil characteristics, as well as site assessment criteria, such as agriculture and urban infrastructure, support services, farm size, compatibility factors, on-farm investments, and potential farm production loss to the local community and county.

A Farmland Conversion Impact Rating was conducted by the NRCS to determine impacts to prime farmland on the proposed project area.

The proposed sewer line corridor is expected to convert approximately 4.0 acres of farmland. The total amount of prime farmland in question represents less than 0.001% of the farmland in Warren County. The NRCS assessed the Land Evaluation of the converted acreage at 70.8 out of 100 points. The Corridor Assessment returned a score of 16.0 out of 160 (see Appendix G). The total points assessed for this analysis are 86.8. According to the criteria stated in FPPA regulations (7 CFR 658.4(c)(2)), because this site received a total score of less than 160, no further consideration for protection is necessary. The proposed replacement parcel is expected to convert approximately 4.2 acres of farmland. The total amount of prime farmland in question represents less than 0.001% of the farmland in Warren County. The NRCS assessed the Land Evaluation of the converted acreage at 61.2 out of 100 points. The Site Assessment returned a score of 16.0 out of 160 (Appendix H.1). The total points assessed for this analysis are 77.2.

The proposed commercial and industrial development at the southwest corner of Highway 28 and Delaware Avenue includes approximately 71.9 percent soils classified as Prime Farmland and 25.4 percent classified as Statewide or Local Important Farmland. The NRCS assess the Land Evaluation of the converted acreage at 61.2 out of 100 points. The Site Assessment returned a score of 60. Out of 160 points. The Total Points was calculated at 121.2 out of 260 points, which is not considered significant (Appendix H.2).

According to the criteria stated in FPPA regulations (7 CFR 658.4(c)(2)), because both the corridor and replacement parcel both received total scores of less than 160, no further consideration for protection is necessary.

Environmental Effects

The *No Action Alternative* would not affect significant or important agricultural land, because no sewer system improvements and upgrades would not occur with the selection of this alternative.

Based on a review of soil types present within the project corridor and replacement parcel and the intensity and duration of potential effects, the NRCS determined that the *Preferred Alternative* would not affect agricultural potential. Impacts would be negligible and limited to the project corridor. Using BMPs, areas along the corridor could be farmed in the future once the corridor has been restored after construction.

Development of the potential commercial and industrial development at the southwest corner of Highway 28 and Delaware Avenue would impact less than 0.0001 percent of cropland in Iowa and 0.0007 percent of cropland in Warren County.

Environmental Commitments

Currently excepted BMPs regarding soil separation and reclamation should be incorporated into the project plans.

4.8. Historical and Cultural Resources

(National Historic Preservation Act [NHPA], 36 CFR Part 800)

Cultural Resources are often defined as the tangible remains of past human activity and may include buildings and structures; prehistoric and historic archaeological sites; canals; or landscapes. These non-renewable resources may yield unique information about past societies and environments and provide answers for modern day social and conservation problems. Although many have been discovered and protected, many more remain undiscovered or unprotected.

Federal actions are subject to the review requirements of Section 106 of the NHPA. The review process involves consultation with various agencies, groups and individuals. The goal of consultation is to identify historic properties potentially affected by the undertaking; assess its effects; and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. Historic Properties are those properties that are listed on the National Register of Historic Places (National Register) or are eligible for listing. A property is considered eligible when it meets specific criteria established by the National Park Service (36 CFR Part 63).

Compliance with Section 106 of the NHPA is required since this project requires an Easement Administration Action by the NRCS. Under Section 106 of the NHPA, a Federal agency must consider direct and indirect impacts of any action they fund or permit on properties listed on or evaluated as eligible for listing on the National Register of Historic Places (NRHP). Construction and installation of a structure or practice could impact an archaeological site through earthmoving activities such as trenching, grading, and grubbing. The NHPA implementation regulations are found at 36 CFR 800, Protection of Historic Properties. Compliance with Section 106 of NHPA must be followed in planning for most agency activities where there is some potential to impact a historic property and in the ongoing management of agency resources.

NRCS cultural resource specialists sent the ISHPO a letter on July 1, 2024, initiating the Section 106 review and compliance process for the project. On July 22, 2024, ISHPO staff concurred with the NRCS finding that No Historic Properties Affected for the Alternative 1 corridor. They

did note that Site 13WA247 is immediately outside the project corridor and that it has been previously assessed as not eligible for listing on the National Register (Appendix I).

4.8.1. National Register of Historic Places

Authorized by the NHPA and administered by the National Park Service in collaboration with the Iowa State Historic Preservation Office (ISHPO), Division of Cultural Affairs, the National Register is the official list of the country's historic places worthy of preservation and recognition. Under Section 106 of the NHPA, a federal agency must consider direct and indirect impacts of any action they fund or permit on properties listed on or evaluated as eligible for listing on the National Register (For purposes of Section 106 of the NHPA, a property evaluated as eligible is treated as though it were listed on the National Register.). In Warren County, 12 properties are currently listed on the National Register (NPS 2023a). No National Register property occurs within or in proximity to the project area. Three National Register properties occur within 6 miles of the project area: Summerset United Presbyterian Church, Fort Des Moines Provisional Army Officer Training School, and St. Patrick's Church.

4.8.2. Standing Structures and Buildings

A review of historic maps, historic plat maps, and current aerial orthographic photographs does not show any buildings or structures within or in the proximity to the study area, including any building or structure recorded with the ISHPO.

4.8.3. Archaeological Resources

The entire review area was intensively inventoried for archaeological resources by specialists on May 6-10, 2024. No archaeological resources were identified as a result of the literature review conducted in anticipation of the fieldwork or during the archaeological resources inventory itself. The archaeological resources inventory included a visual inspection of the ground surface and excavation of soil probes and shovel and auger tests to verify soil conditions and the absence of buried soil horizons and archaeological layers (Langseth 2024).

Based on the review of available archival materials, six previous cultural resource surveys have occurred within portions of the project area, and none of these survey efforts identified cultural or archaeological resources within the current project area. However, one of the previous surveys did record an archeological site (Site 13WA247) adjacent to the current corridor. Site 13WA247 is identified as a prehistoric artifact scatter of unknown age (broadly dating to 300 to 14,000 years ago) and historic Euro-American structural remains. The site area was subject to pedestrian survey and subsurface testing during the 2024 investigation. No artifacts or other archaeological indicators were recovered. Because of its limited potential to produce significant information about the region's prehistoric developments, the site was evaluated as not eligible for listing on the National Register when evaluated against Criterion D. No additional work or stipulations were recommended.

The initial archival review of historic maps did not indicate the presence of any potential historic properties within the review area, although aerial photographs suggested the presence of one

potential historic-age building – associated with a nearby farmstead – on the 1938 aerial photograph. No evidence of a potential archaeological site was identified during the 2024 Phase I inventory, as the area has been disturbed through earthmoving associated with development.

Impact7G cultural resource specialists intensively inventoried the proposed commercial and industrial property in 2023. They did not identify any archaeological resources within the proposed development. The Dunn Farmstead was noted as being previously recorded and previously evaluated as not eligible for listing on the National Register (Munson and Haynes 2023). The results, conclusions, and recommendations contained in Munson and Haynes (2023) are incorporated in to this assessment by reference. The methods, results, conclusions, and recommendations presented in Munson and Haynes (2023) are incorporated into this review by reference.

4.8.4. Unmarked Graves and Burials

Chapter 263B of the Iowa Code protects ancient human remains in Iowa. No known cemeteries or unmarked graves were identified during the literature review. The Good Hope Cemetery is located 2.7 miles east of the project area. The intensive archaeological resources inventory of the review area also failed to note any potential cemeteries, mounds, or graves within the project area.

4.8.5. Native American Consultation

In addition to the agencies listed above, the following Tribal agencies were given the same opportunity to identify and or comment on the identification of any historic properties and or culturally sensitive properties and or areas within the scope of the project area. These Tribal agencies are registered with the U.S. Department of Housing and Urban Development's (HUD) Tribal Directory as having interest based on state and county location of the project. As a result, the following seven (n = 7) Tribes/Organizations were contacted:

- Apache Tribe of Oklahoma
- Iowa Tribe of Kansas and Nebraska
- Iowa Tribe of Oklahoma
- Menominee Indian Tribe of Wisconsin
- Sac & Fox Nation of Missouri in Kansas and Nebraska
- Sac & Fox Nation, Oklahoma
- Sac & Fox Tribe of the Mississippi in Iowa

NRCS cultural resource specialists sent these tribal entities a letter on July 1, 2024, inviting them to be consulting parties in the Section 106 review and asking if they had any concerns about the project's potential effect on cultural and archaeological resources of concern to them. On August 29, 2024, a representative of the Peoria Tribe of Indians of Oklahoma offered no objections to the project, but requested that they be notified of any discovery during construction. They accepted the invitation to serve as a consulting party for the project (see Appendix I). None of the Tribal agencies contacted expressed any concerns about impacts to properties of potential

concern or importance to them. Any concerns would be addressed through the Section 106 review and compliance process and would be resolved before the proposed project would be allowed to proceed.

Environmental Effects

The *No Action Alternative* would not affect significant archaeological or cultural resources, because no sewer system improvements and upgrades would not occur with the selection of this alternative.

Based on the literature review; file search results; and the intensive archaeological and cultural resources inventory of the project corridor, which did not identify any archaeological resources, the *Preferred Alternative* would not affect significant or non-significant cultural and archaeological resources.

Because the project would not impact any property or properties currently listed or eligible for listing on the National Register, the NRCS has determined that no historic properties would be affected by the project. The NRCS would consult with its partners at the ISHPO and Tribal Historic Preservation Offices to obtain concurrence with the No Historic Properties Effect finding for this action.

Environmental Commitments

All project activities should be limited to the area covered by the intensive cultural resources inventory.

Should human remains be exposed during the proposed construction, the Iowa Burial Law [Code of Iowa, Sections 263B, 523I.316(6), and 716.5; IAC 685, Chapter 11.1] requires that all work in the vicinity of the find be halted, the remains protected, local law enforcement officials notified, and the Office of the State Archaeologist Bioarchaeology Program Director be notified immediately.

4.9. Water Resources

ACEP objectives include protecting, restoring, and enhancing wetlands for the protection and improvement of water quality and attenuation of floodwater (Title 440 Part 528.100 B (ii) and (iii)). Impacts to water resources relative to laws, regulations, EOs or policies under Alternatives 1 and 2 are discussed below.

4.9.1. Floodplain Management

[24 CFR Part 55, EO 11988]

All Federal actions must meet the standards of EO 11988, Floodplain Management. The purpose of the EO is to avoid incompatible development in floodplain areas. It states, in part, that:

Each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal

activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

Floodplains are lowlands or relatively flat areas adjoining inland or coastal waters, including areas subject to a one percent or greater chance of flooding in any given year. Floodplains serve critical functions and values including:

- dissipating the energy of floods and reducing flood damage downstream;
- storing floodwater that slowly releases water into adjacent streams; and
- maintaining base flows for area streams.

The floodplain is divided into two sections: the floodway which carries most of the flow during a flood event, and the floodway fringe which is an area of very slow-moving water or “slack water.” A floodway is the channel of a river or stream and those portions of the floodplain adjoining the channel that are reasonably required to carry and discharge the 100-year flood. These are high hazard areas of rapidly moving water during times of flood. Regulations are designed to ensure the flow-carrying capacity of a watercourse is not harmfully obstructed and the floodway portion of the floodplain is not used for residential construction. One of the duties of the Floodplain Section, IDNR, is to ensure development that does occur within the 100-year floodplain is reasonably safe from flooding and does not increase flood damage potential.

Norwalk and Warren County participate in the Federal Flood Insurance Program. Most of the project corridor and the replacement parcel is within the 100-year (Zone A) floodplain (Figure 7).

Environmental Consequences

The *No Action Alternative* would not affect any floodplains, because no sewer system improvements and upgrades would occur with the selection of this alternative.

The *Preferred Alternative* would be placed across portions of the defined and regulated 100-year floodplain along the North River. Impacts would be temporary and limited to the area in and immediately outside the construction corridor. Because the sewerline expansion would be buried, it would not alter or impede high-water flow. Project construction may cause short-term, negligible effects to the floodplain. However, upon project completion, the grade will be restored to preconstruction conditions, resulting in no change to the grade. Therefore, the Preferred Alternative would result in no effects to the floodplain.

Environmental Commitments

As project plans are finalized, the City and its consulting engineering and design firm would submit project plans to the IDNR Floodplain Section to determine the need for a floodplain permit. The stipulations required under the floodplain permit would be adhered to and incorporated into the final project design. A request to the Warren County Flood Plain Manager to issue a Flood Plain Permit for the proposed actions would also be made for issuance of a local floodplain permit.

All stipulations and requirements required under the pertinent floodplain permits would be included in the final project design and installation.

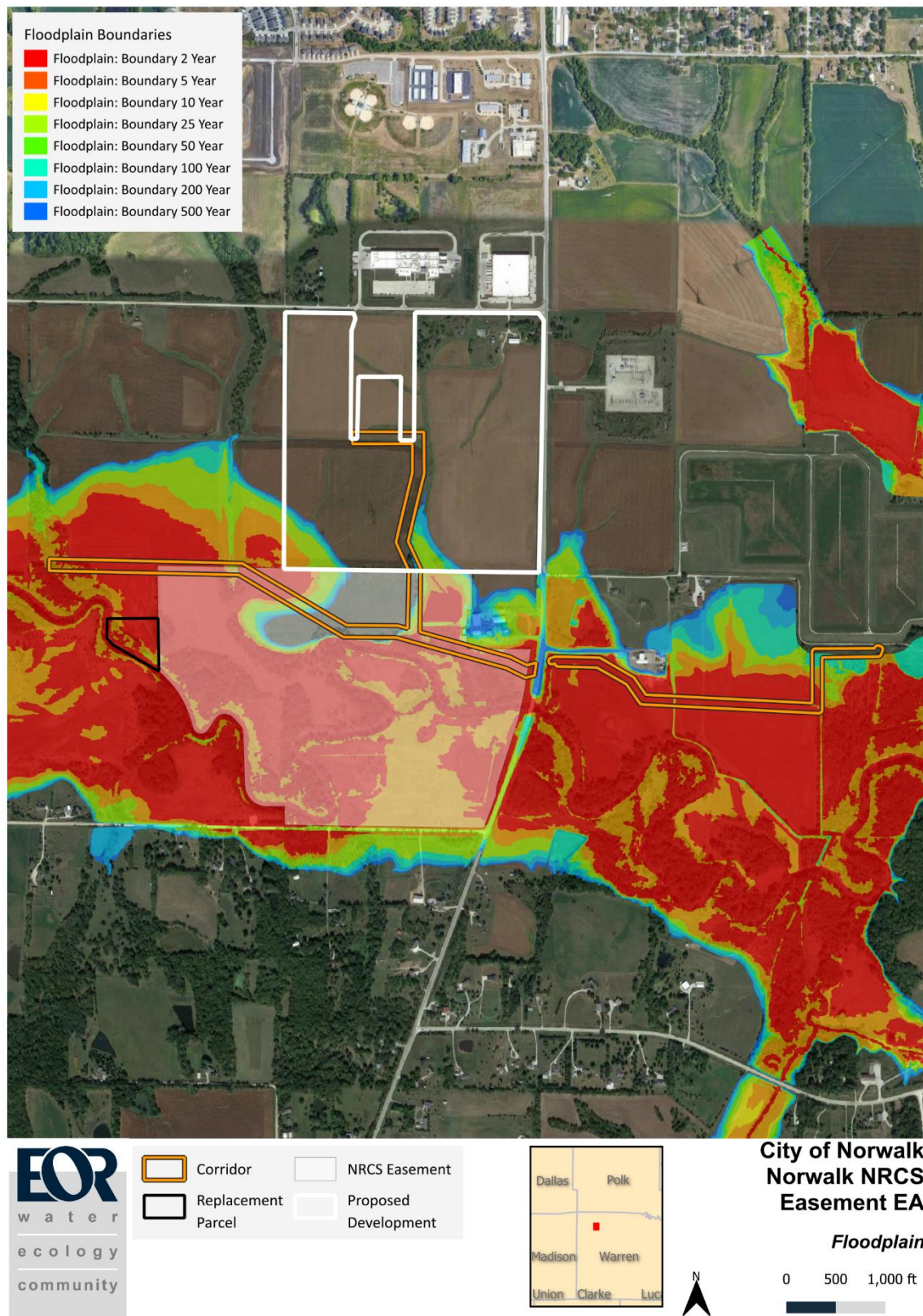


Figure 7. Floodplain.

4.9.2. Water Quality (Sole Source Aquifers)

(*Safe Drinking Water Act* [SDWA], 40 CFR Part 149)

The SDWA requires protection of drinking water systems that are the sole or principal drinking water source for an area and that, if contaminated, would create a significant hazard to public health. The EPA uses Sole Source Aquifer designations as a tool to protect drinking water supplies in areas where alternatives to the groundwater resource are few, cost-prohibitive, or nonexistent. The designation protects an area's groundwater resource by requiring an EPA review of any proposed projects within the designated area receiving Federal financial assistance. All proposed

actions involving new conversion or construction projects receiving Federal funds are subject to review to ensure they do not endanger the water source. There are no sole source aquifers in Iowa (USEPA, 2020a)

Environmental Consequences

The *No Action Alternative* would not affect aquifers regulated under the SDWA, because no sewer system improvements and upgrades would not occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect any aquifers regulated under the SDWA, as regulated aquifers are absent in Warren County.

Environmental Commitments

BMPs are not proposed.

4.9.3. Wetlands and Waters of the United States

(*Clean Water Act* {CWA}, 24 CFR Part 55, EO 11990)

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, bottomland forest, and similar areas.

Over the last 125 years, the rate of wetland loss due to filling and drainage by man has greatly increased. Before World War II, drainage to expand agricultural lands accounted for most of this loss. More recently, wetland destruction has been caused by commercial, industrial, and residential expansion. The estimated 4 to 6 million acres of Iowa wetlands existing in pre-settlement times have now been reduced to less than 500,000 acres. Approximately 95 percent of Iowa's original wetlands have been drained or filled, while many remaining wetlands are no longer representative of original landscape types.

In general, the impacts of agricultural development on Iowa's wetlands are:

- field drainage has eliminated large areas of wetlands;
- erosion and sedimentation from plowed fields have greatly increased water turbidity and eliminated aquatic plants that require clear water;
- nutrient loading has locally reduced oxygen levels, prompted algal blooms, and led to the dominance of species (cattails) that thrive on high nutrient levels;

- heavy agricultural runoff has led to the deposition of rich organic mud in the wet meadows and along the shoreline, favoring the dominance of early successional and weedy species; and
- introduced, aggressive exotic plants have crowded out native plant species and reduced dependent insects and birds.

Wetlands are a significant factor in the health and existence of other natural resources, such as inland lakes, groundwater, fisheries, and wildlife. Ecological services provided by wetlands include:

- Flood and storm control by the hydrologic absorption and storage capacity of wetlands;
- Wildlife habitat by providing breeding, nesting, feeding grounds and cover for many types of wildlife and waterfowl, including migratory waterfowl and rare, threatened, or endangered wildlife species;
- Protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies;
- Pollution treatment by serving as a biological and chemical oxidation basin;
- Erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter; and
- Sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.

Waters of the U.S., including wetlands, waterways, lakes, natural ponds and impoundments, are regulated by the U.S. Army Corps of Engineers (USACE). Under Section 404 of the CWA, a permit is issued by the USACE which authorizes the discharge of dredged or fill material into waters of the U.S. (33 USC 1251 et seq.). EO 11990, Protection of Wetlands, requires Federal agencies to implement “no net loss” measures for wetlands (42 FR 26951). These no net loss measures include a phased approach to wetland impact avoidance, then minimization of impacts if wetlands cannot be avoided, and finally mitigation.

Discharges of dredged or fill material, excavation, and mechanized land clearing in waters of the U.S. requires authorization from the USACE under Section 404 of the *Clean Water Act*. Final authorization for activities in waters of the United States (waters of the U.S.) must be authorized by the USACE’s District Engineer.

An on-site wetland delineation of the corridor and replacement parcel was completed on May 31 and 31, and June 22 and 25, 2023, and May 31, 2024, to confirm the presence or absence of wetland resources identified through the off-site analysis and to define wetland boundaries, if necessary. Soils, vegetation, and hydrology were documented at each sample point and provided in data sheets. Wetland boundaries were determined via consideration of soil, hydrology, vegetation, topography, and professional judgment at paired upland and wetland sample points. Wetland delineations have been conducted in accordance with the USACE’s Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (U.S. Army Corps of Engineers, 2010; referred to as the Regional Supplement) for non-agricultural wetlands and for agricultural wetlands, the National Food Security Act Manual, 5th Addition (United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS), 2010; referred to as NFSAM)

The North River and three unnamed tributaries to the North River are a potential waters of the U.S. and are regulated resources under the CWA.

Wetland specialists identified five wetlands (Wetlands 1-5) within or in the proximity to the review area and potential commercial and industrial development south of Delaware Avenue and west of Highway 28 (Figures 8-10; Table 7) (Dursky 2023; Griggs and Martin 2024). Given the adjacency and connectivity to the North River and its tributaries, all are likely regulated wetland resources under Section 404 of the CWA. Because the project could involve jurisdictional waters of the U.S., project activities could be regulated as impacts to waters of the U.S.

The eastern leg of the corridor south of the lagoon is within an area identified as a 4.0-acre forested mitigation area associated with the original force main sewerline project (CEMVR-OD-P-2007-160). Except for small-diameter nuisance trees, medium- and large-diameter trees are generally absent in this area, and no wetlands were delineated as a result of this review within this area. Impacts in this area will be temporary, and the corridor will be restored to current conditions after the active construction phase of the project has been completed. Additional stipulations may be required. While the proposed work would directly affect the area designated as forested mitigation, the impacts are expected to be temporary and may not require additional mitigation efforts beyond restoration of existing conditions.

Table 7. Summary of Wetlands.

Wetland ID	Size (Acres)	Sampling Point(s)	Circular 39 Wetland Type / Cowardin Wetland Type Wetland Description	WOTUS/ Jurisdictional
WL-1	2.99	S2, S3, S4, and S5	PEM1A – Palustrine emergent at base of pond	Potentially
WL-2	1.29	S7, S8, and S9	PEM1A – Palustrine emergent	Potentially
WL-3	1.40	S12	PF01A – Palustrine forested	Potentially
WL-4	0.50	S14	PEM1Cx – Palustrine emergent in constructed conservation practice	Potentially
WL-5	2.27	RS3	PEM1A	Potentially

A jurisdictional determination of identified resources within the proposed commercial and industrial development and the NRISS project have not been undertaken, as of July 23, 2024. As site plans have not been advanced, wetland and stream impacts cannot be determined. BMPs and site redesign will be used to minimize or eliminate impacts. If unavoidable, purchase of wetland and stream credits would be purchased from an accredited mitigation bank.

Other Concerns

Outstanding Iowa Water is defined as a surface water the IDNR has classified as an outstanding state resource because of its high-water quality standard. No Outstanding Iowa Water has been designated within the study area.

Environmental Consequences

The *No Action Alternative* would not affect wetlands and streams regulated under the CWA, because no sewer system improvements and upgrades would occur with the selection of this alternative.

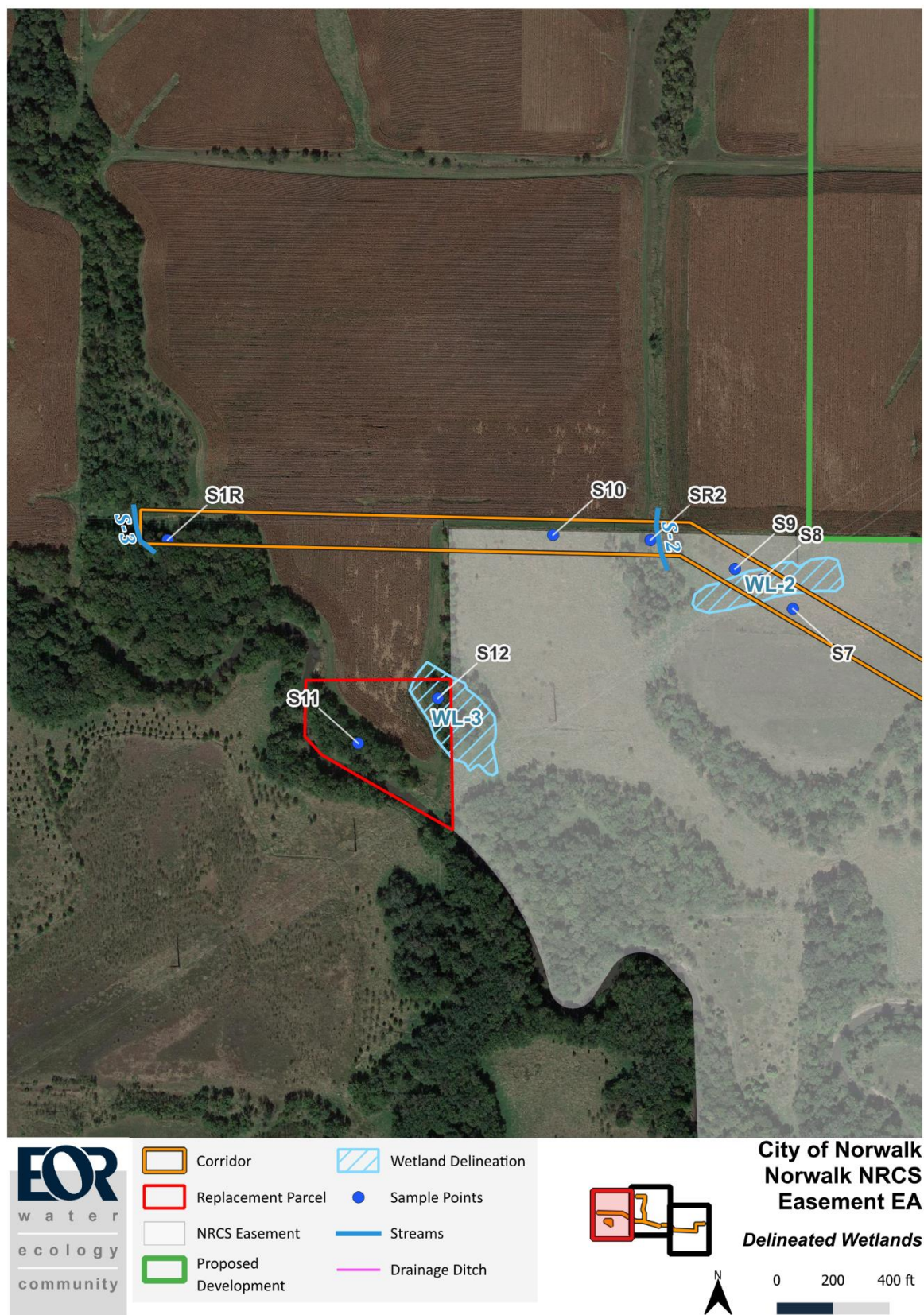


Figure 8. Waters of the U.S. and Wetlands -- West.

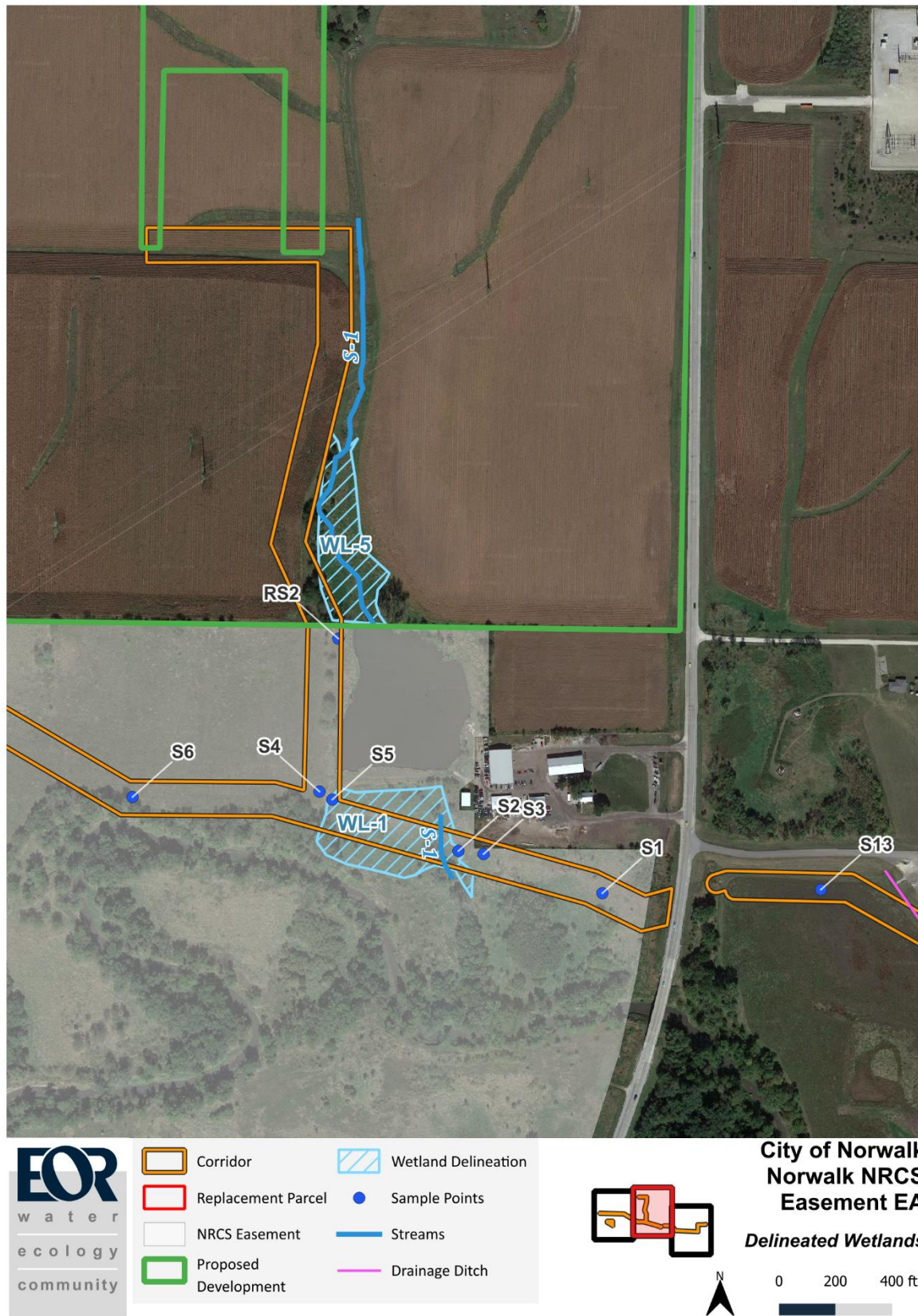


Figure 9. Waters of the U.S. and Wetlands -- Center.

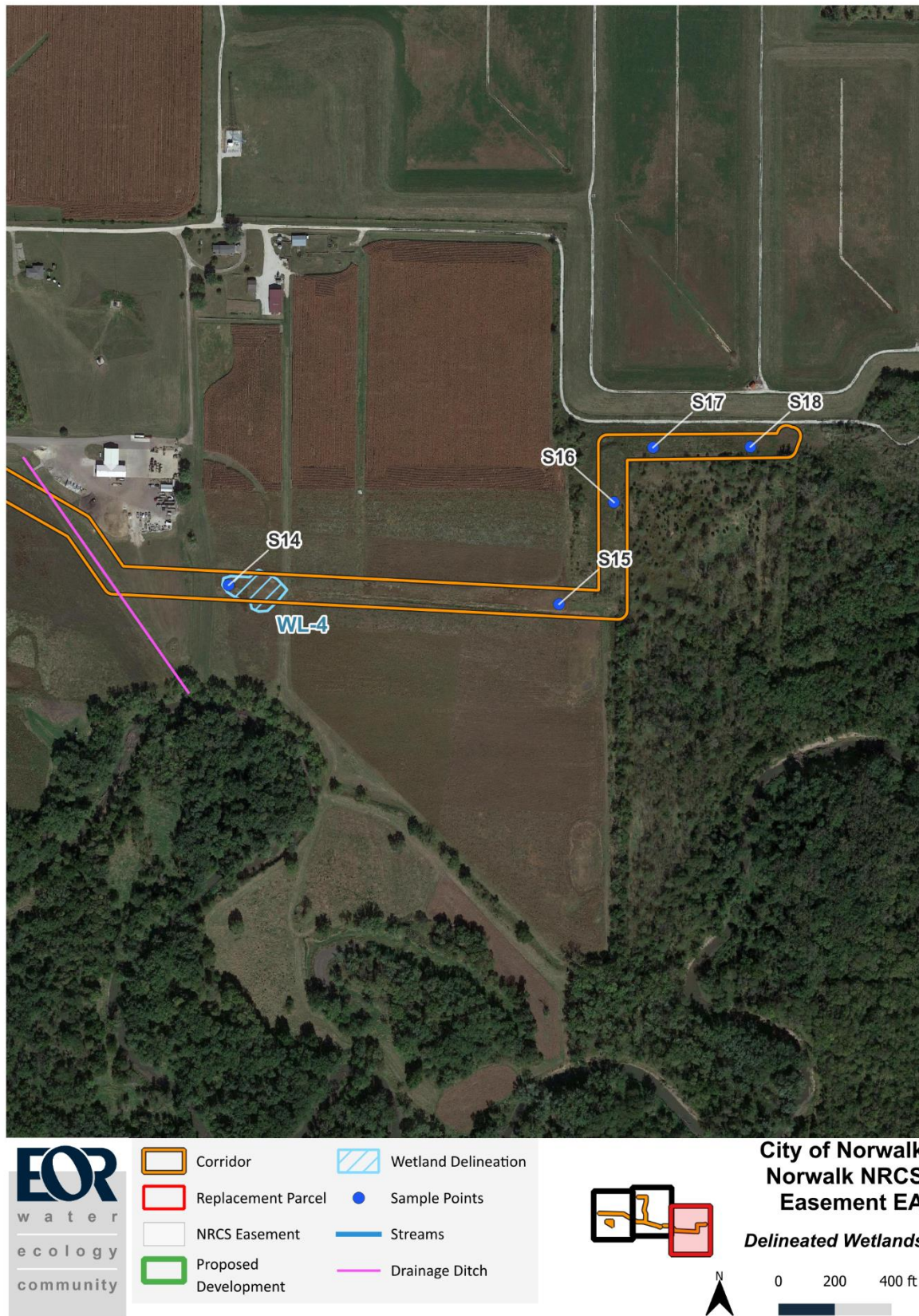


Figure 10. Waters of the U.S. and Wetlands -- East.

Portions of three wetlands and two stream crossings could be affected by the construction of the force main sewer under the *Preferred Alternative*. A fourth wetland is within the replacement parcel and would not be affected by the proposed action. A fifth wetland is immediately outside the proposed corridor and also would not be affected by construction of the Preferred Alternative. As project plans are not finalized and some effort would be made to reduce or eliminate wetland impacts, the amount of wetland impacts cannot be determined. Because the project corridor would be reclaimed to pre-construction conditions, wetland and stream impacts are anticipated to be temporary and within the allowable limits under Nationwide Permit 58 – Utility Line Activities for Water and Other Substances. A Preconstruction Notification would be submitted the Regulatory Office, Rock Island District, USACE.

If permanent wetland impacts can be kept under 0.10 acres, project activities and impacts fall within the defined perimeters of Nationwide Permit 58 – Utility Line Activities for Water and Other Substances; further USACE notification and authorization would not be required. If project impacts include 0.11 to 0.50 acres of wetlands, compensatory mitigation would be required under the CWA. Impacts greater than 0.51 acres would require compensatory mitigation and issuance by the USACE of an Individual Permit.

The *Preferred Alternative* would also cross over a forest restoration mitigation site along its eastern-most leg south of the treatment lagoons. The USACE would stipulate restoration requirements in the permit issued for the project.

Environmental Commitments

Temporary erosion control measures would be used during construction and the site would be restored to include permanent erosion control measures. Upon completion of construction all disturbed areas (including equipment staging areas) would have been stabilized and restored to their original condition with approved vegetation or other appropriate non-polluting materials. Conditions and stipulations required under Nationwide Permit 58 would be adhered to in the final project design and implementation.

Conditions and stipulations required under Nationwide Permit 58 should be adhered to in the final project design.

4.10. Climate Change

Climate change refers to any significant changes in average climatic conditions (such as mean temperature, precipitation, or wind) or variability (such as seasonality and storm frequency) lasting for an extended period (century or longer). Although some effects of climate change are considered known or likely to occur, many potential impacts are unknown. Climate change science is a rapidly advancing field, and new information is being collected and released continually. Construction activities associated with implementation of the proposed action would contribute to increased greenhouse gases emissions, but such emissions would be short term, ending with the project completion. It is not possible to meaningfully link the greenhouse gases emissions of such individual project actions to quantitative effects on regional or global climatic patterns. Any effects on climate change would not be discernible at a regional scale.

Environmental Consequences

The *No Action Alternative* would not affect the climate, because no sewer system improvements and upgrades would not occur with the selection of this alternative.

The *Preferred Alternative* would not affect the climate, as impacts would be minimal and limited to construction (10 to 11 months). The system is designed to be resilient and to withstand extreme weather and hydrological conditions and events, so environmental exposure stemming from a systems failure is not anticipated. It is estimated that project would generate 370.1 metric tons (or 408.0 short tons) of CO₂e, which is less than 0.001 percent of the 124.22 million metric tons carbon dioxide equivalent generated in Iowa in 2022.

Environmental Commitments

BMPs are not proposed.

4.11. Natural Areas, Scenic Beauty, and Viewsheds

ACEP objectives include protecting, restoring, and enhancing wetlands for the “protection and enhancement of open space and aesthetic quality” (Title 440 Part 528.100 B. (v)) with landowners retaining the rights to quiet enjoyment. Natural areas are land and water units where natural conditions are maintained and they have been designated as “natural areas” by government, foundations, organizations and/or private landowners. No officially designated natural or scenic areas occur near the study corridor.

4.11.1. Wild and Scenic Rivers

(*Wild and Scenic Rivers Act* [WSRA], 36 CFR Part 297)

The purpose of the WSRA is to preserve the free-flowing state of rivers listed in the NWSRS, or under study for inclusion in the NWSRS. This designation is based on a river’s outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Rivers in the NWSRS are classified as wild river areas, scenic river areas, or recreational river areas. The WSRA establishes requirements applicable to water resource projects and protects both the river, or river segments, and the land immediately surrounding them. Section 7 of the WSRA specifically prohibits Federal agencies from providing assistance for the construction of any water resources projects adversely affecting any listed Wild and Scenic River.

Section 5(d) of WSRA requires the NPS to compile and maintain a Nationwide Rivers Inventory (NRI), a registry of river segments potentially qualified as national wild, scenic, or recreational river areas. A river segment may be listed on the NRI if it is free-flowing and has one or more “outstandingly remarkable values.” All agencies are required to consult with the NPS before taking actions that could effectively foreclose wild, scenic, or recreational status for rivers on the NRI.

No activities would occur along a component of the NWSRS or in a river officially designated by Congress as a *study river* for possible inclusion in the NWSRS unless the appropriate Federal agency has determined in writing the proposed activity would not adversely affect the Wild and Scenic River designation or study status. There are no NPS-designated Wild and Scenic Rivers within Iowa.

Nine stream reaches are officially designated in Iowa as a *Study River* (NPS, 2020b). The North River is not a *Study River* (Appendix K).

Environmental Consequences

The *No Action Alternative* would not affect Wild or Scenic Rivers.

The *Preferred Alternative* would not directly or indirectly affect any Wild or Scenic Rivers.

Environmental Commitments

BMPs are not proposed.

4.11.2. National Parks, National Monuments, and Battlefields

Construction would not occur within or in close proximity to any National Parks, National Monuments, or Battlefields per the National Natural Landmarks national registry (NPS, 2020c). The Hebert Hoover Presidential Library located in West Liberty 120 miles east of the review area is the closest National Monument.

Environmental Consequences

The *No Action Alternative* would not affect a National Parks, National Monuments, Battlefields, or other units administered by the National Park Service, because no sewer system improvements and upgrades would not occur with the selection of this alternative.

The *Preferred Alternative* would not directly or indirectly affect any a National Parks, National Monuments, Battlefields, or other units administered by the National Park Service.

Environmental Commitments

BMPs are not proposed.

4.11.3. Wilderness Areas, Recreational Rivers, Lake Shores, and Trails

Construction would not occur in proximity or span any wild and scenic rivers per the National Park Service (NPS, 2020d), lake shores, or recreational trails (INHF 2020).

Environmental Consequences

The *No Action Alternative* would not affect a Wilderness Areas, Recreational Rivers, Lake Shores, and Trails.

The *Preferred Alternative* would not directly or indirectly affect any Wilderness Areas, Recreational Rivers, Lake Shores, and Trails.

Environmental Commitments

BMPs are not proposed.

4.11.4. National Wildlife Refuges

The Neal Smith National Wildlife Refuge is located approximately 20.5 miles northeast of the project corridor. It would not be directly or indirectly affected by the proposed action (USFWS, 2020c).

Environmental Consequences

The *No Action Alternative* would not affect a National Wildlife Refuges.

The *Preferred Alternative* would not directly or indirectly affect any National Wildlife Refuges.

Environmental Commitments

BMPs are not proposed.

4.11.5. Federally Operated lands

No federally owned or operated lands are in or near the review area.

Environmental Consequences

The *No Action Alternative* would not affect federally operated lands.

The *Preferred Alternative* would not directly or indirectly affect any federally operated lands.

Environmental Commitments

BMPs are not proposed.

State-sovereign Lands

No state-owned or protected lands are associated in or near the review area.

Environmental Consequences

The *No Action Alternative* would not affect state-sovereign lands.

The *Preferred Alternative* would not directly or indirectly affect any state-sovereign lands.

Environmental Commitments

BMPS are not proposed.

4.12. Miscellaneous Issues

4.12.1. Environmental Controversy (Aesthetics)

Based on the fact the corridor would be reclaimed to current conditions and grade after the pipe has been installed under the Preferred Alternative, the project would not create any negative aesthetic impact.

Environmental Consequences

The *No Action Alternative* would not affect visual integrity of the surrounding area, because no sewer system improvements and upgrades would occur with the selection of this alternative.

The *Preferred Alternative* would be limited to ground within sewer line corridor and would not directly or indirectly change in the visual landscape. Any impacts would be limited to construction and the reclamation and are expected to be short-term, negligible, and limited to the project corridor.

Environmental Commitments

Restoration of the construction corridor using current BMPs is proposed. Stipulations regarding reclamation and vegetation management in the easement would be adhered to.

4.12.2. Transportation

All construction would be completed using required safe traffic control markings where required. Public transportation would not be unduly affected by the project.

Environmental Consequences

The *No Action Alternative* would not affect traffic along area roadways, because no sewer system improvements and upgrades would occur with the selection of this alternative.

There could be a slight increase in traffic during construction under the *Preferred Alternative*, but that level should abate once construction is completed.

Environmental Commitments

The contractors selected for this project would ensure that appropriate signage is placed along Highway 28 to ensure the public is aware of on-going construction activities. The contractor would also comply with all other safety practices (state and federal) and obtain any necessary permits, including a permit from the Iowa Department of Transportation. BMPs would be used to prevent or minimize the track-out of sediment from the construction site.

4.12.3. Noise, Radio, and Television Interference; Human Health and Safety; Socioeconomic and Community Resources

The project would not unduly disrupt the public livelihood or create excessive noise. Construction under the *Preferred Alternative* would be completed during typical normal daylight hours during normal workdays.

Environmental Commitments

BMPS are not proposed.

4.13. Cumulative Effects

The CEQ's regulations for implementing NEPA require an assessment of cumulative effects during the decision-making process for Federal projects. Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR Part 1508.7). Cumulative effects are considered for both the No Action Alternative and Preferred Alternative (Alternative 2). Cumulative effects were determined by combining the effects of the alternative with other past, present, and reasonably foreseeable future actions.

Two alternatives were evaluated in this EA: (1) a No-action Alternative, and (2) the Preferred Alternative. Table 8 summarizes the potential environmental impacts expected with each of the alternatives. The No-action Alternative would result in no environmental impacts on the environment. The Preferred Alternative could result in minor environmental impacts from the temporary increase in noise; the production of fugitive dust during construction; and impacts to wetlands. However, these impacts would be mitigated by the use of BMPs.

The review area is in a rural, agricultural area in Norwalk and northeast Warren County, Iowa. It is surrounded by agricultural land planted in a bi-annual corn-bean rotation and public and private conservation ground, including the North River ACEP Easement. The project would not impact water quality or quantity; state- or federally protected threatened or endangered species; natural communities; or floodplains. No property listed on, or eligible for listing on the National Register of Historic Places exists within the study area. Tribal organizations were consulted to determine if any impacts would occur to tribal historical and cultural resources. Wetland impacts are anticipated to be less than 0.1 acres and within the perimeters of activities permitted under Nationwide Permit 58 Utility Line Activities for Water and Other Substances.

The human environment would only be minimally impacted by this project, and those impacts would be mitigated by BMPs and design considerations. The project is consistent with local planning and development policies and local ordinances. The public would not be exposed to hazardous substances and electronic magnetic fields as a result of the project. No coastal resources would be affected by the project. The project would not disproportionately impact low-income or disadvantaged groups, and no groups would be dislocated because of the project. It would not put an undue burden on first responders or community cultural facilities or institutions.

Grading would be required under the Preferred Alternative. All land disturbing activities would incorporate erosion, sediment control, and stormwater management BMPs to protect water quality and soil resources. Construction activities would only minimally and temporarily affect air quality due to the creation of dust during soil excavation and transport. Construction activities could also cause a minor amount of noise and would only affect the construction workers that are on the construction site. BMPs would be implemented to minimize dust, noise, erosion, and sediment runoff associated with construction activities. Construction activities would be limited to day-light hours.

The Preferred Alternative is not anticipated to pose a significant cumulative impact on Norwalk, Warren County, or the surrounding region. The environmental and human impacts are minimal or

temporary. Implementation of BMPs and other measures would further mitigate the duration and intensity of all potential impacts. The area would still support important habitat, ecological system functions, and enjoyable aesthetics.

Table 8. Environmental Review Status.

Resources	Resources Present	Effects to Resources	Best Management Practices
Airports	No	No effect	None proposed
Air Quality	No	No effect	BMPs to minimize fugitive dust during construction.
Historic Prop./Cultural Resources	Yes	No effect	Consultation with ISHPO on No Historic Properties Effected findings. In the unlikely event that there are any unanticipated archaeological or cultural discoveries made during construction, the proper agency or agencies (NRCS, ISHPO, Warren County Sheriff), tribes, and nations shall be notified immediately so that the discovery can be properly treated before the resumption of earth-moving activities.
TSA/ESA, Habitat, State Species	Yes	May affect but not likely to adversely affect	BMPs for the Indiana, Northern-long eared, and Tri-colored bats would be integrated in the final project design and project plans. Continued consultation with IDNR and USFWS regarding proposed BMPs for state- and federally protected species, as appropriate.
Water Resources	Yes	No effect	If wetland impacts can be kept under 0.10 acres, project activities would be permitted under Nationwide Permit 58 – Utility Line Activities for Water and Other Substances. If impacts are between 0.11 and 0.50 acres, compensatory mitigation – likely credits obtained from a wetland bank that services the Upper Des Moines River Watershed –

Resources	Resources Present	Effects to Resources	Best Management Practices
			would be purchased. Wetland impacts greater than 0.51 acres would require both compensatory mitigation and an Individual Permit from the USACE. A Preconstruction Notice would be submitted to the USACE for each project component to ensure compliance with the CWA. Loss of existing wetland protected under the easement would be compensated by the acquisition of the 4.3-acre replacement parcel north of the North River. Regulated waters of the U.S. are present. Project activities would likely be permitted under Nationwide Permit 58 – Utility Line Activities for Water and Other Substances issued by the USACE. Conditions and stipulations required under Nationwide Permit 58 should be adhered to in the final project design. Critical area stabilization actions must be taken to prevent any direct or indirect filling or sedimentation of stream, river, or wetland habitats on the easement. The proponent take action to ensure no substances harmful to fish, aquatic wildlife, or vegetation are released into stream, river, or wetland habitats (fuels, adhesives, bonding agents, or other substances).
Floodplains	Yes	No effect	Floodplain permit applications would be submitted to the IDNR

Resources	Resources Present	Effects to Resources	Best Management Practices
			Floodplain Section and Warren County Floodplain manager, if required.
Formally Classified Lands	No	No effect	None present
Weeds	N/A	No effect	Acres offered as replacement for acres removed must be seeded to diverse native prairie habitat cover, meeting a minimum pollinator habitat requirement set forth in the NRCS-Iowa 327 conservation cover standard; Upon completion, any additional area impacted must be immediately replanted to native covers, including native grasses and forbs tolerant of hydric soils and other appropriate materials. Monitor for invasive species and treat with current BMPs if weeds become an issue in these plantings.
Coastal Resources	N/A	No effect	None proposed
Coral Reefs/Protected Aquatics	N/A	No effect	None proposed
Important Farmlands	Yes	No effect	None proposed
Production of Hazardous Waste	No	No effect	If a hazardous substance is discovered during construction activities, the IDNR should be contacted at 712.262.4177. Work within the sensitive area should not resume until IDNR personnel indicate no further assessment is needed.
Environmental Justice Concerns	No	No effect	None proposed
Environmentally Controversial	No	No effect	None proposed
Other Controversial Issues	No	No effect	None proposed
Overall Project Finding	--	No effect	The contractors selected for this project would ensure that appropriate signage is placed along State Highway 28 to ensure the public is aware of on-going construction activities.

Resources	Resources Present	Effects to Resources	Best Management Practices
			The contractor would also comply with all other safety practices (state and federal) and obtain any necessary permits. BMPs would be used to prevent or minimize the track-out of sediment from the construction site.

5. CONCLUSIONS

The No Action Alternative (Alternative 1) would have no impact on environmental resources. The sewerline would not be constructed, and no social, economic, or health-related benefits would occur from this project for Howard County.

The Preferred Alternative (Alternative 2) consists of an approximately 4.12-acres of existing, new, and temporary right-of-way along sewerline expansion of the existing force main and 4.18 acres associated with the replacement parcel designed to mitigate the subordination of the existing conservation easement to the sewerline easement. Alternative 2 was selected as it prevents significant short-term and long-term adverse environmental impacts and meets the stated purpose and need for the project. The selected alternative would not:

- result in significant adverse effects on public health or safety;
- adversely impact any property currently listed on or eligible for listing on the National Register;
- significantly affect historic or cultural resources, parks, public open space, prime farmlands, wetland, wild and scenic rivers, or ecologically critical areas;
- result in impacts on the quality of the human environment which are not controversial;
- pose any highly uncertain outcomes and does not involve unique or unknown risks;
- adversely affect endangered or threatened species or critical habitat to any significant degree;
- impact minority or economic disadvantaged persons or communities; and
- violate Federal, State, or local requirements required for protection of the environment.

The majority of potential impacts associated with Alternative 2 are considered to be negligible and temporary and limited mostly during construction. While evaluated as non-significant, the remaining impacts would be lessened through the implementation of permitting and currently accepted BMPs. The proposed action would result in positive socioeconomic impacts on the immediate area and surrounding community.

If BMPs and regulatory compliance permits and requirements described in this EA are implemented, the analysis performed in this EA concludes that the proposed action would not have a significant adverse impact – either individually, directly, or cumulatively – on the environment.

The easement is being held in perpetuity by NRCS for the purposes restoring and protecting the functions and values of wetlands –wildlife conservation, water quality improvement, floodwater retention, groundwater recharge, open space, aesthetics, and education. NRCS policy also requires that any impacts be minimized to the greatest extent practicable, and that any remaining adverse impacts to be mitigated are by enrollment of other lands providing equal or greater conservation functions and values; no net loss of acres; and not encompass more than 10 percent of the easement area. When all of these factors were considered, as well as the environmental impacts detailed in this EA, the Preferred Alternative meets all of these conditions. By implementing the Preferred Alternative – including the purchase of the 4.18 acre compensatory mitigation area and planting the area with a native “ecotype” seed mix – all benefits of the ACEP easement would remain.

6. AGENCIES AND ASSOCIATED CORRESPONDENCE

The following agencies have been contacted for review and comments regarding the environmental aspects of the Easement Administration Action of the North River ACEP-WRP tract. The agencies were asked to review the project based on the Environmental Review Guide.

U.S. Department of Housing and Urban Development – HUD.GOV

Community Planning and Development - <https://egis.hud.gov/tdat/Tribal.aspx>

Tribal Directory Assessment Tool (TDAT) v2.3

TDAT v2.2 was developed by the Office of Environment and Energy (OEE) to help users identify tribes that may have an interest in the location of a HUD-assisted project and provide tribal contact information to assist users with initiating Section 106 consultation under the NHPA (54 U.S.C. § 300101 et seq.). The following tribes and nations were invited to participate in the Section 106 review process:

Mr. Matthew Tselee, Chairman
Apache Tribe of Oklahoma
P.O. Box 1330
Andarko, Oklahoma 73005

Mr. Tim Rhodd, Chairperson and Mr. Lance Foster, Tribal Historic Preservation Officer
Iowa Tribe of Kansas and Nebraska
3345 Thrasher Road
White Cloud, KS 66094

Mr. Jacob Keyes, Chairman and Ms. Candace Preshall, Tribal Historic Preservation Officer
Iowa Tribe of Oklahoma
335588 East Road
Perkin, OK 74059

Ms. Gina Kakkak, Chairwoman and Mr. David Crignon, Tribal Historic Preservation Officer
Menominee Indian Tribe of Wisconsin
W2908 Tribal Office Loop
Keshena, WI 54135

Ms. Tiauna Carnes, Chairperson
Sac & Fox Nation of Missouri in Kansas and Nebraska
305 North Main Street
Reserve, KS 66434

Mr. Don Abney, Interim Principal Chief and Ms. Sandra Massey, Tribal Historic Preservation Officer
Sac & Fox Nation, Oklahoma
920883 South Highway 99, Building A
Stroud, OK 74079

Ms. Vern Jefferson, Chairwoman and Mr. Johnathan Buffalo, Director, Historic Preservation
Department and Tribal Historic Preservation Officer
Sac & Fox Tribe of the Mississippi in Iowa
349 Meskwaki Road
Tama, IA 52339

Chief Craig Harper
Peoria Tribe of Indians of Oklahoma
118 S. Eight Tribes Trail
Miami, Oklahoma 74354

Impact7G

Jon Reiss
8951 Windsor Parkway
Johnston, Iowa 50131

Iowa Department of Natural Resources

Mr. Seth Moore, Environmental Specialist
502 East 9th Street
Des Moines, Iowa 50319

Iowa State Historic Preservation Office

Ms. Heather Gibb, Interim State Historic Preservation Officer
Iowa State Historical Building
600 East Locust Street
Des Moines, Iowa 50319

Iowa Department of Transportation

Angela Poole, Director
Office of Location and Environment
800 Lincoln Way
Ames, IA 50010

Natural Resources Conservation Service – State Office

Mr. John Paulin, Easement Restoration, Monitoring, and Management Specialist
USDA-NRCS Iowa
210 Walnut
693 Federal Building
Des Moines, Iowa 50309-2174

U.S. Army Corps of Engineers

Kirsten Brown, Biologist/Senior Project Manager
Western Branch, Regulatory Division
US Army Corps of Engineers - Rock Island District
1500 Rock Island Drive
Rock Island, IL 61201-2004

U.S. Fish and Wildlife Service

Information for Planning and Conservation
Illinois-Iowa Ecological Services Field Office
1511 47th Avenue
Moline, Illinois 61265-7022
Consultation Code: 03E18000-2020-SL1-0803

Warren County Planning and Zoning

Lindsey Baughman, Director
301 North Buxton, Suite 210
Indianola, IA 50125

Warren County Emergency Management

Tony Bass, Coordinator
115 N Howard Street, Suite B100
Indianola, IA 50125

6.1. PUBLIC INVOLVEMENT

A public hearing was held concurrently during a session of the Warren County Board of Supervisor's weekly meeting on December 21, 2023. No comments were received at that time. This EA will be available at [News | Natural Resources Conservation Service \(usda.gov\)](https://www.usda.gov/news/natural-resources-conservation-service) for public review and comment, and a copy will also be available for review at the Warren County NRCS Office at 909 E 2nd Avenue in Indianola. Comments should be submitted to John Paulin, Easement Restoration Specialist, USDA-NRCS Iowa, 210 Walnut, 693 Federal Building, Des Moines, IA 50309-2180, 515.323.2237, john.paulin@usda.gov.

7. REFERENCES CITED AND CONSULTED

American Farmland Trust. 2024. Farms Under Threat: Iowa. [Farms Under Threat \(csp-fut.appspot.com\)](https://farmsunderthreat.csp-fut.appspot.com)

Dursky, Tyler. Threatened and Endangered Species Review: Norwalk Certified Site. Letter to Chris Cataldo, Economic Development Specialist, City of Norwalk. July 14, 2023. Letter to the City of Norwalk.

Dursky, Tyler. 2023. Wetland Delineation, Norwalk Certified Site. Technical report prepared by Impact7G.

Griggs, Kevin and Will Martin. 2024. Wetland Investigation Report for the for the Easement Administration Action on an Agricultural Conservation Easement Program - Wetland Reserve Easement (Easement 5461141701K0P) Associated with the North River Interceptor Sanitary Sewer Extension, Warren, County, Iowa. Technical report prepared for the City of Norwalk.

U.S. Environmental Protection Agency. 2023. Factors for Greenhouse Gas Inventories. Available online at: https://www.epa.gov/system/files/documents/2022-04/ghg_emission_factors_hub.pdf.

Iowa Department of Natural Resources (IDNR). 2020a. Topeka Shiner: <https://www.iowadnr.gov/idnr/Fishing/Iowa-Fish-Species/Fish-Details/SpeciesCode/TOP>.

IDNR. 2020b. Iowa Natural Areas Inventory: <https://programs.iowadnr.gov/naturalareasinventory/pages/Query.aspx>

IDNR. 2020c. Contaminated Sites Database: <https://programs.iowadnr.gov/contaminatedsites/pages/search.aspx>

IDNR. 2020d. Facility Explorer: <https://facilityexplorer.iowadnr.gov/FacilityExplorer/>

IDNR. 2020e. Impaired Waters: <http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Monitoring/Impaired-Waters>

IDNR. 2020f. Storage Tank Database: <https://programs.iowadnr.gov/tanks/pages/advanced.aspx>

Iowa Department of Transportation. 2020. Iowa Living Roadway Trust, IRVM Plan Requirements: <https://univnortherniowa.maps.arcgis.com/apps/MapSeries/index.html?appid=08d8183542f44e89bde743610a1443f6>

IDNR. 2022 Iowa Statewide Greenhouse Gas Emissions Inventory Report: https://www.iowadnr.gov/Portals/idnr/uploads/air/ghgemissions/2022_GHG_Report.pdf.

Iowa Flood Center. 2020. Iowa Flood Maps. <http://ifis.iowafloodcenter.org/ifis/newmaps/risk/map/>

Iowa Natural Heritage Foundation. 2020. Iowa By Trails. <http://www.iowabytrail.com/>

Langseth, Jared. 2024. Phase I Archeological Survey of the Proposed North River Interceptor Extension Project, Greenfield and Linn Townships, Warren County, Iowa. Technical report prepared by Bear Creek Archeology – BCA 3337.

Minnesota Department of Natural Resources. 2020. *Emydoidea blandingii*. <https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=ARAAD04010>.

Munson, Gina and John Haynes. 2023. CRM Report 326: Phase I Cultural Resources Investigations for the Proposed Dunn Industrial Certified Site, Norwalk, Warren County, Iowa. Technical report prepared by Impact7G.

National Oceanic and Atmospheric Administration. 2020. Coastal Zone Management Act. <https://coast.noaa.gov/czm/act/>

National Park Service (NPS). 2020a. National Register of Historic Places: <https://www.nps.gov/nr/research/>

NPS. 2020b. Wild and Scenic Rivers: <http://www.nps.gov/rivers>

NPS. 2020c. Find a Park / Iowa: <https://www.nps.gov/state/ia/index.htm>

NPS. 2020d. Rivers for All: <https://www.nps.gov/subjects/rivers/index.htm>

Natural Resources Conservation Service (NRCS). 2020a. Wetland Reserve Program: <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=STELPRDB1049327>

NRCS. 2020b. Soils Website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

Prior, Jean. 1991. *Landforms of Iowa*. University of Iowa Press, Iowa City.

U.S. Fish and Wildlife Service (USFWS). 2020a. Information for Planning and Conservation: <https://ecos.fws.gov/ipac/>

USFWS. 2020b. National Wetland Inventory: <http://www.fws.gov/wetlands/Data/Mapper.html>

USFWS. 2020c. National Wildlife Refuge Locator – Iowa: <http://www.fws.gov/refuges/refugeLocatorMaps/Iowa.html>

USFWS. 2012. Best Management Practice Recommendations for Bridge Replacement Projects in Known Topeka Shiner Regions of IA. https://www.fws.gov/Midwest/endangered/fishes/TopekaShiner/pdf/BMP's%20from%20IA%20bridge%20replacement_general.pdf. Accessed December 2020.

U.S. Army Corps of Engineers (USACE). 2020. RIBITS: Regulatory In-lieu Fee and Bank Information Tracking System: <https://ribits.ops.usace.army.mil/ords/f?p=107:2>

U.S. Census Bureau (USCB). 2017. American Fact Finder. <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkml>

U.S. Environmental Protection Agency (USEPA). 2020a. EJSCREEN: Environmental Justice Screening and Mapping Tool. Website accessed February 2020. <https://www.epa.gov/ejscreen>

USEPA. 2020b. NEPAassist. <http://epa.gov/compliance/nepa/nepassist-mapping.html>, Website accessed February 2020.

USEPA. 2020c. Green Book: Iowa Nonattainment/Maintenance Status for Each County by Year and for All Criteria Pollutants, https://www3.epa.gov/airquality/greenbook/anayo_ia.html,

U.S. Department of Housing and Urban Development (USHUD). 2020. Tribal Directory Assessment Tool: <https://egis.hud.gov/tdat/>

APPENDIX A. SCHLICHTE WETLAND RESERVE PROGRAM DEED

Warren County, Iowa
Recorded: 12/6/2018 at 1:30:25.0 PM
Polly J. Glascock RECORDER
Number: 2018-09579
County Recording Fee: \$112.00
Iowa E-Filing Fee: \$5.09
Combined Fee: \$117.09
Revenue Tax:

Prepared by: Shelley A. Dugan, Easement Specialist, Phone (515) 323-2610
Natural Resources Conservation Service, 210 Walnut Street, Room 693, Des Moines, IA 50309

Return to: David L. Wetsch, Wetsch, Abbott, Osborn, Van Vliet & Pech, P.L.C.
974 73rd Street, Suite 20, Des Moines, IA 50324-1032

Legal description on Exhibit A.

Address for tax statement: No change of ownership – easement only. Current landowners will still be responsible for property taxes.

EXEMPT FROM TRANSFER TAX -- EASEMENT-- IOWA CODE SECTION 428A.2 (17)

U.S. Department of Agriculture
Natural Resources Conservation Service

NRCS-LTP-30
07/2014

**WARRANTY EASEMENT DEED
IN PERPETUITY**

**AGRICULTURAL CONSERVATION EASEMENT PROGRAM
WETLAND RESERVE EASEMENT
EASEMENT NO. 54-6114-17-01K0P**

THIS WARRANTY EASEMENT DEED is made by and between **Jason M. Schlichte and Wynn A. Schlichte, husband and wife**, of 1950 W. Jester Park Drive, Polk City, Iowa 50226 (hereafter referred to as the "Landowner"), Grantor(s), and **the UNITED STATES OF AMERICA** and its assigns, (hereafter referred to as the "United States"), Grantee. The Landowner and the United States are jointly referred to as the "Parties".

The United States of America is acquiring this property by and through the Commodity Credit Corporation (CCC) and the acquiring agency of the United States is the Natural Resources Conservation Service (NRCS), United States Department of Agriculture.

Witnesseth:

Purposes and Intent. The purpose of this easement is to restore, protect, manage, maintain, and enhance the functional values of wetlands and other lands, and for the conservation of natural values including fish and wildlife and their habitat, water quality improvement, flood water retention, groundwater recharge, open space, aesthetic values, and environmental education. It is the intent of NRCS to give the Landowner the opportunity to participate in the restoration and management activities on the Easement Area.

Authority. This easement deed acquisition is authorized by Subtitle H of Title XII of the Food Security Act of 1985, as amended, for the Agricultural Conservation Easement Program - Wetland Reserve Easement.

NOW THEREFORE, for and in consideration of the terms of this mutual obligations and benefits recited herein to each party and the sum of **Seven Hundred Sixty-Four Thousand, Two Hundred Ninety-Six Dollars (\$764,296.00)**, paid to Grantor(s), the receipt of which is hereby acknowledged, Grantor(s) hereby grants and conveys with general warranty of title to the UNITED STATES OF AMERICA and its assigns, (Grantee), in perpetuity, the lands comprising the Easement Area described in Part I and appurtenant rights of access to the Easement Area, but reserving to the Landowner only those rights, title, and interest in the lands comprising the Easement Area expressly enumerated in Part II. It is the intention of the Landowner to convey and relinquish any and all other property rights not so reserved. This easement shall constitute a servitude upon the land so encumbered; shall run with the land for the duration of the easement; and shall bind the Grantor(s), their heirs, successors, assigns, lessees, and any other person claiming under them.

SUBJECT, however, to all valid rights of record, if any.

PART I. Description of the Easement Area. The lands encumbered by this easement deed, referred to hereafter as the Easement Area, are described on a Plat of Survey by Paul R. Herold, recorded on January 29, 2018, as Instrument Number 2018-00686, in the office of the Warren County Recorder. A reduced copy of said Plat of Survey is attached hereto as EXHIBIT A which is appended to and made a part of this easement deed.

TOGETHER with a right of access for ingress and egress to the Easement Area across adjacent or other properties of the Landowner. Such a right-of-way for access purposes is described in EXHIBIT B which is appended to and made a part of this easement deed.

PART II. Reservations in the Landowner on the Easement Area. Subject to the rights, title, and interest conveyed by this easement deed to the United States, including the restoration, protection, management, maintenance, enhancement, and monitoring of the wetland and other natural values of the Easement Area, the Landowner reserves:

- A. **Title.** Record title, along with the Landowner's right to convey, transfer, and otherwise alienate title to these reserved rights.

-
- B. Quiet Enjoyment. The right of the Landowner to enjoy the rights reserved on the Easement Area without interference from others.
- C. Control of Access. The right to prevent trespass and control access by the general public subject to the operation of State and Federal law.
- D. Recreational Uses. The right to undeveloped recreational uses, including undeveloped hunting and fishing and leasing of such rights for economic gain, pursuant to applicable State and Federal regulations that may be in effect at the time. Undeveloped recreational uses may include use of hunting or observation blinds that will accommodate no more than four people and are temporary, non-permanent and easily assembled, disassembled and moved without heavy equipment. Undeveloped recreational uses must be consistent with the long-term protection and enhancement of the wetland and other natural values of the Easement Area.
- E. Subsurface Resources. The right to oil, gas, minerals, and geothermal resources underlying the Easement Area, provided that any drilling or mining activities are to be located outside the boundaries of the Easement Area, unless activities within the boundaries are specified in accordance with the terms and conditions of EXHIBIT C which is appended to and made a part of this easement deed, if applicable. **NONE**
- F. Water rights and water uses. The right to water uses and water rights identified as reserved to the Landowner in EXHIBIT D which is appended to and made a part of this Easement Deed, if applicable. **NONE**

PART III. Obligations of the Landowner. The Landowner shall comply with all terms and conditions of this Easement, including the following:

- A. Prohibitions. Without otherwise limiting the rights of the United States acquired hereunder, it is expressly understood that the rights to carry out the following activities and uses have been acquired by the United States and, unless authorized by the United States under Part IV, are prohibited on the Easement Area:
1. haying, mowing, or seed harvesting for any reason;
 2. altering of grassland, woodland, wildlife habitat or other natural features by burning, digging, plowing, disking, cutting or otherwise destroying the vegetative cover;
 3. accumulating or dumping refuse, wastes, sewage, or other debris;
 4. harvesting wood or sod products;
 5. draining, dredging, channeling, filling, leveling, pumping, diking, impounding, or related activities, as well as altering or tampering with water control structures or devices, except as specifically set forth in EXHIBIT D, if applicable;
 6. diverting or causing or permitting the diversion of surface or underground water into, within, or out of the Easement Area by any means, except as specifically set forth in EXHIBIT D, if applicable;

-
7. building, placing, or allowing to be placed structures on, under, or over the Easement Area; except for individual semi-permanent hunting or observation blinds for undeveloped recreational uses the external dimensions of which will be no more than 80 square feet and 8 feet in height, with the number, locations, and features of blinds approved by NRCS under Part IV;
 8. planting or harvesting any crop;
 9. grazing or allowing livestock on the Easement Area;
 10. disturbing or interfering with the nesting or brood-rearing activities of wildlife including migratory birds;
 11. use of the Easement Area for developed recreation. These uses include but are not limited to, camping facilities, recreational vehicle trails and tracks, sporting clay operations, skeet shooting operations, firearm range operations and the infrastructure to raise, stock, and release captive raised waterfowl, game birds and other wildlife for hunting or fishing;
 12. any activities which adversely impact or degrade wildlife cover or other habitat benefits, water quality benefits, or other wetland functions and values of the Easement Area; and
 13. any activities to be carried out on the Landowner's land that is immediately adjacent to, and functionally related to, the Easement Area if such activities will alter, degrade, or otherwise diminish the functional value of the Easement Area.

B. Noxious Plants and Pests. The Landowner is responsible for noxious weed control and emergency control of pests as required by all Federal, State, and local laws. A plan to control noxious weeds and pests must be approved in writing by the NRCS prior to implementation by the Landowner.

C. Fences. Except for establishment cost incurred by the United States and replacement cost not due to the Landowner's negligence or malfeasance, all other costs involved in maintenance of fences and similar facilities to exclude livestock shall be the responsibility of the Landowner. The installation or use of fences which have the effect of preventing wildlife access and use of the Easement Area are prohibited on the Easement Area, easement boundary, or on the Landowner's land that is immediately adjacent to, and functionally related to, the Easement Area.

D. Restoration. The Landowner shall allow the restoration and management activities NRCS deems necessary for the Easement Area.

E. Access Maintenance. The Landowner is responsible to maintain any non-public portions of the access route described in Exhibit B such that the access route can be traversed by a standard four-wheel all-terrain vehicle at least annually.

F. Use of water for easement purposes. The Landowner shall use water for easement purposes as set forth in EXHIBIT D, which is appended to and made a part of this Easement Deed, if applicable.

-
- G. Protection of water rights and water uses. As set forth in EXHIBIT D, if applicable, the Landowner shall undertake actions necessary to protect any water rights and water uses for easement purposes.
- H. Taxes. The Landowner shall pay any and all real property and other taxes and assessments, if any, which may be levied against the land.
- I. Reporting. The Landowner shall report to the NRCS any conditions or events which may adversely affect the wetland, wildlife, and other natural values of the Easement Area.
- J. Survival. Irrelevant of any violations by the Landowner of the terms of this Easement Deed, this easement survives and runs with the land for its duration.
- K. Subsequent Conveyances. The Landowner agrees to notify NRCS in writing of the names and addresses of any party to whom the property subject to this Easement Deed is to be transferred at or prior to the time the transfer is consummated. Landowner and its successors and assigns shall specifically refer to this Easement Deed in any subsequent lease, deed, or other instrument by which any interest in the property is conveyed.

PART IV. Compatible Uses by the Landowner.

- A. General. The United States may authorize, in writing and subject to such terms and conditions the NRCS may prescribe at its sole discretion, the temporary use of the Easement Area for compatible economic uses, including, but not limited to, managed timber harvest, periodic haying, or grazing.
- B. Limitations. Compatible use authorizations will only be made if, upon a determination by NRCS in the exercise of its sole discretion and rights, that the proposed use is consistent with the long-term protection and enhancement of the wetland and other natural values of the Easement Area. The NRCS shall prescribe the amount, method, timing, intensity, and duration of the compatible use. Compatible use authorizations do not vest any rights in the Landowner and can be revoked by NRCS at any time.

PART V. Rights of the United States. The rights of the United States include:

- A. Management activities. The United States has the right to enter the Easement Area to undertake, on a cost-share basis with the Landowner or other entity as determined by the United States, any activities to restore, protect, manage, maintain, enhance, and monitor the wetland and other natural values of the Easement Area. The United States may apply to or impound additional waters, in accordance with State water law, on the Easement Area in order to maintain or improve wetland and other natural values.

-
- B. Access. The United States has a right of reasonable ingress and egress to the Easement Area over the Landowner's property, whether or not the property is adjacent or appurtenant to the Easement Area, for the exercise of any of the rights of the United States under this Easement Deed. The authorized representatives of the United States may utilize vehicles and other reasonable modes of transportation for access purposes. To the extent practical, the United States shall utilize the access identified in EXHIBIT B. The United States may, in its discretion, conduct maintenance activities on the access route identified in Exhibit B to obtain physical access to the Easement Area for the exercise of any of the rights of the United States under this Easement Deed.
- C. Easement Management. The Secretary of Agriculture, by and through the NRCS, may delegate all or part of the management, monitoring or enforcement responsibilities under this Easement Deed to any Federal or State agencies authorized by law that the NRCS determines to have the appropriate authority, expertise and resources necessary to carry out such delegated responsibilities. State or federal agencies may utilize their general statutory authorities in the administration of any delegated management, monitoring or enforcement responsibilities for this easement. The authority to modify, subordinate, exchange, or terminate this easement under Subtitle H of Title XII of the Food Security Act of 1985 is reserved to the Secretary of Agriculture in accordance with applicable law. If the United States at some future time acquires the underlying fee title in the property, the interest conveyed by this Easement Deed will not merge with fee title but will continue to exist and be managed as a separate estate.
- D. Violations and Remedies - Enforcement. The Parties, Successors, and Assigns, agree that the rights, title, interests, and prohibitions created by this Easement Deed constitute things of value to the United States and this Easement Deed may be introduced as evidence of same in any enforcement proceeding, administrative, civil or criminal, as the stipulation of the Parties hereto. If there is any failure of the Landowner to comply with any of the provisions of this Easement Deed, the United States or other delegated authority shall have any legal or equitable remedy provided by law and the right:
1. To enter upon the Easement Area to perform necessary work for prevention of or remediation of damage to wetland or other natural values; and,
 2. To assess all expenses incurred by the United States (including any legal fees or attorney fees) against the Landowner, to be owed immediately to the United States.

PART VI. General Provisions.

- A. Successors in Interest. The rights granted to the United States shall accrue to any of its agents or assigns. All obligations of the Landowner under this Easement Deed shall also bind the Landowner's heirs, successors, agents, assigns, lessees, and any other person claiming under them. All the Landowners who are parties to this Easement Deed shall be jointly and severally liable for compliance with its terms.

B. Rules of Construction and Special Provisions. All rights in the Easement Area not reserved by the Landowner shall be deemed acquired by the United States. Any ambiguities in this Easement Deed shall be construed in favor of the United States to effect the wetland and conservation purposes for which this Easement Deed is being acquired. The property rights of the United States acquired under this easement shall be unaffected by any subsequent amendments or repeal of the Agricultural Conservation Easement Program. If the Landowner receives the consideration for this easement in installments, the Parties agree that the conveyance of this easement shall be totally effective upon the payment of the first installment.

C. Environmental Warranty. "Environmental Law" or "Environmental Laws" means any and all Federal, State, local or municipal laws, orders, regulations, statutes, ordinances, codes, guidelines, policies, or requirements of any governmental authority regulating or imposing standards of liability or standards of conduct (including common law) concerning air, water, solid waste, hazardous materials or substance, worker and community right-to-know, hazard communication, noise, radioactive material, resource protection, subdivision, inland wetlands and watercourses, health protection and similar environmental health, safety, building and land use as may now or at any time hereafter be in effect.

"Hazardous Materials" means any petroleum, petroleum products, fuel oil, waste oils, explosives, reactive materials, ignitable materials, corrosive materials, hazardous chemicals, hazardous wastes, hazardous substances, extremely hazardous substances, toxic substances, toxic chemicals, radioactive materials, infectious materials, and any other element, compound, mixture, solution or substance which may pose a present or potential hazard to human health or the environment.

Landowner warrants that it is in compliance with, and shall remain in compliance with, all applicable Environmental Laws. Landowner warrants that there are no notices by any government authority of any violation or alleged violation of, non-compliance or alleged non-compliance with or any liability under any Environmental Law relating to the operations or conditions of the Easement Area. Landowner further warrants that it has no actual knowledge of a release or threatened release of Hazardous Materials on, beneath, near or from the Easement Area.

D. General Indemnification. Landowner shall indemnify and hold harmless the United States, its employees, agents, and assigns for any and all liabilities, claims, demands, losses, expenses, damages, fines, fees, penalties, suits, proceedings, actions, and cost of actions, sanctions asserted by or on behalf of any person or government authority, and other liabilities (whether legal or equitable in nature and including, without limitation, court costs, and reasonable attorneys' fees and attorneys' fees on appeal) to which the United States may be subject or incur relating to the Easement Area, which may arise from, but is not limited to, Landowner's negligent acts or omissions or Grantor's breach of any

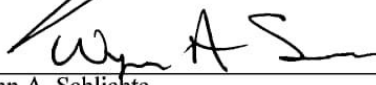
representation, warranty, covenant, or agreements contained in this Easement Deed, or violations of any Federal, State, local or municipal laws, including all Environmental Laws.

TO HAVE AND TO HOLD, this Warranty Easement Deed is granted to the United States of America and its assigns forever. The Landowner covenants that he, she, or they are vested with good title to the Easement Area and will warrant and defend the same on behalf of the United States against all claims and demands. The Landowner covenants to comply with the terms and conditions enumerated in this document for the use of the Easement Area and adjacent lands for access, and to refrain from any activity not specifically allowed or that is inconsistent with the purposes of this Easement Deed.

Dated this 6th day of December, 20 18.

Landowner(s):

) 
) Jason M. Schlichte

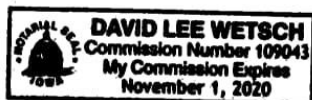
) 
) Wynn A. Schlichte

Notarial acknowledgement in accordance with Iowa Code is required. See next page.

ACKNOWLEDGMENT

State of Iowa)
County of Polk)ss.

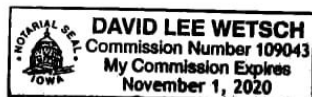
This instrument was acknowledged before me on Dec 6, 2018, by
Jason M. Schlichte.



[Signature]
Notary Public in and for said State

State of Iowa)
County of Polk)ss.

This instrument was acknowledged before me on Dec 6, 2018, by
Wynn A. Schlichte.



[Signature]
Notary Public in and for said State

ACCEPTANCE BY GRANTEE:

I, Kurt Simon, State Conservationist, being the duly authorized representative of the United States Department of Agriculture, Natural Resources Conservation Service, do hereby accept this Warranty Easement Deed with respect to the rights and duties of the United States of America, Grantee.

Dated this 5th day of November, 20 18.

) Kurt Simon, State MS for
) Kurt Simon
) State Conservationist

This instrument was drafted by the Office of General Counsel, U.S. Department of Agriculture, Washington, D.C. 20250-1400.

NONDISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its program and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (1202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 705-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

PRIVACY ACT STATEMENT

The above statements are made in accordance with the Privacy Act of 1974 (U.S.C. 522a). Furnishing this information is voluntary; however, failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other State or Federal Law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

Exhibit B – Page 1 of 1

Access is from a public road and across the following parcel:

Parcel "AB" in the survey of the Northeast Quarter of the
Northwest Quarter of Section 25, Township 77 North, Range 25
West of the 5th P.M., Warren County, Iowa, as shown in Book
2011, Page 1298, in the Office of the Warren County Recorder.

Landowners assign to the United States their rights under a perpetual Easement Agreement between Eric Michael Caligiuri and Debra L. Caligiuri, husband and wife (Grantors), and Jason M. Schlichte (Grantee), filed on March 11, 2011, in Fee Book 2011-1887, and Amended Easement Agreement filed December 12, 2017, as Instrument Number 2017-10580, in the Office of the Warren County Recorder, reserving the rights to use said access for their own purposes.

2018-09579 XE 12/06/2018 01:00:00 PM 2018-09579 of 20

01/28/2018 11:59:48 AM Total Pages: 9
XPS PLAT OF SURVEY
Recording Fee: \$ 47.00
Polly Glascock, Recorder, Warren County Iowa



Index Legend
Prepared by & Returned to: Paul R. Herold, PLS 15525
HRS, LLC - 10 East Main Street, New Hampton IA 50659
County: Warren
Sections: 25 & 26
Township: T77N
Range: R25W
Allot Parts: NW 1/4 section 25 & E 1/2 NE 1/4 Section 26
Proprietor: Jason M. Schlichte
Requested By: Southern Iowa Resource Conservation & Development and the Natural Resources Conservation Service

Exhibit A - Page 1 of 9

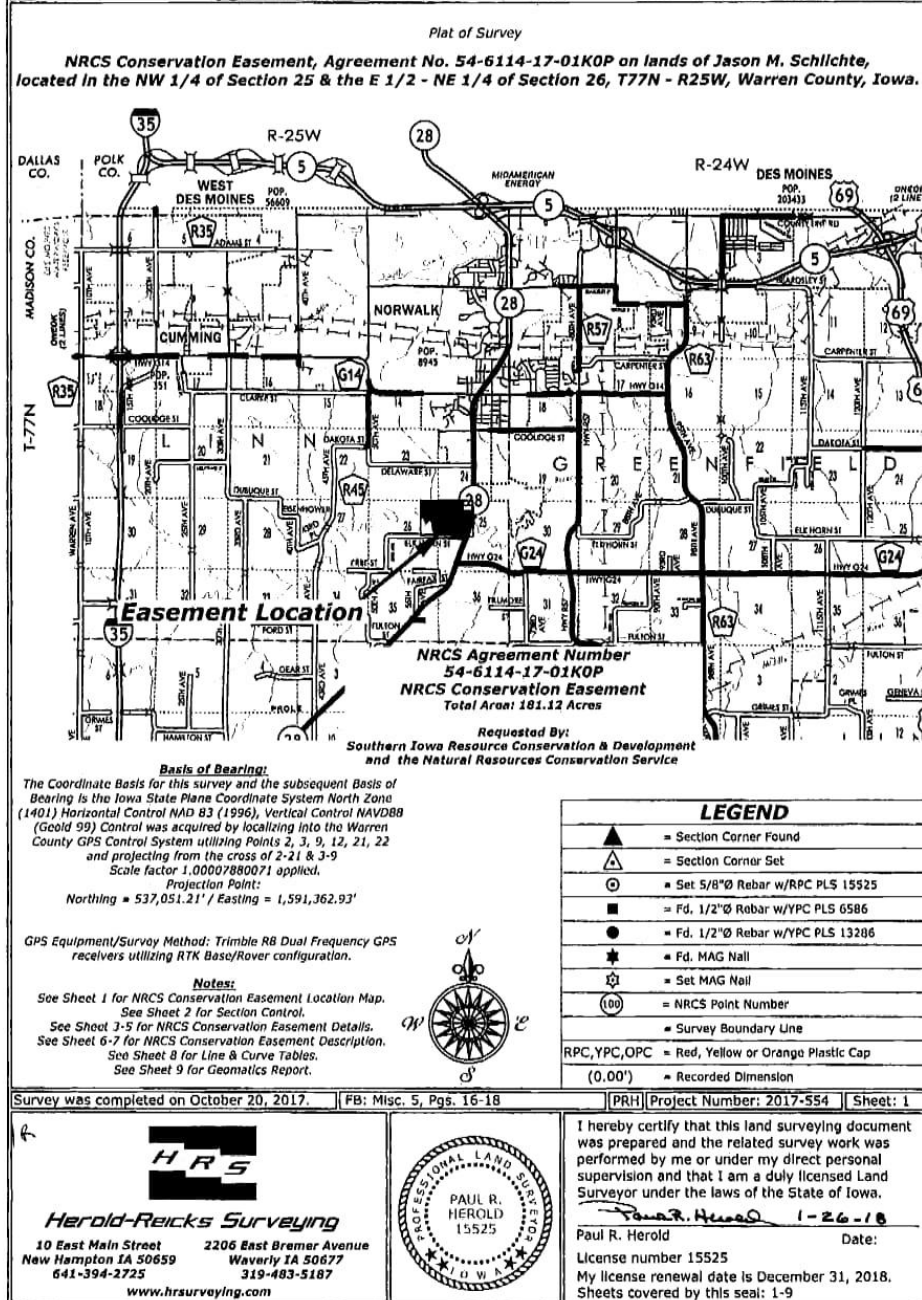


Exhibit A - Page 2 of 9

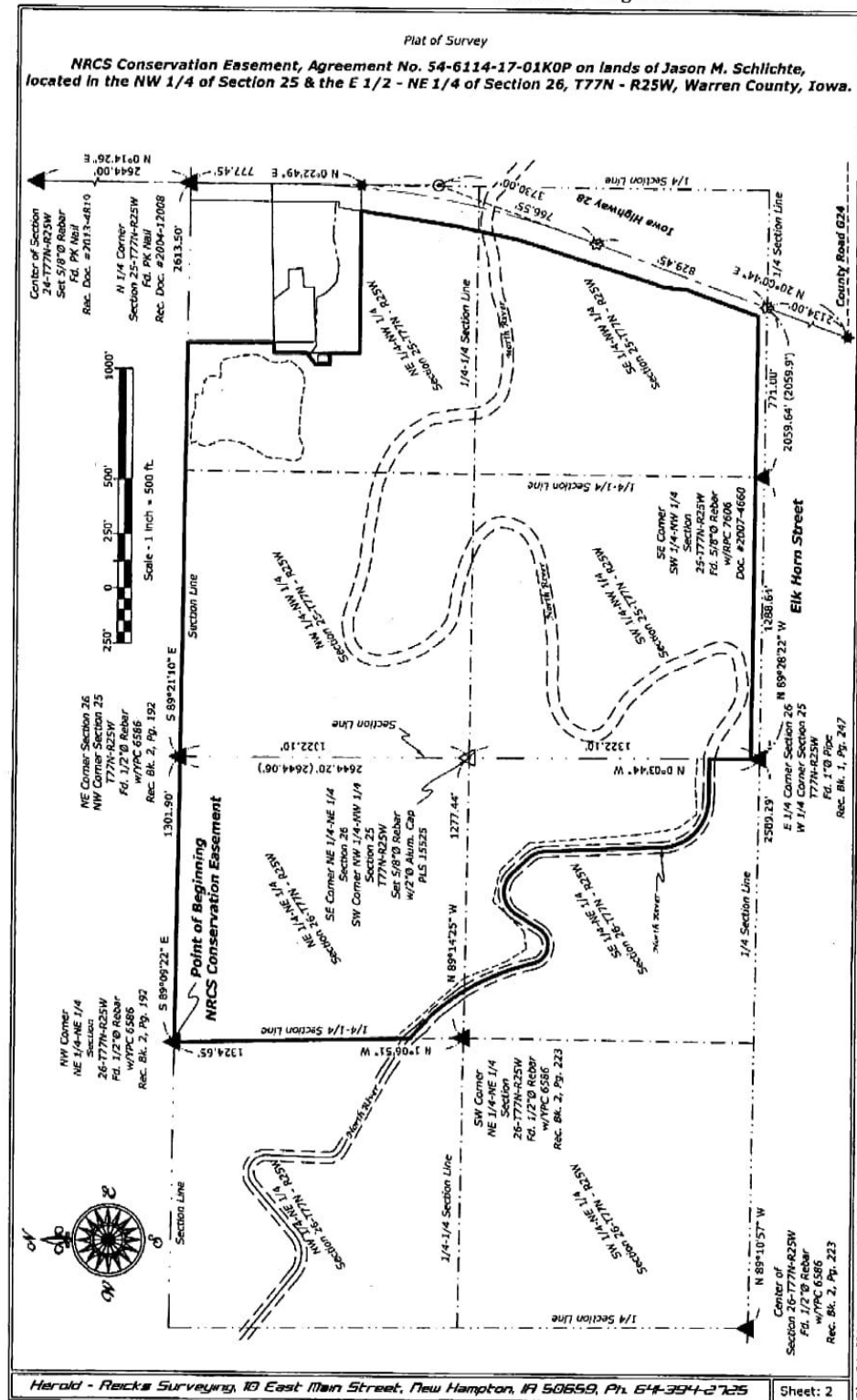


Exhibit A - Page 3 of 9

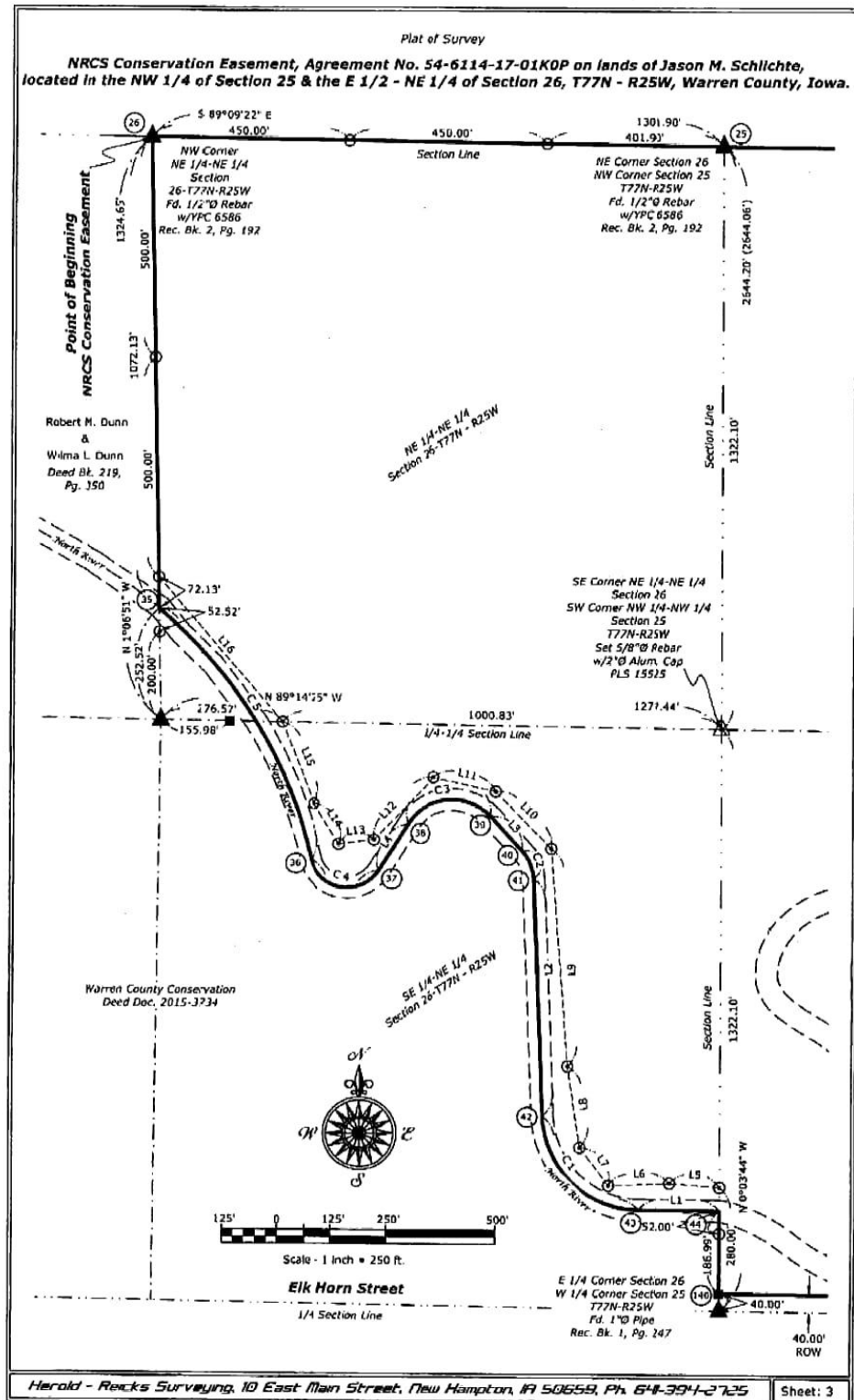


Exhibit A - Page 4 of 9

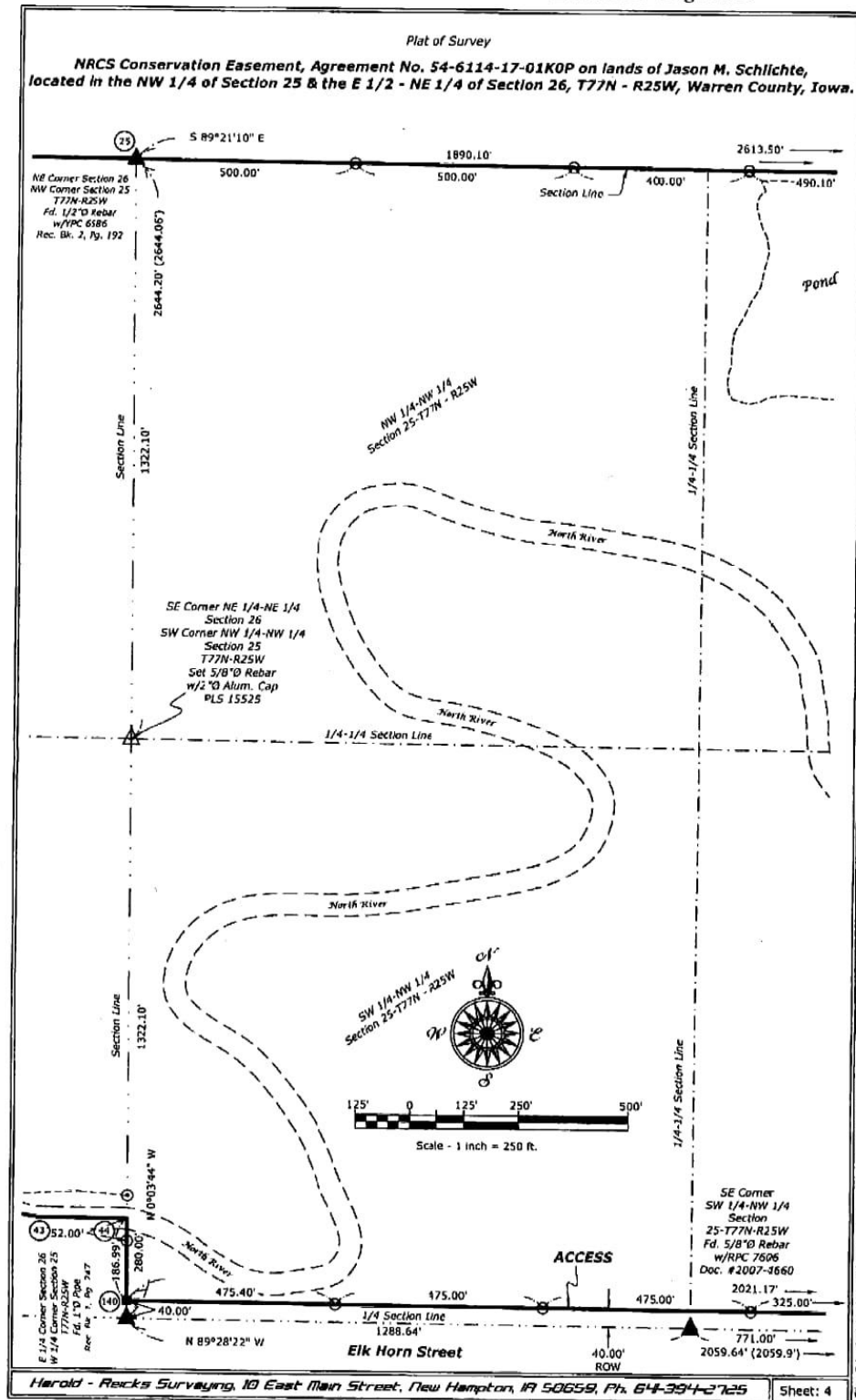


Exhibit A - Page 5 of 9

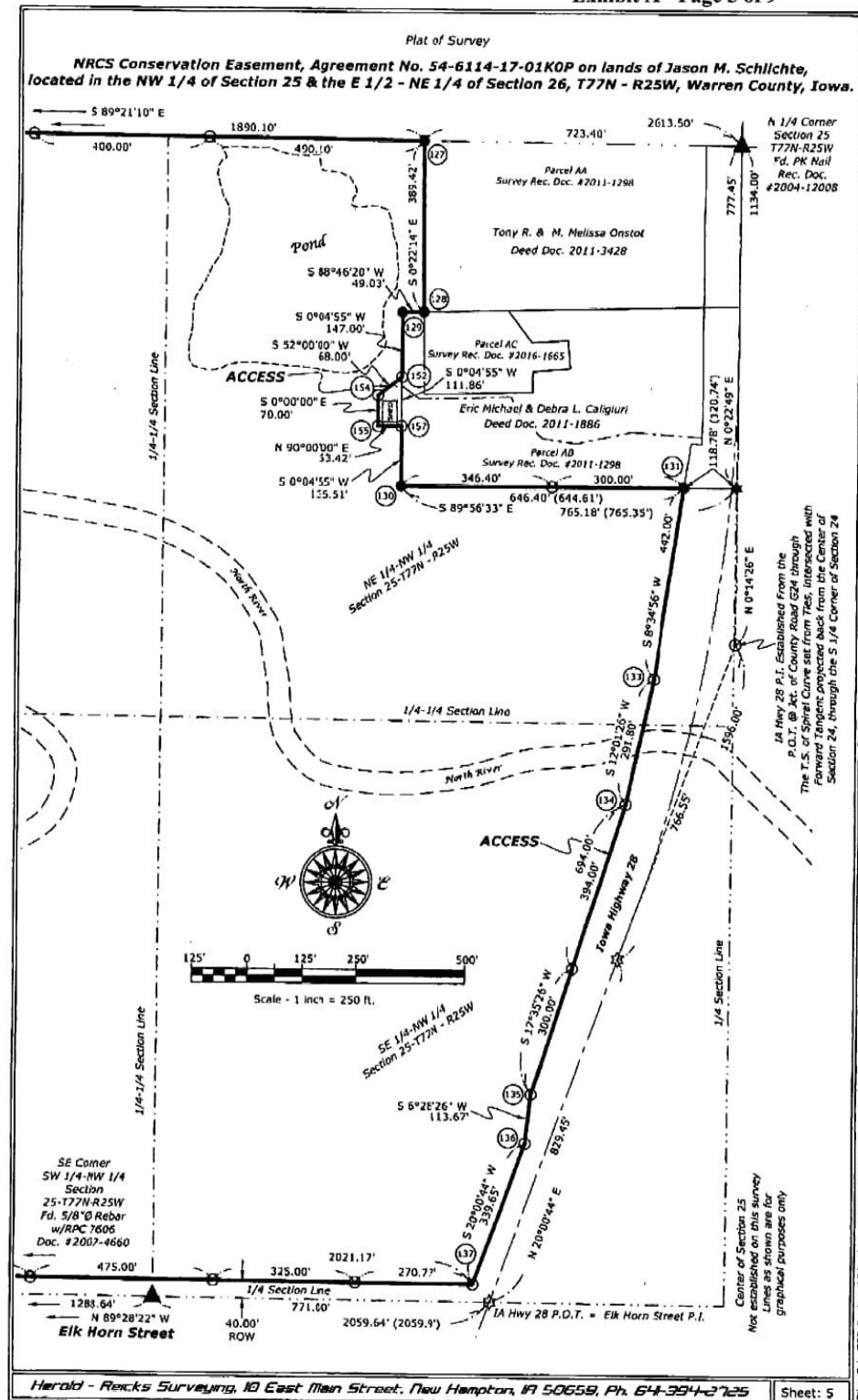


Exhibit A - Page 6 of 9

<i>Plat of Survey</i> NRCS Conservation Easement, Agreement No. 54-6114-17-01K0P on lands of Jason M. Schlichte, located in the NW 1/4 of Section 25 & the E 1/2 - NE 1/4 of Section 26, T77N - R25W, Warren County, Iowa.	
<u>Legal Description:</u>	
NRCS Conservation Easement located in the Northwest Quarter of Section 25 and the East Half of the Northeast Quarter of Section 26, Township 77 North, Range 25 West of the 5th P.M., Warren County, Iowa, and more particularly described as follows:	
Beginning at the Northwest Corner of the Northeast Quarter of the Northeast Quarter of said Section 26;	
Thence South 89°09'22" East, 1301.90 feet along the North Line of said Quarter-Quarter Section to the Northeast Corner Thereof;	
Thence South 89°21'10" East, 1890.10 feet along the North Line of the Northwest Quarter of said Section 25 to the Northwest Corner of Parcel AA, recorded February 17, 2011, Document #2011-1298, on file in the Warren County Recorder's Office, Indianola, Iowa;	
Thence South 00°22'14" East, 389.42 feet along the West Line of said Parcel AA to the Southwest Corner Thereof and the North Line of Parcel AB, recorded February 17, 2011, Document #2011-1298, on file in the Warren County Recorder's Office, Indianola, Iowa;	
Thence South 88°46'20" West, 49.03 feet along the North Line of said Parcel AB to the Northwest Corner Thereof;	
Thence South 00°04'55" West, 147.00 feet along the West Line of said Parcel AB;	
Thence South 52°00'00" West, 68.00 feet;	
Thence South 00°00'00" East, 70.00 feet;	
Thence North 90°00'00" East, 53.42 feet to the West Line of said Parcel AB;	
Thence South 00°04'55" West, 135.51 feet along the West Line of said Parcel AB to the Southwest Corner Thereof;	
Thence South 89°56'33" East, 646.40 feet along the South Line of said Parcel AB to the Westerly Right-of-Way Line of Iowa Highway 28;	
Thence South 08°34'56" West, 442.00 feet;	
Thence South 12°01'26" West, 291.80 feet;	
Thence South 17°35'26" West, 694.00 feet;	
Thence South 06°28'26" West, 113.67 feet;	
Thence South 20°00'44" West, 339.65 feet all along said Westerly Right-of-Way Line to the North Right-of-Way Line of Elk Horn Street;	
Thence North 89°28'22" West, 2021.17 feet along said North Right-of-Way Line to the East Line of the Northeast Quarter of said Section 26;	
Thence North 00°03'44" West, 186.99 feet along said East Line to the Centerline of North River;	
Thence (L1) North 89°39'13" West, 185.35 feet;	
Thence (C1) Northwesterly 335.17 feet along a 220.00 foot Radius Curve, Concave Northeasterly (said Curve having a long chord of North 46°00'30" West, 303.68 feet);	
Thence (L2) North 02°21'48" West, 541.81 feet;	
Note: The Bearings and Distances indicated in this Legal Description are to the Monuments "Found or Set" as indicated on the attached "Plat of Survey" and the calls along the courses in this Description are to those Monuments as indicated.	
Herold - Rickels Surveying, 10 East Main Street, New Hampton, IA 50659, Ph. 641-394-2725	
Sheet: 6	

File: S:\CSD Projects\2017\2017-354 - NRCS - Warren - Schlichte\2017-354.dwg, 12/26/2017 4:06:53 PM

Exhibit A - Page 8 of 9

Plat of Survey

NRCS Conservation Easement, Agreement No. 54-6114-17-01K0P on lands of Jason M. Schlichte, located in the NW 1/4 of Section 25 & the E 1/2 - NE 1/4 of Section 26, T77N - R25W, Warren County, Iowa.

Easement Line Data

Line No.	Bearing	Distance
L1	N89°39'13"W	185.35'
L2	N2°21'48"W	541.81'
L3	N43°01'43"W	105.74'
L4	S32°08'48"W	124.55'

Easement Curve Data

Curve No.	Length	Radius	Delta	Chord Bearing	Chord Length
C1	335.17'	220.00'	87°17'25"	N 46°00'30" W	303.68'
C2	70.97'	100.00'	40°39'55"	N 22°41'45" W	69.49'
C3	219.54'	120.00'	104°49'29"	S 84°33'33" W	190.18'
C4	198.84'	84.50'	134°51'02"	N 80°26'22" W	156.05'
C5	677.74'	1045.39'	37°14'59"	N 31°35'13" W	665.94'

Meander Line Data

Line No.	Bearing	Distance
L5	S85°31'23"E	112.83'
L6	N87°33'02"E	141.00'
L7	S37°28'22"E	107.25'
L8	S8°45'18"E	188.71'
L9	S4°31'27"E	496.08'
L10	S44°29'26"E	181.60'
L11	S77°23'07"E	144.31'
L12	N43°59'26"E	197.13'
L13	N82°59'43"E	79.90'
L14	S32°24'23"E	108.13'
L15	S21°31'34"E	199.50'
L16	S40°45'17"E	433.28'

Herold - Reicks Surveying, 10 East Main Street, New Hampton, IA 50659, Ph. 641-394-2725

Sheet: 8

File: S:_CDD Projects\2017\2017-554 - NRCS - Warren - Schlichte\2017-554.dwg, 12/26/2017 4:07:12 PM

Exhibit A - Page 9 of 9

Plat of Survey
**NRCS Conservation Easement, Agreement No. 54-6114-17-01K0P on lands of Jason M. Schlichte,
 located in the NW 1/4 of Section 25 & the E 1/2 - NE 1/4 of Section 26, T77N - R25W, Warren County, Iowa.**

Geomatics Report

Point No.	Northing	Easting	Description	Latitude	Longitude
25	529667.69'	1587445.43'	Easement Corner	N41.453630	W93.693241
26	529686.86'	1586143.78'	Easement Corner	N41.453675	W93.697989
35	528615.08'	1586164.63'	Easement Corner	N41.450733	W93.697906
36	528047.72'	1586513.44'	Easement Corner	N41.449178	W93.696627
37	528021.88'	1586667.32'	Easement Corner	N41.449108	W93.696066
38	528127.26'	1586733.59'	Easement Corner	N41.449398	W93.695825
39	528145.29'	1586922.92'	Easement Corner	N41.449449	W93.695134
40	528067.99'	1586995.07'	Easement Corner	N41.449237	W93.694870
41	528003.88'	1587021.88'	Easement Corner	N41.449061	W93.694772
42	527462.51'	1587044.23'	Easement Corner	N41.447576	W93.694686
43	527251.61'	1587262.71'	Easement Corner	N41.446998	W93.693888
44	527250.48'	1587448.05'	Easement Corner	N41.446996	W93.693211
127	529646.34'	1589335.47'	Easement Corner	N41.453583	W93.686346
128	529257.03'	1589337.99'	Easement Corner	N41.452515	W93.686333
129	529255.98'	1589289.05'	Easement Corner	N41.452511	W93.686512
130	528861.61'	1589288.40'	Easement Corner	N41.451429	W93.686511
131	528860.96'	1589934.88'	Easement Corner	N41.451431	W93.684153
133	528423.93'	1589868.92'	Easement Corner	N41.450231	W93.684390
134	528138.54'	1589808.14'	Easement Corner	N41.449448	W93.684610
135	527476.99'	1589598.40'	Easement Corner	N41.447631	W93.685370
136	527364.04'	1589585.58'	Easement Corner	N41.447321	W93.685415
137	527044.96'	1589469.35'	Easement Corner	N41.446444	W93.685817
140	527063.26'	1587448.25'	Easement Corner	N41.446482	W93.693239
152	529108.96'	1589288.84'	Easement Corner	N41.452108	W93.686511
154	529067.10'	1589235.24'	Easement Corner	N41.451993	W93.686707
155	528997.12'	1589235.25'	Easement Corner	N41.451801	W93.686706
157	528997.12'	1589288.68'	Easement Corner	N41.451801	W93.686511

Herold - Reicks Surveying, 10 East Main Street, New Hampton, IA 50659, Ph. 641-394-2725

Sheet: 9

File: S:\CDD Projects\2017\2017-554 - NRCS - Warren - Schlichte\2017-554.dwg, 12/26/2017 4:07:19 PM

APPENDIX B. AERIAL OVERVIEW PHOTOGRAPHS



Photo 1 – Western End of Project Corridor – View to the West.



Photo 2 – Center of Project Corridor West of Highway 28 – View to the East.



Photo 3 – Center of Project Corridor East of Highway 28 – View to the Southwest.



Photo 4 – Eastern End of Project Corridor – View to the East



Photo 5 – Overview of Replacement Parcel – View to the Northwest

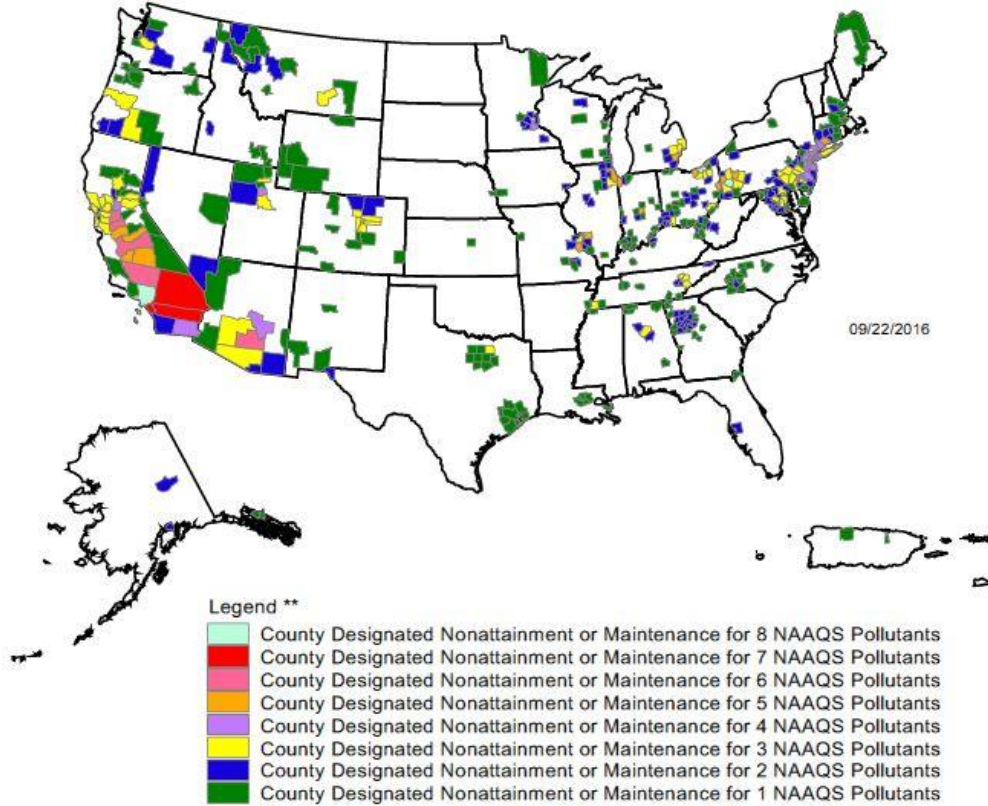


Photo 6 – North River in Vicinity of Project Corridor West of Highway 28– View to the West.

APPENDIX C. AIR QUALITY

Counties Designated "Nonattainment" or "Maintenance"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *

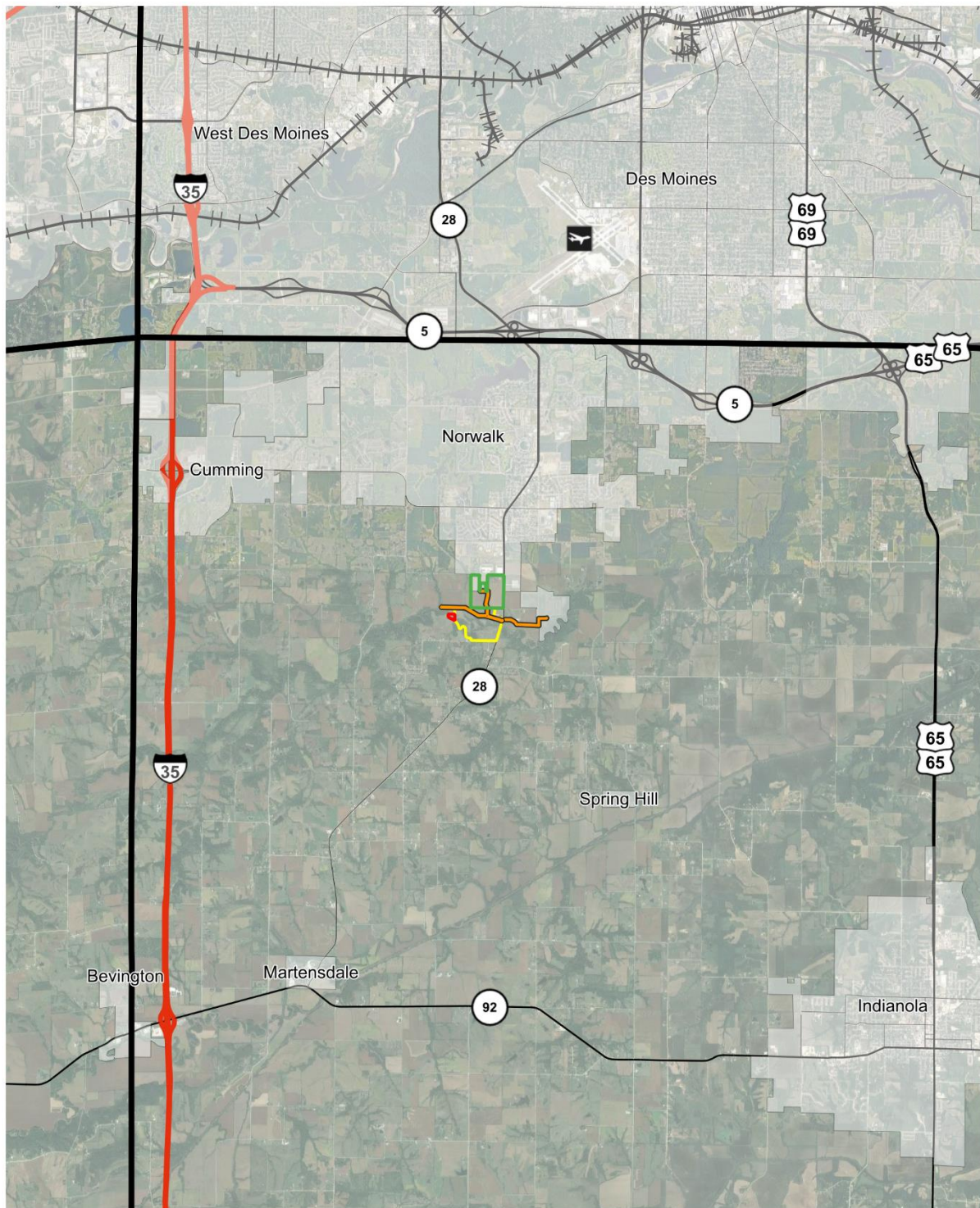


Guam - Piti and Tanguisson Counties are designated nonattainment for the SO₂ NAAQS

* The National Ambient Air Quality Standards (NAAQS) are health standards for Carbon Monoxide, Lead (1978 and 2008), Nitrogen Dioxide, 8-hour Ozone (2008), Particulate Matter (PM-10 and PM-2.5 (1997, 2006 and 2012), and Sulfur Dioxide.(1971 and 2010)

** Included in the counts are counties designated for NAAQS and revised NAAQS pollutants. Revoked 1-hour (1979) and 8-hour Ozone (1997) are excluded. Partial counties, those with part of the county designated nonattainment and part attainment, are shown as full counties on the map.

APPENDIX D. AIRPORTS



- | | |
|----------------------|-------------------|
| Corridor | County Boundaries |
| Replacement Parcel | City Limits |
| NRCS Easement | Active Rail Lines |
| Proposed Development | |



City of Norwalk Norwalk NRCS Easement EA

Airport



0 1 2 mi



APPENDIX E. BIOLOGICAL RESOURCES

Appendix E.1. IPaC Consultation



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
Phone: (309) 757-5800 Fax: (309) 757-5807

In Reply Refer To:
Project Code: 2023-0109315
Project Name: Norwalk Easement Administrative Action

July 26, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat, if present, within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) **the accuracy of this species list should be verified after 90 days**. This verification can be completed formally or informally. You may verify the list by visiting the ECOSPHERE Information for Planning and Consultation (IPaC) website <https://ipac.ecosphere.fws.gov> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list.

Section 7 Consultation

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the U.S. Fish and Wildlife Service (Service) if they determine their project "may affect" listed species or designated critical habitat. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action may affect endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service to make "no effect" determinations. If you determine that your proposed action will have

no effect on threatened or endangered species or their respective designated critical habitat, you do not need to seek concurrence with the Service.

Note: For some species or projects, IPaC will present you with *Determination Keys*. You may be able to use one or more Determination Keys to conclude consultation on your action.

Technical Assistance for Listed Species

1. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain information on the species life history, species status, current range, and other documents by selecting the species from the thumbnails or list view and visiting the species profile page.

No Effect Determinations for Listed Species

1. If there are *no* species or designated critical habitats on the Endangered Species portion of the species list: conclude "no species and no critical habitat present" and document your finding in your project records. No consultation under ESA section 7(a)(2) is required if the action would result in no effects to listed species or critical habitat. Maintain a copy of this letter and IPaC official species list for your records.
2. If any species or designated critical habitat are listed as potentially present in the **action area** of the proposed project the project proponents are responsible for determining if the proposed action will have "no effect" on any federally listed species or critical habitat. No effect, with respect to species, means that no individuals of a species will be exposed to any consequence of a federal action or that they will not respond to such exposure.
3. If the species habitat is not present within the action area or current data (surveys) for the species in the action area are negative: conclude "no species habitat or species present" and document your finding in your project records. For example, if the project area is located entirely within a "developed area" (an area that is already graveled/paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping, is located within an existing maintained facility yard, or is in cultivated cropland conclude no species habitat present. Be careful when assessing actions that affect: 1) rights-of-ways that contains natural or semi-natural vegetation despite periodic mowing or other management; structures that have been known to support listed species (example: bridges), and 2) surface water or groundwater. Several species inhabit rights-of-ways, and you should carefully consider effects to surface water or groundwater, which often extend outside of a project's immediate footprint.
4. Adequacy of Information & Surveys - Agencies may base their determinations on the best evidence that is available or can be developed during consultation. Agencies must give the benefit of any doubt to the species when there are any inadequacies in the information. Inadequacies may include uncertainty in any step of the analysis. To provide adequate information on which to base a determination, it may be appropriate to conduct surveys to determine whether listed species or their habitats are present in the action area. Please contact our office for more information or see the survey guidelines that the Service has made available in IPaC.

May Effect Determinations for Listed Species

1. If the species habitat is present within the action area and survey data is unavailable or inconclusive: assume the species is present or plan and implement surveys and interpret results in coordination with our office. If assuming species present or surveys for the species are positive continue with the may affect determination process. May affect, with respect to a species, is the appropriate conclusion when a species might be exposed to a consequence of a federal action and could respond to that exposure. For critical habitat,

'may affect' is the appropriate conclusion if the action area overlaps with mapped areas of critical habitat and an essential physical or biological feature may be exposed to a consequence of a federal action and could change in response to that exposure.

2. Identify stressors or effects to the species and to the essential physical and biological features of critical habitat that overlaps with the action area. Consider all consequences of the action and assess the potential for each life stage of the species that occurs in the action area to be exposed to the stressors. Deconstruct the action into its component parts to be sure that you do not miss any part of the action that could cause effects to the species or physical and biological features of critical habitat. Stressors that affect species' resources may have consequences even if the species is not present when the project is implemented.
3. If no listed or proposed species will be exposed to stressors caused by the action, a 'no effect' determination may be appropriate – be sure to separately assess effects to critical habitat, if any overlaps with the action area. If you determined that the proposed action or other activities that are caused by the proposed action may affect a species or critical habitat, the next step is to describe the manner in which they will respond or be altered. Specifically, to assess whether the species/critical habitat is "not likely to be adversely affected" or "likely to be adversely affected."
4. Determine how the habitat or the resource will respond to the proposed action (for example, changes in habitat quality, quantity, availability, or distribution), and assess how the species is expected to respond to the effects to its habitat or other resources. Critical habitat analyses focus on how the proposed action will affect the physical and biological features of the critical habitat in the action area. If there will be only beneficial effects or the effects of the action are expected to be insignificant or discountable, conclude "may affect, not likely to adversely affect" and submit your finding and supporting rationale to our office and request concurrence.
5. If you cannot conclude that the effects of the action will be wholly beneficial, insignificant, or discountable, check IPaC for species-specific Section 7 guidance and conservation measures to determine whether there are any measures that may be implemented to avoid or minimize the negative effects. If you modify your proposed action to include conservation measures, assess how inclusion of those measures will likely change the effects of the action. If you cannot conclude that the effects of the action will be wholly beneficial, insignificant, or discountable, contact our office for assistance.
6. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

For additional information on completing Section 7 Consultation including a Glossary of Terms

used in the Section 7 Process, information requirements for completing Section 7, and example letters visit the Midwest Region Section 7 Consultations website at: <https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance>.

You may find more specific information on completing Section 7 on communication towers and transmission lines on the following websites:

- Incidental Take Beneficial Practices: Power Lines - <https://www.fws.gov/story/incidental-take-beneficial-practices-power-lines>
- Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning. - <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>

Northern Long-eared Bat Update

Please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S. District Court for the District of Columbia has ordered the Service to complete a new final listing determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to be addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

Other Trust Resources and Activities

Bald and Golden Eagles

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act, as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, please contact our office for further coordination. For more information on permits and other eagle information visit our website <https://www.fws.gov/library/collections/bald-and-golden-eagle-management>. We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
(309) 757-5800

PROJECT SUMMARY

Project Code: 2023-0109315
Project Name: Norwalk Easement Administrative Action
Project Type: Government / Municipal (Non-Military) Construction
Project Description: Administrative action and environmental assessment associated with the North River Extension Project in unincorporated Warren County, Iowa, south of Norwalk.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.4515323,-93.6871540581491,14z>



Counties: Warren County, Iowa

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Mead's Milkweed <i>Asclepias meadii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8204	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

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

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Bald Eagle												
Non-BCC												
Vulnerable												

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- [R4SBCx](#)

FRESHWATER FORESTED/SHRUB WETLAND

- [PFO1A](#)

IPAC USER CONTACT INFORMATION

Agency: Norwalk city
Name: Will Martin
Address: 1002 Quart Avenue
City: Boone
State: IA
Zip: 50036
Email: wmartin@eorinc.com
Phone: 5152980849

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Natural Resources Conservation Service
Name: John Paulin
Email: John.Paulin@usda.gov

Appendix E.2. Iowa Natural Areas Inventory

Listed Species In a County

[<< Back To Query Page](#)

WARREN County, IA

Summary by Species Report

Total Unique Listed Species In This County: 30

County	Common Name	Scientific Name	Class	State Status	Federal Status	Link To Species Profile
WARREN	Bald Eagle	Haliaeetus leucocephalus	BIRDS	S		PDF
WARREN	Barn Owl	Tyto alba	BIRDS	E		PDF
WARREN	Henslow's Sparrow	Ammodramus henslowii	BIRDS	T		PDF
WARREN	King Rail	Rallus elegans	BIRDS	E		PDF
WARREN	Northern Harrier	Circus cyaneus	BIRDS	E		PDF
WARREN	Short-eared Owl	Asio flammeus	BIRDS	E		PDF
WARREN	Byssus Skipper	Problema byssus	INSECTS	T		
WARREN	Purplish Copper	Lycaena helloides	INSECTS	S		
WARREN	Regal Fritillary	Speyeria idalia	INSECTS	S		
WARREN	Wild Indigo Dusky Wing	Erynnis baptisiae	INSECTS	S		
WARREN	Zabulon Skipper	Poanes zabulon	INSECTS	S		
WARREN	Indiana Bat	Myotis sodalis	MAMMALS	E	E	PDF
WARREN	Northern Long-eared Bat	Myotis septentrionalis	MAMMALS		T	
WARREN	Cream Violet	Viola striata	PLANTS (DICOTS)	S		
WARREN	Earleaf Foxglove	Tomanthera auriculata	PLANTS (DICOTS)	S		
WARREN	Early Cudweed	Gnaphalium purpureum	PLANTS (DICOTS)	S		
WARREN	False Loosestrife	Ludwigia peploides	PLANTS (DICOTS)	S		
WARREN	Mead's Milkweed	Asclepias meadii	PLANTS (DICOTS)	E	T	PDF
WARREN	Prairie Bush Clover	Lespedeza leptostachya	PLANTS (DICOTS)	T	T	PDF
WARREN	Blue Mud-plantain	Heteranthera limosa	PLANTS (MONOCOTS)	S		
WARREN	Broom Sedge	Andropogon virginicus	PLANTS (MONOCOTS)	S		
WARREN	Bush's Sedge	Carex bushii	PLANTS (MONOCOTS)	S		
WARREN	Glomerate Sedge	Carex aggregata	PLANTS (MONOCOTS)	S		
WARREN	Great Plains Ladies'-tresses	Spiranthes magnicamporum	PLANTS (MONOCOTS)	S		PDF
WARREN	Meadow Bluegrass	Poa wolfii	PLANTS (MONOCOTS)	S		
WARREN	Slender Ladies'-tresses	Spiranthes lacera	PLANTS (MONOCOTS)	T		
WARREN	Slim-leaved Panic Grass	Dichanthelium linearifolium	PLANTS (MONOCOTS)	T		
WARREN	Crowfoot Clubmoss	Lycopodium digitatum	PLANTS (PTERIDOPHYTES)	S		
WARREN	Ground Pine	Lycopodium clavatum	PLANTS (PTERIDOPHYTES)	E		PDF
WARREN	Smooth Green Snake	Liochlorophis vernalis	REPTILES	S		PDF

Appendix E.3. IDNR Correspondence

Will Martin

From: casey.laskowski@dnr.iowa.gov
Sent: Monday, July 31, 2023 10:02 AM
To: Will Martin
Subject: 2023-1520 Environmental Review Request - North River Interceptor Extension

41.4511/-93.6834; Warren County
Sec. 23/T77N/R25W

Thank you for inviting Department comment on the impact of this project. The Department has searched for records of rare species and significant natural communities in the project area and found no site-specific records that would be impacted by this project. However, these records and data are not the result of thorough field surveys. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

This email is a record of review for protected species, rare natural communities, state lands and waters in the project area, including review by personnel representing state parks, preserves, recreation areas, fisheries and wildlife but does not include comment from the Environmental Services Division of this Department. This email does not constitute a permit. Other permits may be required from the Department or other state or federal agencies before work begins on this project.

If you have questions about this letter or require further information, please contact me at (515) 330-6432.

Environmental Review requests can be submitted electronically to: SLER@dnr.iowa.gov.

Sincerely,



Casey Laskowski | Environmental Specialist
Iowa Department of Natural Resources
P 515-330-6432 | F 515-725-8202 | 502 E. 9th St., Des Moines, IA 50319
www.iowadnr.gov

***Phase I Environmental Site Assessment Report – Presented Under
Separate Cover and Incorporated by Reference***

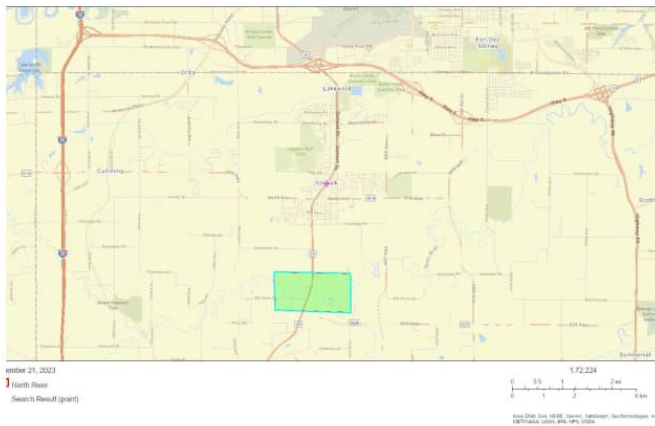
APPENDIX G. EJ SCREENING REPORT

EJScreen Community Report

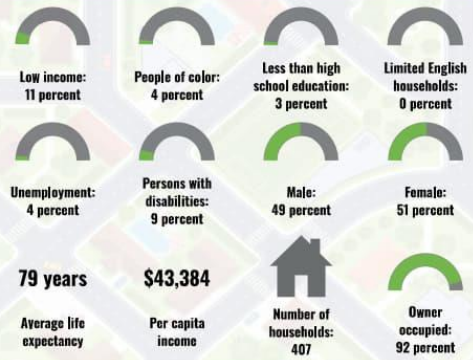
This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Warren County, IA

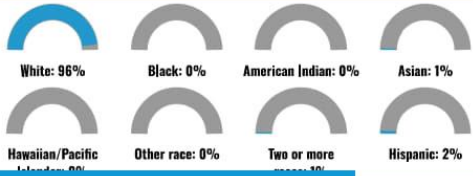
1 mile Ring around the Area
Population: 1,060
Area in square miles: 8.97



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	98%
Other Indo-European	1%
Total Non-English	2%

www.epa.gov/ejscreen

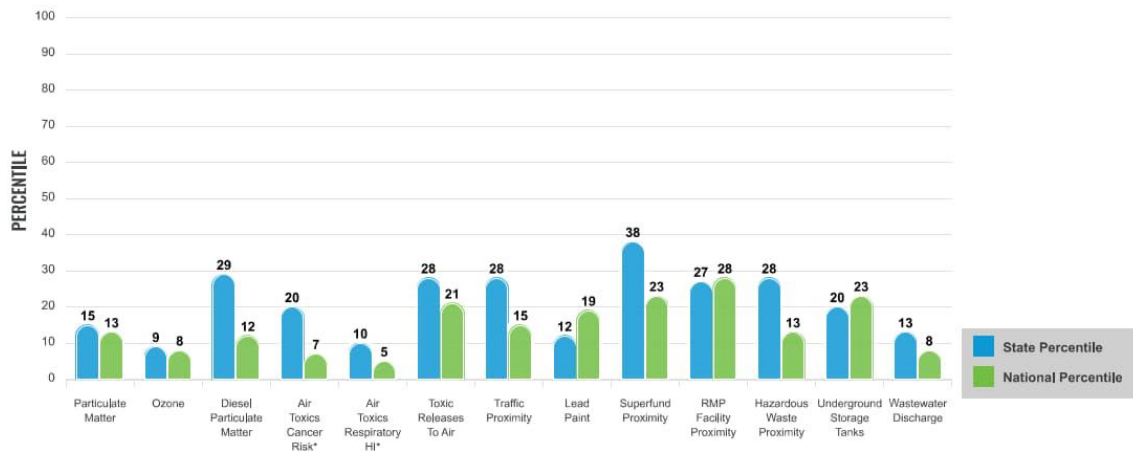
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

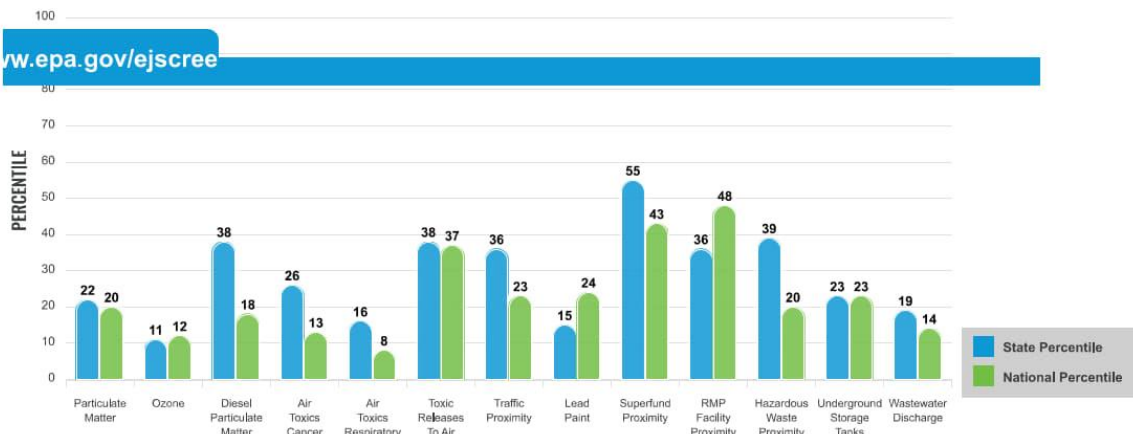
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	7.28	7.63	30	8.08	27
Ozone (ppb)	56.8	58.8	15	61.6	17
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.132	0.158	48	0.261	26
Air Toxics Cancer Risk* (lifetime risk per million)	20	20	14	25	5
Air Toxics Respiratory HI*	0.2	0.21	3	0.31	4
Toxic Releases to Air	740	2,800	50	4,600	53
Traffic Proximity (daily traffic count/distance to road)	29	140	43	210	30
Lead Paint (% Pre-1960 Housing)	0.15	0.45	18	0.3	41
Superfund Proximity (site count/km distance)	0.082	0.094	75	0.13	60
RMP Facility Proximity (facility count/km distance)	0.42	0.72	51	0.43	73
Hazardous Waste Proximity (facility count/km distance)	0.13	0.42	44	1.9	25
Underground Storage Tanks (count/km ²)	0.43	1.9	46	3.9	38
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00012	0.28	38	22	32
SOCIOECONOMIC INDICATORS					
Demographic Index	7%	22%	8	35%	6
Supplemental Demographic Index	7%	12%	15	14%	17
People of Color	4%	15%	27	39%	11
Low Income	11%	29%	12	31%	19
Unemployment Rate	4%	4%	61	6%	48
Limited English Speaking Households	0%	2%	0	5%	0
Less Than High School Education	3%	8%	30	12%	25
Under Age 5	5%	6%	39	6%	47
Over Age 64	15%	18%	39	17%	48
Low Life Expectancy	18%	19%	47	20%	41

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/health/air-toxics-data-update>.

www.epa.gov/ejscreen

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
Water Dischargers 0
Air Pollution 1
Brownfields 0
Toxic Release Inventory 1

Schools 0
Hospitals 0
Places of Worship 0

Other environmental data:

Air Non-attainment No
Impaired Waters Yes

Selected location contains American Indian Reservation Lands* No
Selected location contains a "Justice40 (CEJST)" disadvantaged community No
Selected location contains an EPA IRA disadvantaged community No

Report for 1 mile Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	18%	19%	47	20%	41
Heart Disease	4.7	6.5	10	6.1	21
Asthma	8.6	9.4	7	10	15
Cancer	6.4	6.8	31	6.1	52
Persons with Disabilities	8.7%	12.5%	16	13.4%	23

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	8%	11%	45	12%	57
Wildfire Risk	0%	2%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	7%	16%	20	14%	36
Lack of Health Insurance	1%	5%	5	9%	5
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Footnotes

Report for 1 mile Ring around the Area

www.epa.gov/ejscreen

APPENDIX H. FORM NRCS – CPA – 106 – FARMLAND CONVERSION IMPACT RATING

**Appendix H.1. FORM NRCS – CPA – 106 – Farmland Conversion Impact Rating --
Sewerline**

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 8/3/23	4. Sheet 1 of 1
1. Name of Project City of Norwalk Sewer ROW		5. Federal Agency Involved NRCS	
2. Type of Project Easement Administration Action		6. County and State Warren County, Iowa	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 8/3/23	2. Person Completing Form Patrick Chase
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☒ NO ☐		4. Acres Irrigated Average Farm Size 46 204	
5. Major Crop(s) Corn	6. Farmable Land in Government Jurisdiction Acres: 292,097 % 79.14		7. Amount of Farmland As Defined in FPPA Acres: 302,731 % 82.5
8. Name of Land Evaluation System Used CSR2	9. Name of Local Site Assessment System Warren County, IA		10. Date Land Evaluation Returned by NRCS 8/8/23

PART III (To be completed by Federal Agency)		Alternative Corridor For Segment			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		0			
B. Total Acres To Be Converted Indirectly, Or To Receive Services		4.0			
C. Total Acres In Corridor		4.0			
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		2.9			
B. Total Acres Statewide And Local Important Farmland		0.8			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.00001			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		47.29			
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)		70.8			
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points			
1. Area in Nonurban Use	15	1			
2. Perimeter in Nonurban Use	10	10			
3. Percent Of Corridor Being Farmed	20	0			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	0			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	5			
8. On-Farm Investments	20	0			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS		160	16	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	70.8	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)		160	16	0	0
TOTAL POINTS (Total of above 2 lines)		260	86.8	0	0

1. Corridor Selected: Corridor A	2. Total Acres of Farmlands to be Converted by Project: 4	3. Date Of Selection: 8/9/23	4. Was A Local Site Assessment Used? YES ☐ NO ☒
--	---	--	---

5. Reason For Selection:
Corridor exists with the boundary of a permanent ACEP-WRE easement. Existing ROW will be expanded to accommodate expansion of force main sewer easement.

Signature of Person Completing this Part: **John Paulin** DATE **8/9/23**

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
 - More than 90 percent - 15 points
 - 90 to 20 percent - 14 to 1 point(s)
 - Less than 20 percent - 0 points
- (2) How much of the perimeter of the site borders on land in nonurban use?
 - More than 90 percent - 10 points
 - 90 to 20 percent - 9 to 1 point(s)
 - Less than 20 percent - 0 points
- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
 - More than 90 percent - 20 points
 - 90 to 20 percent - 19 to 1 point(s)
 - Less than 20 percent - 0 points
- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
 - Site is protected - 20 points
 - Site is not protected - 0 points
- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?
(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)
 - As large or larger - 10 points
 - Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points
- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
 - Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
 - Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
 - Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points
- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
 - All required services are available - 5 points
 - Some required services are available - 4 to 1 point(s)
 - No required services are available - 0 points
- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
 - High amount of on-farm investment - 20 points
 - Moderate amount of on-farm investment - 19 to 1 point(s)
 - No on-farm investment - 0 points
- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
 - Substantial reduction in demand for support services if the site is converted - 25 points
 - Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
 - No significant reduction in demand for support services if the site is converted - 0 points
- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
 - Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
 - Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
 - Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

U.S. Department of Agriculture					
FARMLAND CONVERSION IMPACT RATING					
PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request 8/3/2023		
Name of Project City of Norwalk Sewer ROW			Federal Agency Involved NRCS		
Proposed Land Use Easement Administration Action			County and State Warren County, IA		
PART II (To be completed by NRCS)			Date Request Received By NRCS 8/3/2023		Person Completing Form: Patrick Chase
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)			YES ☒	NO ☐	Acres Irrigated 46
					Average Farm Size 204
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 292,097% 79.14		Amount of Farmland As Defined in FPPA Acres: 302,73% 82.51		
Name of Land Evaluation System Used Warren County, IA	Name of State or Local Site Assessment System CSR2		Date Land Evaluation Returned by NRCS 8/8/2023		
PART III (To be completed by Federal Agency)			Alternative Site Rating		
			Site A	Site B	Site C
A. Total Acres To Be Converted Directly			0		
B. Total Acres To Be Converted Indirectly			4.2		
C. Total Acres In Site			4.2		
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland			3.6		
B. Total Acres Statewide Important or Local Important Farmland			0		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted			.00001		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value			57.6		
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)			61.2		
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)			Maximum Points	Site A	Site B
1. Area In Non-urban Use			(15)	1	
2. Perimeter In Non-urban Use			(10)	10	
3. Percent Of Site Being Farmed			(20)	0	
4. Protection Provided By State and Local Government			(20)	0	
5. Distance From Urban Built-up Area			(15)	0	
6. Distance To Urban Support Services			(15)	0	
7. Size Of Present Farm Unit Compared To Average			(10)	0	
8. Creation Of Non-farmable Farmland			(10)	0	
9. Availability Of Farm Support Services			(5)	5	
10. On-Farm Investments			(20)	0	
11. Effects Of Conversion On Farm Support Services			(10)	0	
12. Compatibility With Existing Agricultural Use			(10)	0	
TOTAL SITE ASSESSMENT POINTS			160	16	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)			100	61.2	0
Total Site Assessment (From Part VI above or local site assessment)			160	16	0
TOTAL POINTS (Total of above 2 lines)			260	77.2	0
Site Selected: Site A		Date Of Selection 8/9/23		Was A Local Site Assessment Used?	
				YES ☐ NO ☒	
Reason For Selection: Parcel will be added to existing ACEP-WRE easement as mitigation for subordination of conservation easement to allow for expansion of existing force main sewer ROW. Parcel yields equal or greater conservation and economic value to the U.S.					
Name of Federal agency representative completing this form: John Paulin				Date: 8/9/23	
(See Instructions on reverse side)					

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

**Appendix H.2. FORM NRCS – CPA – 106 – Farmland Conversion Impact Rating –
Proposed Commercial and Industrial Development**

U.S. Department of Agriculture							
FARMLAND CONVERSION IMPACT RATING							
PART I (To be completed by Federal Agency)				Date Of Land Evaluation Request 8/3/2023			
Name of Project City of Norwalk Sewer ROW				Federal Agency Involved NRCS			
Proposed Land Use Easement Administration Action				County and State Warren County, IA			
PART II (To be completed by NRCS)				Date Request Received By NRCS 8/3/2023		Person Completing Form: John Paulin	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)				YES ☒	NO ☐	Acres Irrigated 46	Average Farm Size 204
Major Crop(s) Corn		Farmable Land In Govt. Jurisdiction Acres: 292,097% 79.14		Amount of Farmland As Defined in FPPA Acres: 302,73% 82.51			
Name of Land Evaluation System Used Warren County, IA		Name of State or Local Site Assessment System CSR2		Date Land Evaluation Returned by NRCS 6/12/24			
PART III (To be completed by Federal Agency)				Alternative Site Rating			
				Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				0			
B. Total Acres To Be Converted Indirectly				217.3			
C. Total Acres In Site				217.3			
PART IV (To be completed by NRCS) Land Evaluation Information							
A. Total Acres Prime And Unique Farmland				156.3			
B. Total Acres Statewide Important or Local Important Farmland				55.2			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				0.0007			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				57.6			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				61.2			
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)				Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use				(15)	9		
2. Perimeter In Non-urban Use				(10)	6		
3. Percent Of Site Being Farmed				(20)	20		
4. Protection Provided By State and Local Government				(20)	0		
5. Distance From Urban Built-up Area				(15)	0		
6. Distance To Urban Support Services				(15)	0		
7. Size Of Present Farm Unit Compared To Average				(10)	10		
8. Creation Of Non-farmable Farmland				(10)	0		
9. Availability Of Farm Support Services				(5)	5		
10. On-Farm Investments				(20)	0		
11. Effects Of Conversion On Farm Support Services				(10)	0		
12. Compatibility With Existing Agricultural Use				(10)	10		
TOTAL SITE ASSESSMENT POINTS				160	60	0	0
PART VII (To be completed by Federal Agency)							
Relative Value Of Farmland (From Part V)				100	61.2	0	0
Total Site Assessment (From Part VI above or local site assessment)				160	60	0	0
TOTAL POINTS (Total of above 2 lines)				260	121.2	0	0
Site Selected: Site A		Date Of Selection 6/12/24		Was A Local Site Assessment Used? YES ☐ NO ☒			
Reason For Selection: Parcel is proposed for industrial development once sewer expansion is complete. Despite not being part of the directly impacted project area, it is part of the affected environment for NEPA purposes.							
Name of Federal agency representative completing this form: John Paulin						Date: 6/12/24	

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1** - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2** - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3** - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4** - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5** - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6** - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7** - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

APPENDIX I. CORRESPONDENCE FROM THE IOWA STATE HISTORIC PRESERVATION OFFICE AND PEORIA TRIBE OF INDIANS OF OKLAHOMA

From: branden.scott@email.iowaeda.com <branden.scott@email.iowaeda.com>
Sent: Monday, July 22, 2024 9:49 AM
To: Messerole, Megan - FPAC-NRCS, IA <Megan.Messerole@usda.gov>
Cc: shpo106@iowaeda.com; derek@bearcreekarcheology.com
Subject: [External Email]R&C 240791569 - 00052569 - NRCS - Warren - Warren County Easement Administration Action

[External Email]

If this message comes from an **unexpected sender** or references a **vague/unexpected topic**;
Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Ms. Messerole:

We have received your submittal for the above referenced federal undertaking. We provide the following response in accordance with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations 36 CFR 800.

Regarding this project, please see the following comments:

R&C 240791569 - 00052569 - NRCS - Warren - Warren County Easement Administration Action - The city of Norwalk is planning to expand an existing force-main sewer right-of-way easement and construct a sanitary sewer trunk line through land currently in the Natural Resources Conservation Service (NRCS) Agricultural Conservation Easement Program (ACEP). The construction of this sanitary sewer will allow the city to limit septic system installation, ensure connection to municipal sanitary sewer to properly treat wastewater, and to properly manage and discharge stormwater from urban development. To implement this project, NRCS will be subordinating our rights to the easement to the city within the sewer right-of-way. In exchange, the city will acquire a four-acre parcel to the west to add to the NRCS easement. Due to the ground disturbing nature of the project within the NRCS easement, it is considered an undertaking under 36 CFR 800.16(y). The NRCS is the responsible federal agency for compliance with Section 106 of the National Historic Preservation Act (NHPA), as amended. The City of Norwalk hired a private archaeological contractor, Bear Creek Archeology, to conduct a Phase I Cultural Resource investigation of the APE. During their survey Bear Creek Archaeology conducted 83 shovel tests and 98 auger tests throughout the project area. All subsurface testing resulted in negative findings. Based on the negative results of the archeological survey, BCA recommends no further work for the project area as identified. Based on the results of the surveys, NRCS has determined that No Historic Property will be affected by this undertaking.

Concur with the federal agency and/or their designated representative (No Historic Properties Affected - No Properties). Please note that 13WA247 is recorded very near to the APE. We have consulted our records and find that our previous opinion of the site is that it is not eligible for the National Register of Historic Places, in case portions of the previously recorded site extend slightly into the APE.

You will not receive a hard copy of this email. It is the submitter's responsibility to maintain the official file of record. If you have any questions or comments, please feel free to contact our office.

With kind regards,
Branden K. Scott
Archaeologist, State Historic Preservation Office
branden.scott@iowaeda.com | 515.348.6291 | culture.iowaeda.com/shpo

P (918) 540-2535
F (918) 540-2538



PEORIA TRIBE OF INDIANS OF OKLAHOMA

118 S. Eight Tribes Trail Miami, OK 74354
P.O. Box 1527 Miami, OK 74355

CHIEF
Craig Harper

SECOND CHIEF
Rosanna Dobbs

Via email: megan.messerole@usda.gov

August 29, 2024

USDA-NRCS
Iowa State Office
210 Walnut Street, Room 693
Des Moines, IA 50309

RE: Easement Section 30, T77N, R24W, and Sections 23-26, T77N, R25W Warren County, IA

Dear Megan Messerole:

The Peoria Tribe offers no objection to the above-referenced project at this time. However, given the Peoria Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Iowa, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Peoria Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at (918) 544-9234 or by email at bfletcher@peoriatribes.com to initiate consultation.

The Peoria Tribe accepts this request to serve as a consulting party.

Respectfully,

Burgundy Fletcher

Burgundy Fletcher
Historic Preservation Specialist

SECRETARY
Jenny Rampey

TREASURER
Jason Dollarhide

FIRST COUNCILMAN
Nick Hargrove

SECOND COUNCILMAN
Kara D. North

THIRD COUNCILMAN
Scott Myers

APPENDIX J. WATER QUALITY (SOLE-SOURCE AQUIFERS)

Designated Sole Source Aquifers in EPA Region VII

Iowa, Kansas, Missouri, Nebraska



REGION VII (IA, KS, MO, NE)

Stephanie Lindberg
Drinking Water/Ground Water Branch
EPA Region 7
901 N. 5th Street
Kansas City, KS 66101
phone: (800) 223-0425
email: lindberg.stephanie@epa.gov

There are no designated Sole Source Aquifers in Region VII. Contact the coordinator above for more information about designating SSAs in Region VII.

Return to: [Sole Source Aquifer program home page](#)

APPENDIX K. WILD AND SCENIC RIVERS – IOWA



Iowa Segments

Hector Santiago
National Park Service
Midwest Regional
Office
601 Riverside Drive
Omaha, Nebraska
68102
(402) 661-1848



Authorizations /
History / Eligibility
Descriptions /
**Outstandingly
Remarkable
Values /Potential
Classification /Wild and
Scenic Rivers System**

[Return to nri Page](#)

River	County	Reach	Length (miles)	Year Listed/ Updated	Potential Classification	ORVs	Description	Other States
Boone	Hamilton and Webster	From Webster City to confluence with Des Moines River.	25	1995	S	S, R, F, W	Iowa's first designated "Protected Water Area." Identified for it's scenic and natural qualities, including relatively undisturbed riparian habitat and excellent smallmouth bass fishery.	
Cedar River	Louisa, Muscatine	Iowa River to Highway 6.	26	1982		F, W, C	Two federally listed endangered species of mussel and one federally listed species of bat may be found along the river; potentially rich	

<https://www.nps.gov/nrcr/programs/rtca/nri/states/ia.html>

1/19/2017

							in cultural resources; nice streamside relief with bluffs and ridges.	
Maquoketa River	Jackson, Jones	Mississippi River to US 151 Bridge (omit small reservoir northwest of Maquoketa)	68	1982		S, R, G, F, W, H, C, O	River cuts narrow, gorge-like valley up to 150 feet deep through limestone; excellent water quality supporting productive smallmouth bass fishery; potentially rich in cultural resources; threatened northern wild monkshood has been found in basin.	
Middle Raccoon River	Guthrie and Dallas	City of Panora to the city of Redfield dam.	15	1995	S	S, R, F, W	A designated Iowa "Protected Water Area." Beautiful canoe route with good access. Excellent smallmouth bass fishing and wildlife viewing.	
Turkey River	Clayton, Fayette, Winneshiek, Howard	Mississippi River to Vernon Springs.	110	1982		S, R, G, F, H, C, O	Gently rolling hills with dense stands of trees; good trout stream; high potential for significant cultural resources; northern wild monkshood, a federally listed endangered species, has been found in the basin.	
Upper Iowa River	Winneshiek and Allamakee	City of Kendallville to Highway 76 crossing.	64	1995	W	S, R, G, F, W	A designated "Protected Water Area." The state's most scenic canoe river	

							with towering limestone outcroppings and beautiful riparian habitat. Good bass and trout fishing.	
Wapsipinicon River	Clinton, Scott, Cedar, Jones, Linn, Buchanan, Black Hawk, Bremer	Mississippi River to State Highway 334 at Frederika (omit reservoir northwest of Independence).	195	1982		S, G, F, W, H	A designated Iowa "Protected Water Area." Wide, wooded flood plain with only limited development and agricultural encroachment; wide diversity of fish and wildlife habitat; exposed geologic fault; historically valuable Stone City quarries.	
Yellow River	Allamakee	Entire segment within Effigy Mounds National Monument	1	1982/1993	S	S, R, G, W, H, C	One of fastest falling rivers in state, providing excellent fishing and canoeing opportunities. Numerous prehistoric Indian burial mounds. Site of Jefferson Davis Sawmill upstream from boundary.	
Yellow River	Allamakee	Mississippi River to Highway W60 near Myron.	34	1982		S, R, F, W, H, C	Heavily wooded with marked relief, camping and backpacking opportunities; unusual ecological niches and plant life, including the northern wild monkshood, a federally listed threatened plant, has been found in the basin; good fishery;	

							high potential for cultural resources (Effigy Mounds National Monument adjoins near mouth).	
--	--	--	--	--	--	--	---	--

Challenge Cost Share Program | Federal Lands to Parks | Hydropower Relicensing Program
Land and Water Conservation Fund | National Center for Recreation and Conservation | National Trails System
Partnership Wild and Scenic Rivers | Rivers and Trails Program | Urban Park and Recreation Recovery

Webmaster
NPS.gov U.S. Department of the Interior FOIA Privacy Disclaimer USA.gov

Last Modified 2-27-09