

Decatur Bridge

Burt County, NE and Monona County, IA

NDOT Project Number: STP-51-7(109)

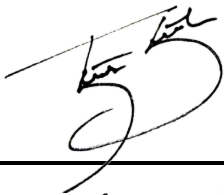
Control Number: 32395

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ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to 42 USC 4332 and 23 CFR 771, 772 & 774
to the US Department of Transportation, Federal Highway Administration
by the Nebraska Department of Transportation and the Iowa Department of Transportation

Project Sponsor signatures indicate verification that the content of this document and the scope of the project are accurate. FHWA's signature gives approval to distribute this information for public and agency review and comment, and certifies that the Environmental Assessment represents both DOTs' good-faith effort to prioritize documentation of the most important considerations required by the statute within the congressionally mandated page limits and timeline. Such approval does not commit either DOT to using future federal grant requests to fund the Preferred Alternative.

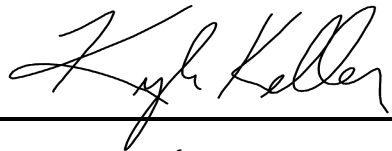


for



3/9/2026

Date



for



3/6/2026

Date



for



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Abbreviations

<i>ACHP</i>	<i>Advisory Council on Historic Preservation</i>
<i>ACM</i>	<i>asbestos-containing material</i>
<i>APE</i>	<i>area of potential effects</i>
<i>APP</i>	<i>Aviation Protection Plan</i>
<i>BGEPA</i>	<i>Blad and Golden Eagle Protection Act</i>
<i>BMP</i>	<i>best management practice</i>
<i>BSNP</i>	<i>Bank Stabilization and Navigation Project</i>
<i>BUG</i>	<i>Backlight Uplight and Glare</i>
<i>CAG</i>	<i>Community Advisory Group</i>
<i>CFR</i>	<i>Code of Federal Regulations</i>
<i>CIA</i>	<i>community impact assessment</i>
<i>CLOMR</i>	<i>Conditional Letter of Map Revision</i>
<i>CWA</i>	<i>Clean Water Act of 1972</i>
<i>DWEE</i>	<i>Nebraska Department of Water, Energy, and Environment</i>
<i>DOT</i>	<i>Department of Transportation</i>
<i>EA</i>	<i>environmental assessment</i>
<i>EDR</i>	<i>Environmental Data Resources</i>
<i>EO</i>	<i>Executive Order</i>
<i>EPA</i>	<i>US Environmental Protection Agency</i>
<i>ESA</i>	<i>Endangered Species Act</i>
<i>et seq</i>	<i>and what follows (regulatory cite)</i>
<i>FEMA</i>	<i>Federal Emergency Management Agency</i>
<i>FHWA</i>	<i>Federal Highway Administration</i>
<i>FPPA</i>	<i>Farmland Protection Policy Act</i>
<i>HMR</i>	<i>Hazardous Materials Review</i>
<i>HPM</i>	<i>Highway Project Manager</i>
<i>IA-</i>	<i>Iowa Highway</i>
<i>IDNR</i>	<i>Iowa Department of Natural Resources</i>
<i>IIS</i>	<i>Integrated Information System</i>
<i>Iowa DOT</i>	<i>Iowa Department of Transportation</i>
<i>Iowa SHPO</i>	<i>Iowa State Historic Preservation Office</i>
<i>LED</i>	<i>light-emitting diode</i>
<i>LEP</i>	<i>limited English proficiency</i>
<i>LF</i>	<i>linear feet</i>
<i>Location/Environmental Study</i>	<i>Decatur Bridge Location and Environmental Study</i>
<i>LST</i>	<i>leaking underground storage tank</i>

<i>LWCF</i>	<i>Land and Water Conservation Fund</i>
<i>MBTA</i>	<i>Migratory Bird Treaty Act</i>
<i>MOA</i>	<i>Memorandum of Agreement</i>
<i>MRRP</i>	<i>Missouri River Recovery Program</i>
<i>MSAT</i>	<i>Mobile Source Air Toxic</i>
<i>N-</i>	<i>Nebraska Highway</i>
<i>N/A</i>	<i>not applicable</i>
<i>NAAQS</i>	<i>National Ambient Air Quality Standards</i>
<i>NDEE</i>	<i>Nebraska Department of Environment and Energy (now DWEE)</i>
<i>NDOT</i>	<i>Nebraska Department of Transportation</i>
<i>NEPA</i>	<i>National Environmental Policy Act of 1969</i>
<i>NESHPO</i>	<i>Nebraska State Historic Preservation Office</i>
<i>NFIP</i>	<i>National Flood Insurance Program</i>
<i>NGPC</i>	<i>Nebraska Game and Parks Commission</i>
<i>NHPA</i>	<i>National Historic Preservation Act</i>
<i>NPDES</i>	<i>National Pollutant Discharge Elimination System</i>
<i>NRCS</i>	<i>Natural Resources Conservation Service</i>
<i>NRHP</i>	<i>National Register of Historic Places</i>
<i>PCB</i>	<i>polychlorinated biphenyls</i>
<i>Project</i>	<i>Decatur Bridge</i>
<i>PEMA/C</i>	<i>palustrine emergent temporarily / seasonally flooded</i>
<i>PEMF</i>	<i>palustrine emergent semi-permanently flooded</i>
<i>PFOA</i>	<i>palustrine forested temporarily flooded</i>
<i>PSSA</i>	<i>palustrine scrub-shrub temporarily flooded</i>
<i>PUB</i>	<i>palustrine unconsolidated bottom (open water)</i>
<i>RCR</i>	<i>Resource Conservation and Recovery Act</i>
<i>ROW</i>	<i>right-of-way</i>
<i>SRTS</i>	<i>Siouxland Regional Transit System</i>
<i>SWP</i>	<i>Source Water Protection</i>
<i>SWPPP</i>	<i>Stormwater Pollution Prevention Plan</i>
<i>TDM</i>	<i>Transportation Demand Management</i>
<i>TL3</i>	<i>Title Three of the Superfund Amendment and Reauthorization Act</i>
<i>TMDL</i>	<i>total maximum daily load</i>
<i>TSCA</i>	<i>Toxic Substances Control Act</i>
<i>TSM</i>	<i>Transportation Systems Management</i>
<i>Uniform Act</i>	<i>Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970</i>
<i>UNL</i>	<i>University of Nebraska-Lincoln</i>
<i>US</i>	<i>United States</i>

<i>USACE</i>	<i>US Army Corps of Engineers</i>
<i>USC</i>	<i>United States Code</i>
<i>USCG</i>	<i>US Coast Guard</i>
<i>USFWS</i>	<i>US Fish and Wildlife Service</i>
<i>USGS</i>	<i>US Geological Survey</i>
<i>UWAP</i>	<i>Nebraska Unexpected Waste Action Plan</i>
<i>WHPA</i>	<i>Wellhead Protection Area</i>
<i>WMA</i>	<i>Upper Decatur Bend Wildlife Management Area</i>

Chapter 1 Project Purpose and Need

1.1 Introduction

The Nebraska Department of Transportation (NDOT), in partnership with the Iowa Department of Transportation (Iowa DOT), proposes to improve the existing Nebraska Highway 51 (N-51)/Iowa Highway 175 (IA-175) crossing of the Missouri River, including the Decatur Bridge, connecting Burt County, Nebraska and Monona County, Iowa as shown in Figure 1-1 (Project). The Decatur Bridge (S051 03644), constructed in 1951 and opened to traffic in 1956, has been determined eligible for listing in the National Register of Historic Places (NRHP). The Decatur Bridge Project would be developed as a federal-aid project, with the Federal Highway Administration (FHWA) as the lead federal agency.

As a federal undertaking, the proposed action, or Project, must satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA)¹ (42 United States Code [USC] 4321 et seq.). To comply with NEPA, this environmental assessment (EA) was prepared and is consistent with requirements implemented by the following regulations and guidelines:

- 23 Code of Federal Regulations (CFR) 771
- 23 CFR 772
- 23 CFR 774
- 23 USC 139
- FHWA Technical Advisory T-6640.8a

The purpose of this EA is to identify and evaluate the potential adverse and beneficial effects or impacts of the Project on the environment and to provide an opportunity for public and resource agency input in the decision-making process.

If, based on the EA, FHWA determines that no significant impacts have been identified or that significant impacts can be minimized or mitigated, FHWA would prepare a Finding of No Significant Impact. If significant environmental impacts are identified and cannot be minimized or mitigated, NEPA requires the preparation of a more detailed Environmental Impact Statement.

This chapter discusses the purpose of and need for the Project and identifies the Project location and study area. Subsequent chapters address the alternatives considered (Chapter 2); the affected environment and potential environmental consequences (Chapter 3); and agency coordination and public involvement efforts (Chapter 4). Appendix A includes a list of resource reports for the Project and identifies whether each report is provided as an appendix to the EA or is included in NDOT's Project file.

¹ NEPA (42 United States Code [USC] 4321–4347) is the foundation of environmental policy making in the United States. The NEPA process includes an environmental review early in the planning for proposed actions. The process is intended to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment.

Figure 1-1. Project Location



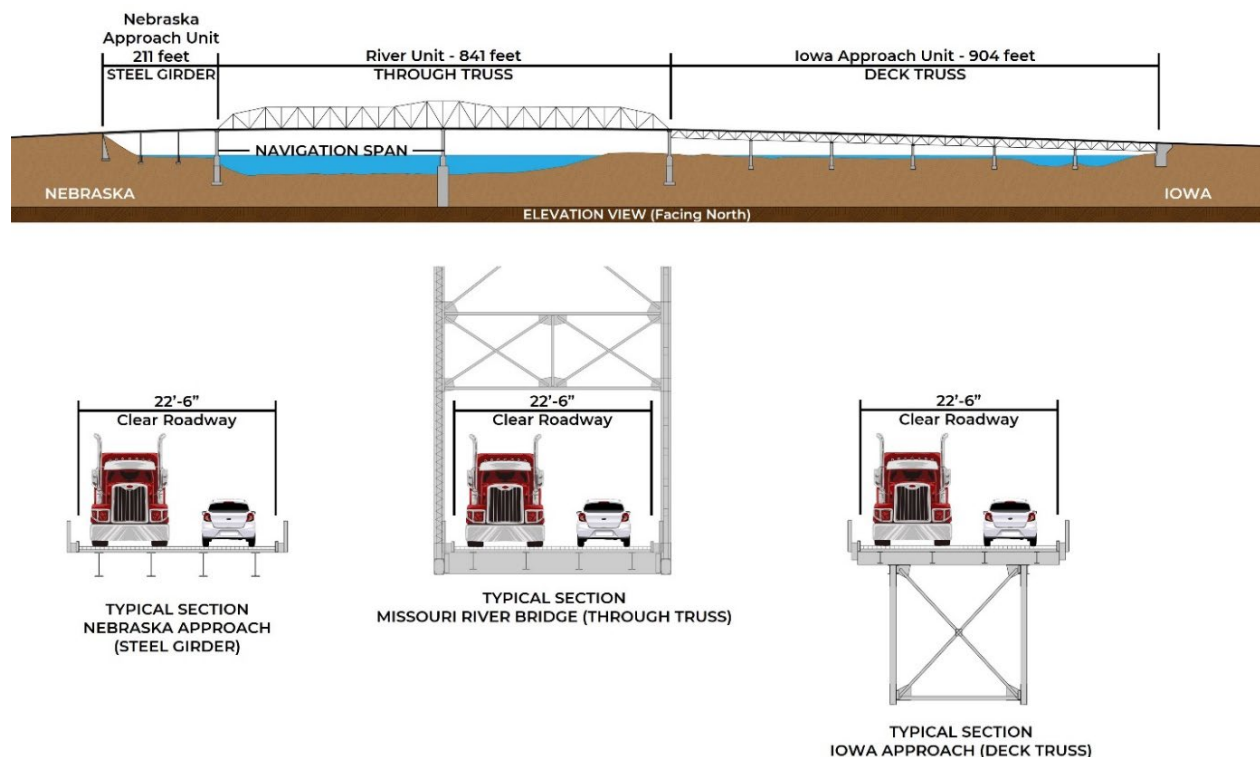
1.2 Project Location and History

1.2.1 Project Location and Setting

The Project, spanning the Missouri River, would connect Burt County, Nebraska and Monona County, Iowa via N-51 and IA-175. The Project limits, or logical termini, fall along the existing N-51 corridor in Decatur and the existing IA-175 corridor east of the Missouri River, as the approach roadway serving the new crossing would connect back into the existing highway. The western terminus of the Project is Broadway Street in Decatur, and the eastern terminus is along IA-175 west of the intersection with 240th Street in Monona County.

The Decatur Bridge is 1,956 feet long, consisting of a three-span Nebraska approach unit, a two-span truss river unit, and two Iowa approach units (Figure 1-2). The Decatur Bridge was determined NRHP eligible by the Nebraska State Historic Preservation Office (NESHPO) in 2013 and by the Iowa SHPO in 2011 under Criterion A: History – Transportation, as a large highway bridge that established the first highway crossing of a major waterway as part of a major state bridge-building initiative; and under Criterion C: Engineering, as a steel continuous through-truss bridge with an exceptional span length.

Figure 1-2. Components of the Decatur Bridge



The *Decatur Bridge Location and Environmental Study (Location/Environmental Study)*,² completed in January 2025, encompassed areas within eastern Burt County and western Monona County for the purpose of identifying potential constraints to be considered in developing alternatives that would connect Decatur/N-51 with IA-175 east of the Missouri River. Initial new crossing alignments were

² *Decatur Bridge Location and Environmental Study* is available at <https://dot.nebraska.gov/media/i55mrhr1/cn32395-decatur-bridge-location-and-environmental-study-feasibility-report-2025-01-13-final-1.pdf>

developed and reviewed from as far north as 230th Street (approximately 1.4 miles north of the existing Decatur Bridge crossing) to approximately 0.6 miles south of the existing crossing.

1.2.2 Decatur Bridge Major Repair History

Nearing 75 years of age, the Decatur Bridge has undergone nine major structural repair projects since the bridge was opened to traffic in 1956. The most recent major repairs include:

- 2000-2001 - The original concrete deck was replaced with an open steel grate deck because of the age and deterioration of the concrete. Although the deck replacement addressed load ratings on the bridge, the open grate deck panels accelerate corrosion of the members below. Since 2021, NDOT and the Iowa DOT have been replacing deck panels annually at a cost of \$175,000 per year (2024 dollars).
- 2011 – Flooding along the Missouri River caused scour issues at the Iowa abutment, with repairs closing the crossing for 5 months.
- 2017 - Structural steel repairs were performed on the River Unit and Iowa Approach Unit trusses. The floor beams of the River Unit were post-tensioned (strengthened) to increase their load capacity. Concrete repairs and strengthening were performed on several substructure units. Street and navigation lighting were overhauled, and the approaches and railings were updated. The entire superstructure and steel portions of the substructure were blasted and repainted.
- 2022 – Only 5 years after the 2017 repair, the biannual inspection identified structural issues of “high or moderate urgency,” noting steel cracks and section loss repairs needed in approximately 7 locations, with structural and non-structural issues identified at another 87 locations.
- 2024 – Inspection identified high and medium urgency repairs in addition to new or further deterioration in structural members repaired in 2022. The next major repair project is anticipated in 2026.

In addition to structural deficiencies, the bridge has several functional deficiencies – conditions that do not meet current design criteria – including narrow travel lanes and no shoulders.

1.3 Project Purpose and Need

The primary purposes of the Project are as follows:

- Provide a resilient river crossing connecting Decatur, Nebraska/N-51 and Onawa, Iowa/IA-175 that maintains access to regional commerce, employment, education, health care, and recreation facilities.
- Maintain accessibility to and by emergency services.
- Provide infrastructure to support current and future travel demand.

These purposes will be used to evaluate the range of alternatives under NEPA.

The needs for the Project are as follows:

- Maintain connectivity for area residents to commerce, health care, education, employment, and recreation facilities on both sides of the river. During major repairs or incidents that close the bridge, residents must travel more than 80 miles out-of-direction to access services in Decatur and Onawa. The extensive out-of-direction travel negatively affects jobs and the regional economy.

- Improve infrastructure condition by addressing both structural and functional deficiencies. Structural deterioration requires frequent and costly repairs and limits the remaining useful life of the river crossing. The bridge's width and lack of shoulders do not meet current design standards, limiting the space available to respond to incidents and to make repairs, contributing to frequent closures.
- Improve resiliency against flooding to address recent trends on the lower Missouri River that show an increase in the frequency and magnitude of major flood events at the project site. The crossing remains susceptible to scouring from future flood events after the damage caused by the 2011 flood, which closed the crossing for 5 months.

Data supporting the purpose and needs are provided in the *Purpose and Need Memorandum*³ included in Appendix B and posted on the NDOT Decatur Bridge Project website.

1.4 Project Study Area

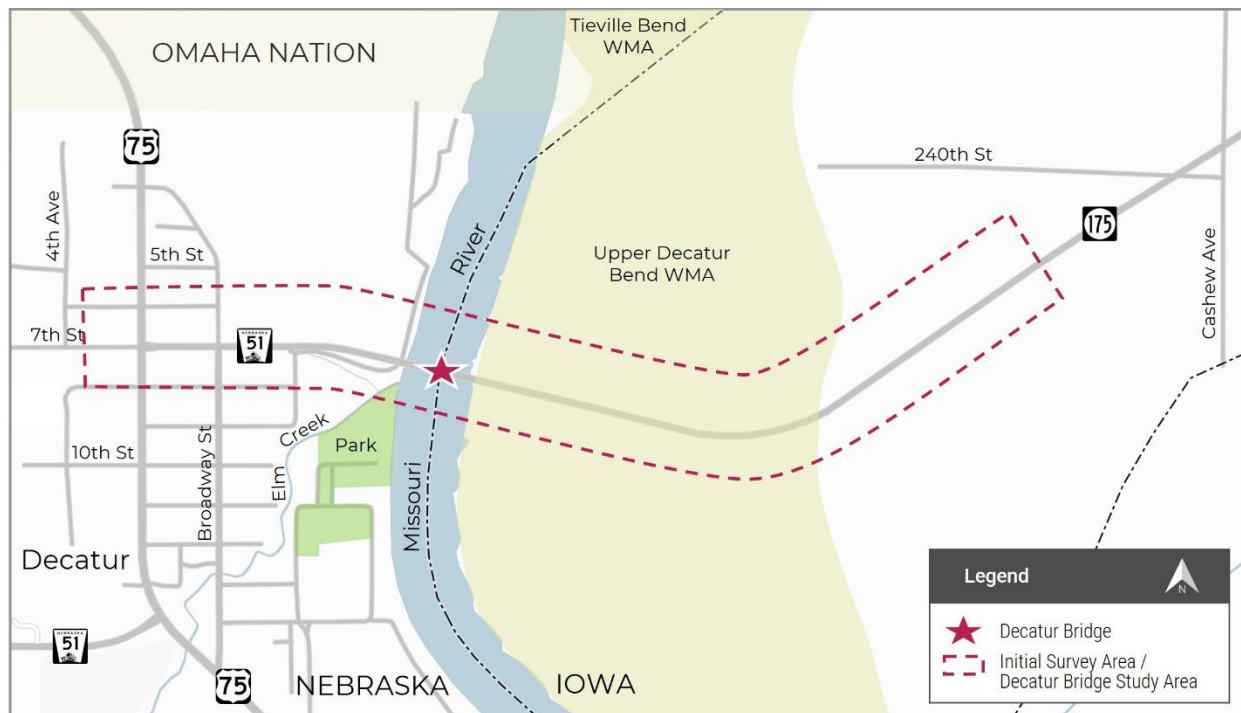
During the *Location/Environmental Study*, initial surveys were conducted within a 1,000-foot-wide corridor centered along the Decatur Bridge crossing. This Initial Survey Area (shown in Figure 1-3) extended from west of US-75 in Decatur to west of Cashew Avenue in Monona County, and will serve as the Project Study Area for this EA. A large portion of the Project Study Area includes the Upper Decatur Bend Wildlife Management Area (WMA) on the Iowa side of the river.

The Project Study Area is considered large enough to identify and address environmental concerns associated with the build alternatives carried forward from the *Location/Environmental Study*.

Resource-specific study areas differing from the Project Study Area are defined, as needed, in their respective sections in Chapter 3, Affected Environment and Environmental Impacts. The Project Study Area is typical of the land use and other features prominent in the general area and along the Missouri River.

³ *Purpose and Need Memorandum* available at: https://dot.nebraska.gov/media/mfshlctw/purpose-and-need-memo_2025-dec.pdf

Figure 1-3. Decatur Bridge Project Study Area



Chapter 2 Alternatives Analysis

This chapter discusses the alternatives that were considered but eliminated, as well as the No-Build Alternative and the Preferred Alternative, which are carried forward for detailed analysis in this EA.

2.1 Alternatives Considered but Eliminated

During the *Location/Environmental Study*, NDOT and Iowa DOT considered several alternatives to improve the Missouri River crossing at Decatur. In addition to rehabilitation of the existing bridge and operational alternatives (described in Table 2-1), other locations for a new river crossing were reviewed. Figure 2-1 illustrates the alignments considered for an improved Missouri River crossing between Nebraska and Iowa. The alignments ranged from approximately 1.4 miles north to approximately 0.6 miles south of the existing Decatur Bridge crossing.

Table 2-1 describes the universe of alternatives considered during the *Location/Environmental Study* and those eliminated from further consideration. Additional information on the alternatives considered is provided in the *Location/Environmental Study* and the *Decatur Bridge Alternatives Analysis to Support Coordination Under Section 106 of the National Historic Preservation Act*⁴ included in Appendix C and posted on the NDOT Decatur Bridge Project website.

Table 2-1. Alternatives Considered but Eliminated

Alternative	Reason Eliminated
Rehabilitation of the Existing Bridge	Rehabilitation would not meet the purpose and need. It would not provide a long-term, resilient river crossing nor the infrastructure to support current and future travel demand. The long-term outcome of even major repairs would not extend the useful life of the bridge. The functional/design deficiencies cannot be addressed without replacing the truss or making other improvements that would affect the features of the bridge that make it NRHP-eligible. The flood resiliency of the crossing would not be improved, and the crossing would continue to be subject to damage and closure resulting from future flood events.
Use of Another River Crossing	Use of another river crossing would not meet the purpose and need. Scheduled maintenance and repairs would continue until a point in the future when such activities can no longer sustain the continued use of the crossing and it would be closed to traffic. At that time, traffic would be rerouted along existing roadways to cross the Missouri River either at Blair or Sioux City, causing more than 80 miles of out-of-direction travel. N-51 and IA-175 would be maintained to provide access to both sides of the river, but at a point in the future, the Decatur Bridge would be removed to avoid creating a hazard to river navigation and public safety.
Transportation Systems Management (TSM)/Transportation Demand Management (TDM) ⁵	TSM/TDM would not meet the purpose and need. Due to the rural nature of the Project, the limited existing infrastructure (no traffic signals, freeway, interchanges), and the limited travel demand, TSM and TDM strategies are not applicable.

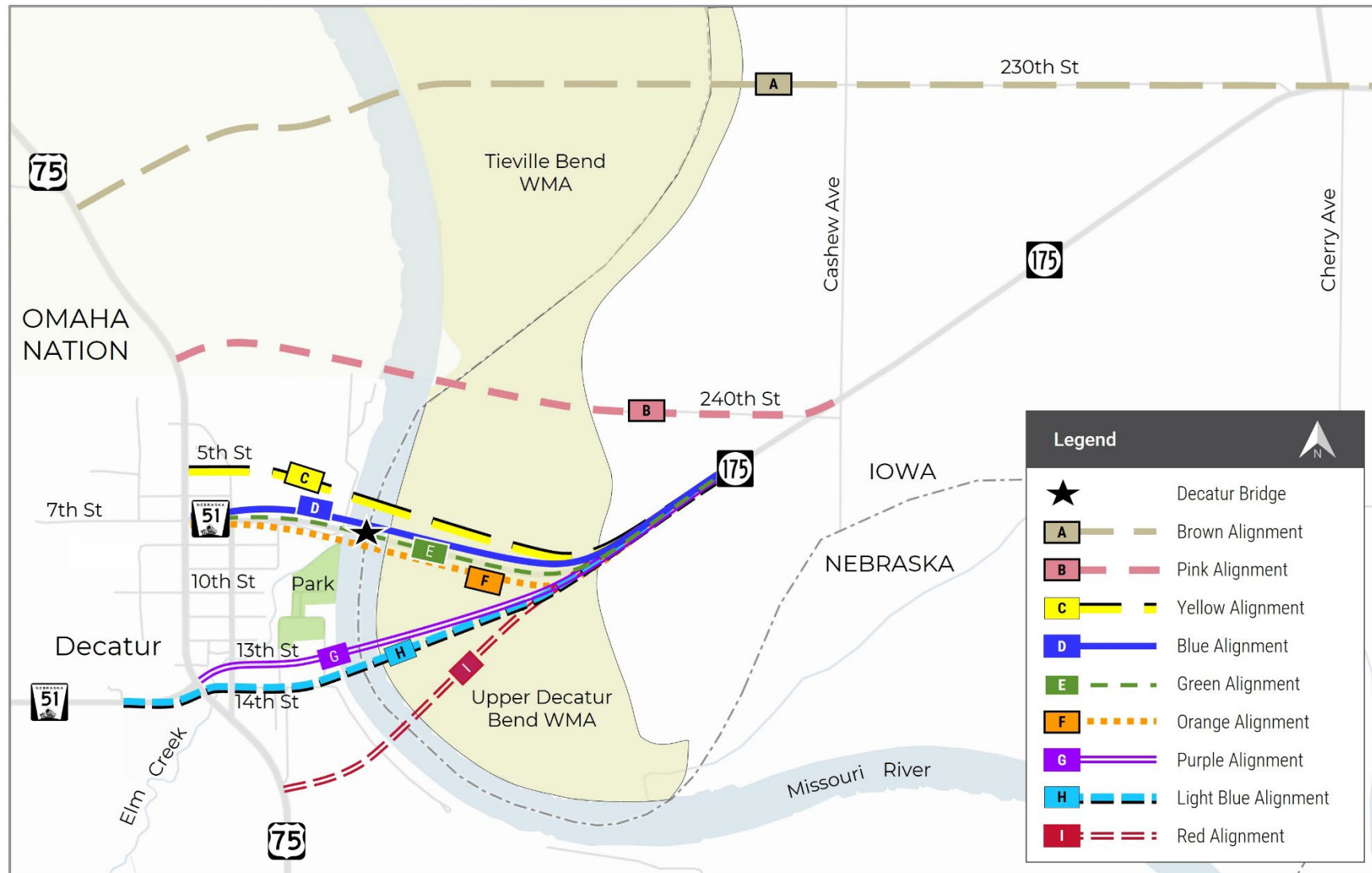
⁴ *Decatur Bridge Alternatives Analysis to Support Coordination Under Section 106 of the National Historic Preservation Act* is available at: https://dot.nebraska.gov/media/wxknrbuf/alternatives-analysis_december-2025-dec.pdf

⁵ TSM is a set of low-cost (non-capital-intensive) strategies to enhance safety, reduce congestion, and improve traffic flow such as traffic signal synchronization, freeway operational improvements, and incident management. TDM includes managing or decreasing the demand for auto-related travel to increase the operating efficiency of transportation facilities. See the *Location/Environmental Study* for additional information.

Table 2-1 continued. Alternatives Considered but Eliminated

Alternative	Reason Eliminated
New Bridge on the Existing Crossing Alignment	Building a new bridge on the existing alignment did not meet the purpose and need. It would result in more than 80 miles of out-of-direction travel during the 2-year or longer construction timeframe. It would affect access to existing businesses in Decatur and access by emergency responders from Onawa during the closure timeframe, potentially resulting in irreversible negative effects on residents and the local economy. The public did not support this alternative.
Alternate Modes	Use of alternate modes would not meet the purpose and need. On-demand transit is only available within each state (services do not cross the river), limiting connectivity to other essential services. On-demand transit is also limited to certain days and times. It would not improve the river crossing.
New Location Build Alternatives	Eight alignments for a new river crossing were evaluated. They extended from approximately 1.4 miles north of the existing crossing to 0.6 miles south. Six of the alignments farthest away from the existing crossing were eliminated because they would result in excessive out-of-direction travel and bypass the community of Decatur; an issue raised by the public. Two alignments adjacent to the existing crossing (Blue - north and Orange – south) were recommended for further study as Build Alternatives in the NEPA process.

Figure 2-1. New Location Build Alternatives Considered



2.2 Build Alternatives Considered for Further Study

Between the completion of the *Location/Environmental Study* (January 2025) and the start of the NEPA process (August 2025), the Blue and Orange Alternatives were refined during the preliminary design effort. The anticipated limits of construction (areas that may be disturbed during construction, including those where both temporary and permanent impacts would occur) were revised, additional hydraulic analyses were conducted, and IDNR requested the relocation of an existing boat channel within the WMA. Proposed impact quantities (originally calculated as a combination of existing highway ROW and areas to be obtained as new ROW) were updated to remove the acreage of existing IA-175 ROW within the WMA. Further refinements were made after the start of the NEPA process to lengthen the bridge resulting from further hydraulic modeling, adjust the length of the WMA access road to avoid a proposed bridge pier, site the replacement boat channel, and refine embankment slopes and armoring to protect the new bridge abutment and WMA access road from scour. These preliminary design changes increased the wetland acreage impacts compared to those presented to agencies during scoping.

Table 2-2 summarizes the impacts of the two build alternatives (Blue – north of and parallel to, and Orange – south of and parallel to the existing Decatur Bridge) as they changed during the preliminary design process. The relevant information in Table 2-2 was shared with resource agencies during Agency Scoping (May 2025) and in the Alternatives Analysis shared with Section 106 consulting parties, Tribal Nations, and cooperating agencies in late 2025. At the start of the NEPA process, the Blue Alternative was selected as the Preferred Alternative. The Orange Alternative was removed from evaluation in this EA because it would require relocating Marina Drive (in Decatur) and more of the WMA access road, impact an Elm Creek tributary and Beck Memorial Park and Campground, and affect the Decatur Wastewater Treatment Plant.

Table 2-2. Impact Comparison of the Build Alternatives During Preliminary Design

Impact Category Approximate Values	Orange Alternative Agency Scoping May 2025	Blue Alternative Agency Scoping May 2025	Orange Alternative Alternatives Analysis December 2025	Blue Alternative Alternatives Analysis December 2025	Blue Alternative Preferred March 2026
Total Bridge Length (LF)	2,755	2,715	2,755	2,715	2,730 ¹
Linear Feet of Marina Drive Realignment	1,174	0	1,174	0	0
Linear Feet of IDNR Access Road Realignment	2,163	941	2,163	941	1,032
Total Acres of New ROW or easements to be acquired	36	29	36	29	34
Total Acres of impact within the WMA	44 ²	30 ²	24	19	23
Acres of Woodland Impacts	16	8	16	8	8
Acres of Permanent Wetland Impacts (all types)	1.9	2.3	1.9	2.3	5.8 ³
Acres of Permanent Stream Impacts (all types)	>0.1	>0.1	>0.1	>0.1	>0.1
NRHP-Eligible Resources, Adverse Effect	Decatur Bridge	Decatur Bridge	Decatur Bridge	Decatur Bridge	Decatur Bridge
Section 4(f) Resources, "Use"	Decatur Bridge Upper Decatur Bend WMA Beck Memorial Park/ Campground	Decatur Bridge	Decatur Bridge Upper Decatur Bend WMA Beck Memorial Park/ Campground	Decatur Bridge Upper Decatur Bend WMA	Decatur Bridge Upper Decatur Bend WMA

1 – Bridge length adjusted based on hydraulic modeling.

2 – Originally included 20 acres of existing highway ROW within the "area impacted within the WMA".

3 – Quantities updated after incorporation of the relocated boat channel within the WMA. Based on the NDOT functional plans for the Preferred Alternative, a total of 13.4 acres of wetland impacts (permanent + temporary), with 5.8 acres of permanent wetland impacts anticipated.

2.3 No-Build Alternative

Under the No-Build Alternative, the existing Decatur Bridge crossing would remain in place. A planned 2026 repair project would still be completed by NDOT, but thereafter, only regular and scheduled maintenance of the bridge would occur. At some point in the future, when repairs and maintenance cannot sustain continued use of the crossing, the crossing will be closed to traffic. Interim closures of the crossing would still occur to conduct scheduled maintenance and repairs when needed. Detours and bridge closures would require traffic to use the next available Missouri River crossings at Blair, Nebraska (approximately 37 miles south of Decatur) and Sioux City, Iowa (approximately 44 miles north of Decatur). The No-Build Alternative would also include ongoing minor construction projects and maintenance activities for transportation facilities throughout Burt County, Nebraska and Monona County, Iowa. The No-Build Alternative does not meet the purpose and need; however, it will be carried

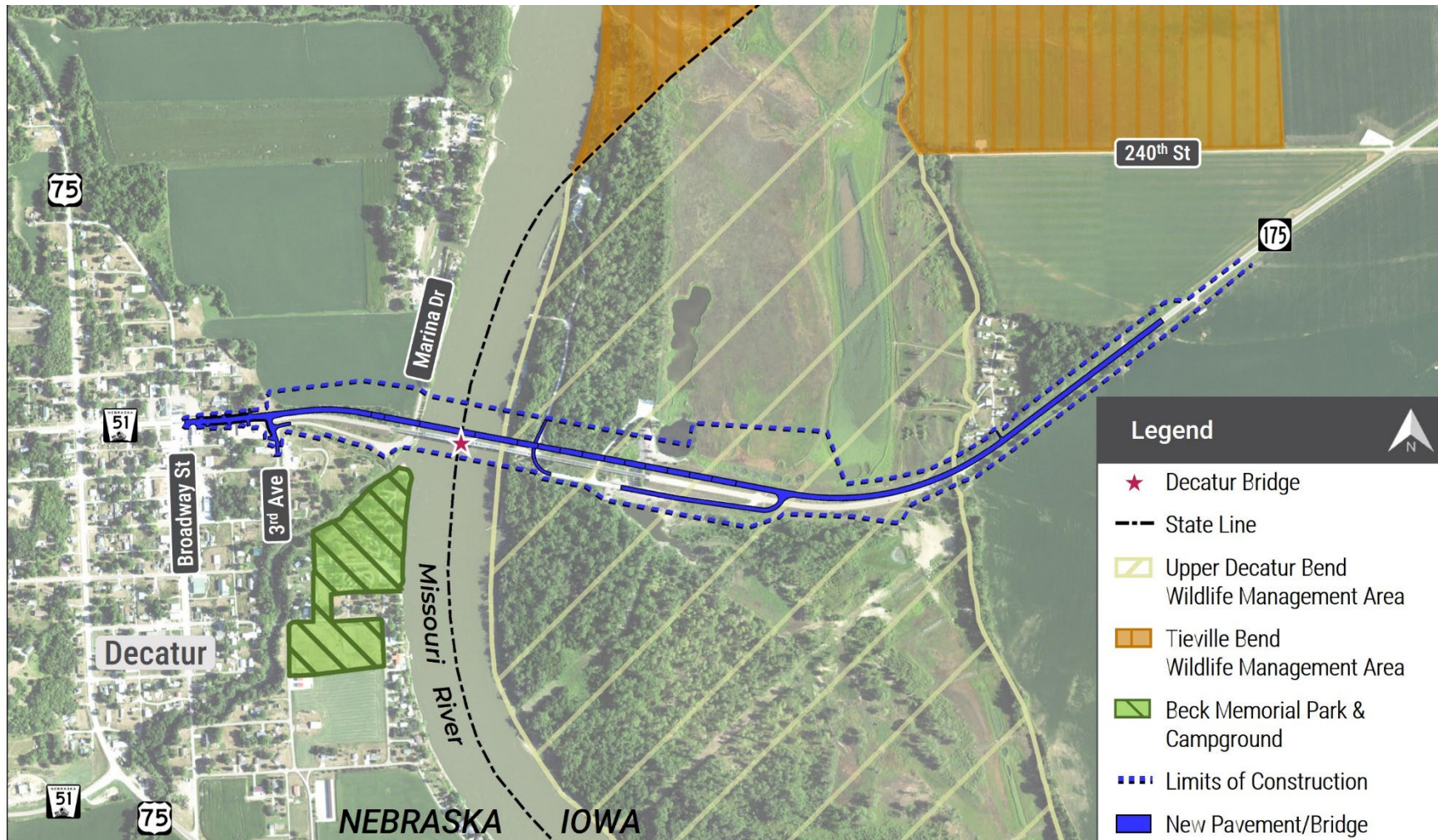
forward under NEPA to serve as a baseline for comparing the impacts of the Preferred Alternative, which will be analyzed further in this EA.

2.4 Preferred Alternative

For this proposed Project, the Preferred Alternative is based on a balanced consideration of the need for safe and efficient transportation; the reasonably foreseeable social, economic, and environmental impacts of the proposed Project; and national, state, and local environmental protection goals (23 CFR 771.105(c)). The Build Alternative, hereafter referred to as the Preferred Alternative, was carried forward for further analysis because it meets the Project's purpose and need, balances the broader goals of infrastructure improvement, and minimizes environmental and community impacts and costs.

The Preferred Alternative (Blue Alternative, Figure 2-2) would provide a new river crossing approximately 80 feet north of and parallel to the existing Decatur Bridge crossing. The new bridge would be approximately 2,730 feet long, almost 775 feet longer than the existing Decatur Bridge, to provide additional flowage capacity within the floodplain and overbank area on the Iowa side of the river. The longer bridge would replace the existing separate overflow structure along IA-175. The new bridge would have a clear roadway width of 40 feet, consisting of two 12-foot-wide travel lanes (one in each direction) and an 8-foot-wide shoulder on each side. The new bridge River Unit is anticipated to be supported by steel plate girders, eliminating any overhead truss components. The approach roadways and bridge units in both Nebraska and Iowa would be updated to current design standards. In Decatur, the approach roadway would tie back into existing N-51 just east of Broadway Street. On the Iowa side, the approach roadway would tie back into existing IA-175 west of the intersection with 240th Street. The Preferred Alternative would reconstruct the existing access road within the Upper Decatur Bend WMA on the Iowa side of the river to maintain WMA access. The existing Decatur Bridge crossing would remain open to traffic during construction of the new bridge (possibly 2 years or more) until the approach roadways are connected to the existing highways. When construction is complete, the Decatur Bridge and sections of the existing approach roadways will be removed.

Figure 2-2. Preferred Alternative – Build a New Bridge North of and Parallel to the Existing Decatur Bridge



Chapter 3 Affected Environment and Environmental Impacts

This chapter identifies environmental resources that would be affected by the proposed Project and the anticipated direct and indirect impacts on those resources. As described in further detail in this chapter, the study area for the environmental analysis depends on the resource. The study area for each resource is large enough to identify and address potential impacts. Unless otherwise noted, resource study areas are the same as the Project Study Area.

To describe the analysis of how the proposed Project affects environmental resources, this chapter considers two groups of resources:

- **Environmental resources not in the study area.** Identifies environmental resources that are typically studied as part of NEPA but are not within the Project Study Area or that would incur minor, possibly negligible effects.
- **Environmental resources requiring detailed analysis.** Sections 3.1 through 3.16 review environmental resources that required detailed technical studies or analyses to determine the context and intensity of potential impacts.

The Project Study Area is defined in Chapter 1 and shown in Figure 1-3. Figure 3-1 (General Features) and Figure 3-2 (Water Features) show the Project Study Area and where permanent and temporary impacts would occur based on the preliminary design of the Preferred Alternative. The Permanent Impact Area is the area where construction activities are anticipated. It was developed based on preliminary limits of construction and includes areas where ROW may be obtained in fee title or under a permanent easement. The Temporary Impact Area is the area that may be disturbed during construction (used to access construction areas, store equipment/materials, relocate utilities, improve drainage, etc.) but would be returned to pre-construction conditions when the Project is complete. Areas of permanent and temporary impacts would be finalized during final design and are generally expected to be wholly contained within the Temporary Impact Area.

Mitigation and environmental commitments are described by resource category in this chapter.

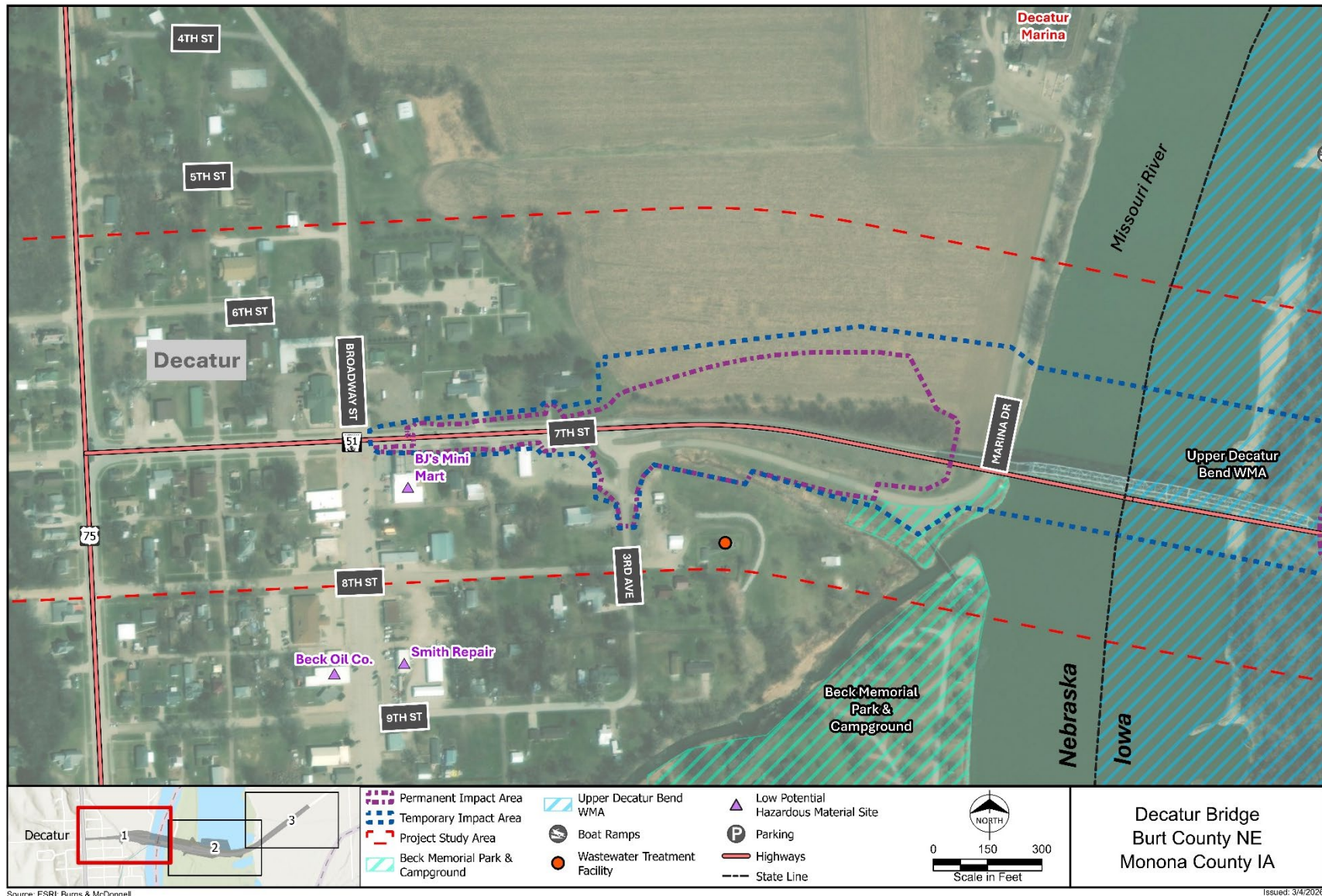


Figure 3-1. Project Study Area – General Features

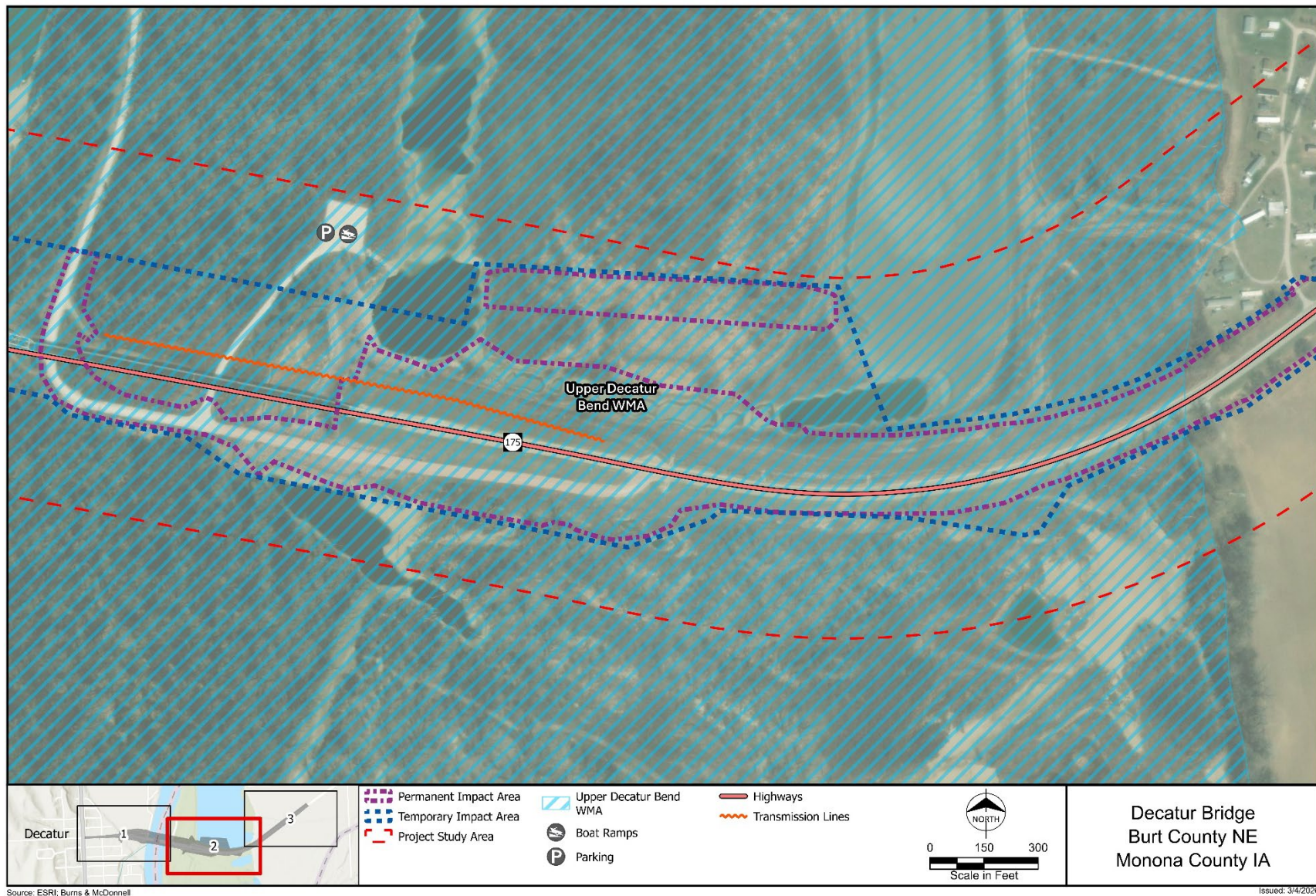


Figure 3-1 continued. Project Study Area – General Features

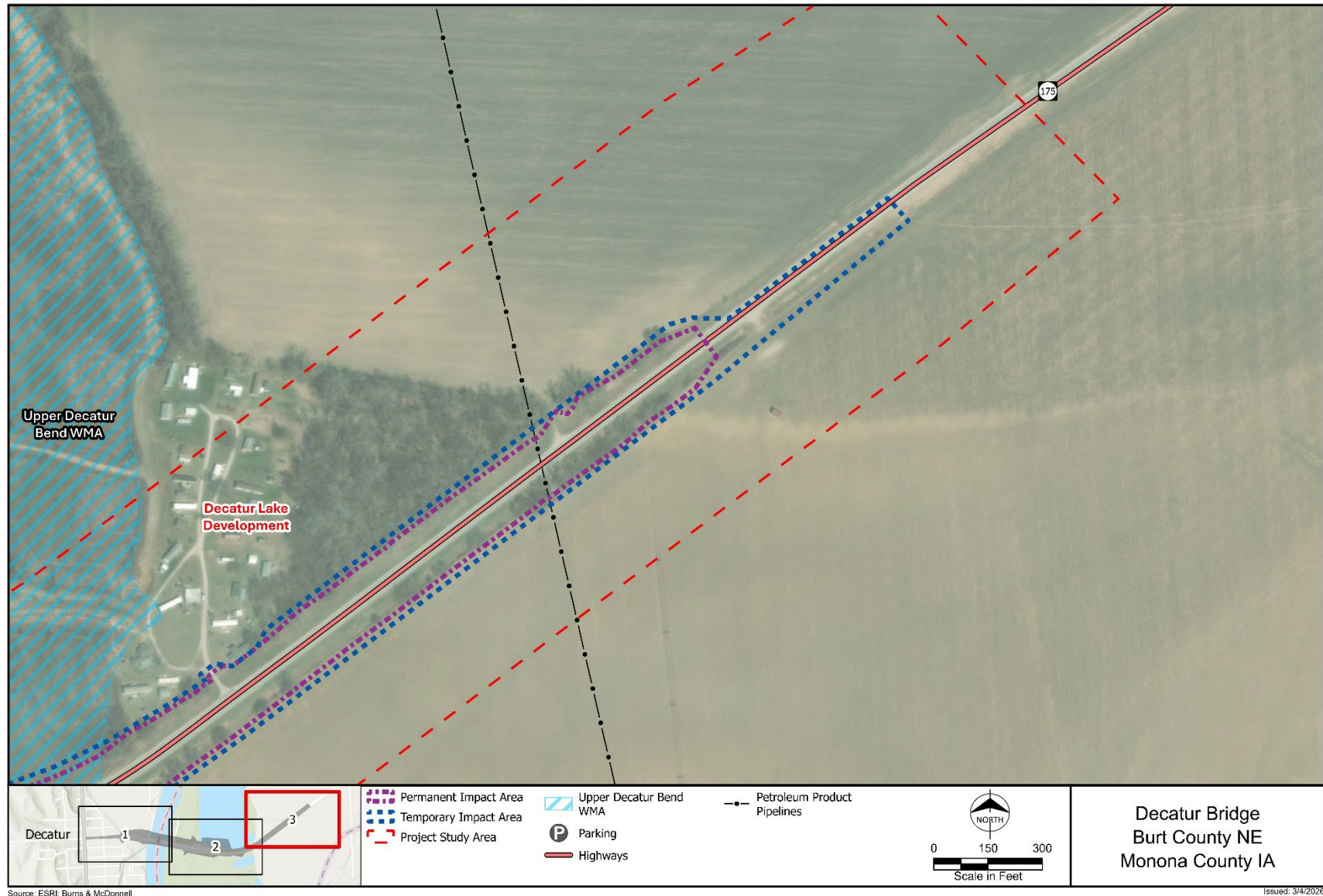


Figure 3-1 continued. Project Study Area – General Features

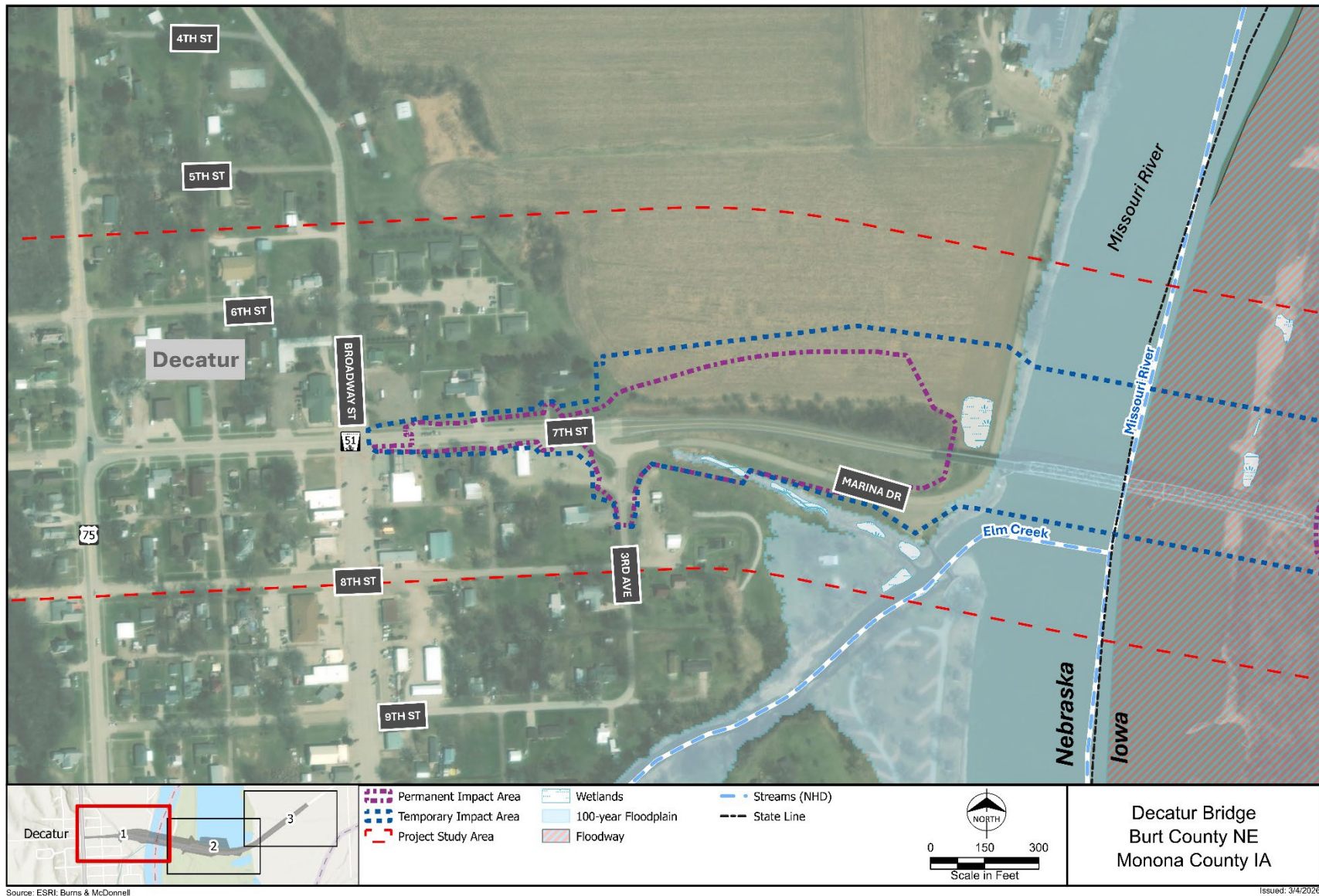


Figure 3-2. Project Study Area – Water Features

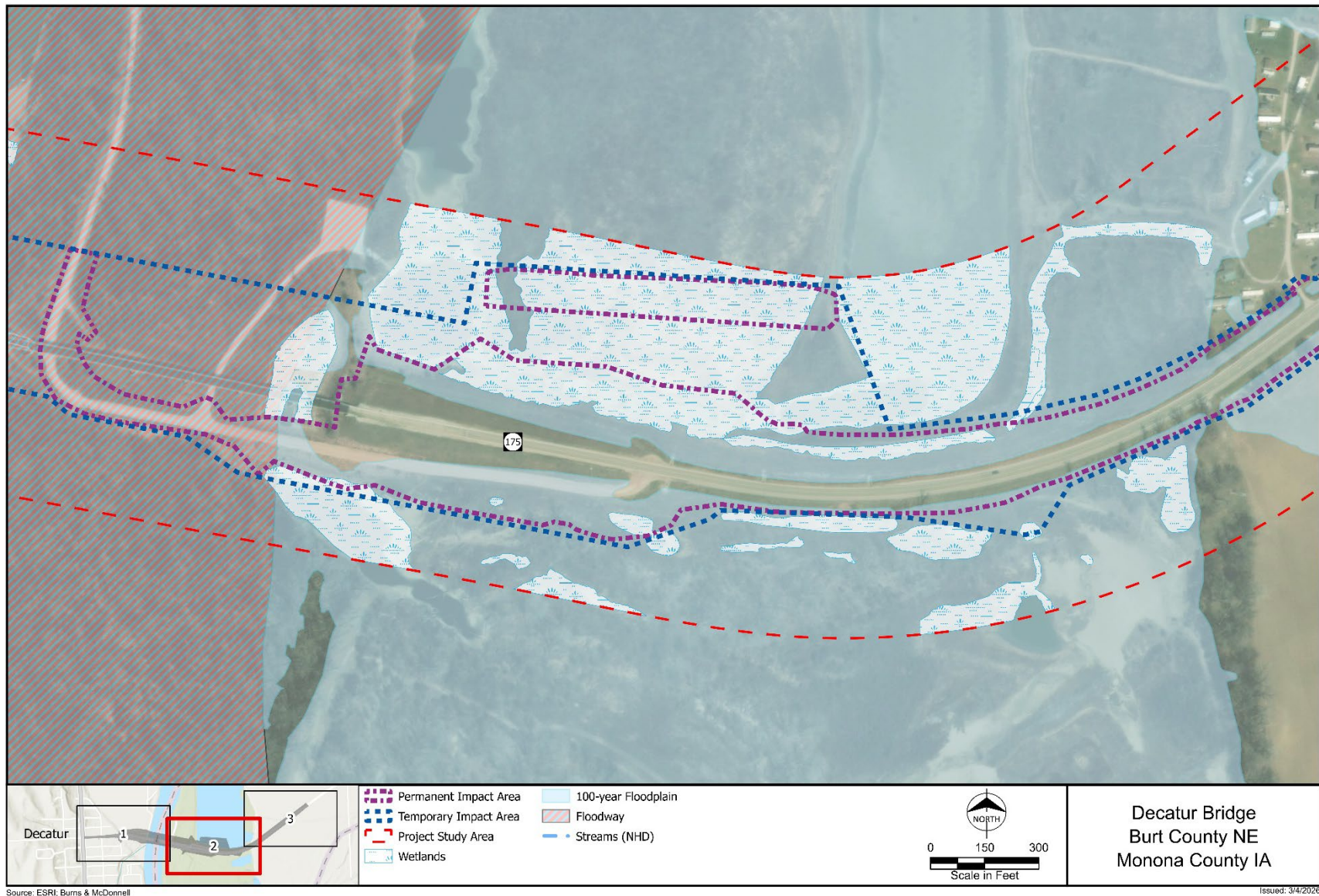


Figure 3-2 continued. Project Study Area – Water Features

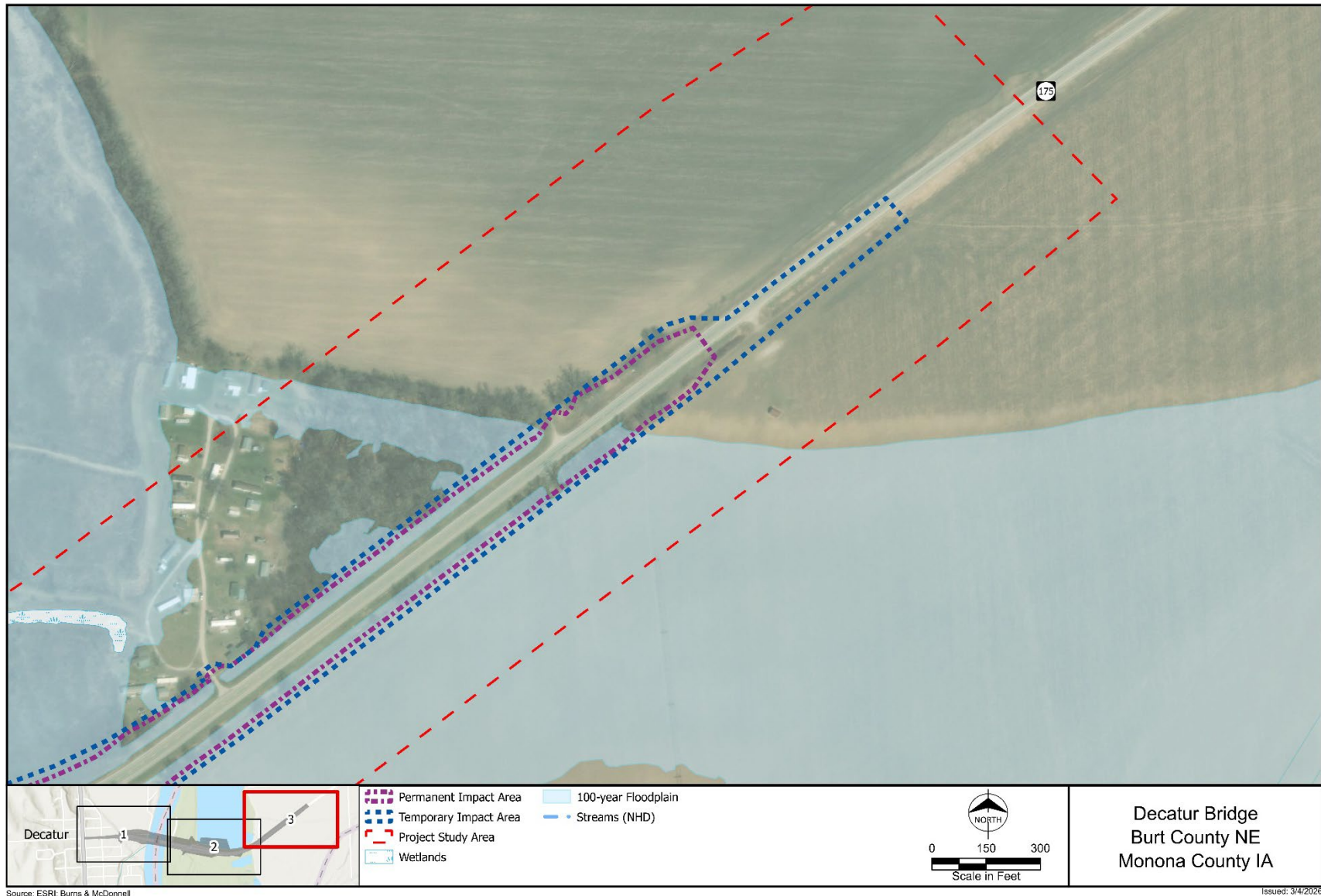


Figure 3-2 continued. Project Study Area – Water Features

Environmental Resources Not in the Project Study Area

For this proposed Project, six resources do not require discussion in the EA because they do not occur within the Project Study Area. These resources are discussed in Table 3-1.

Table 3-1. Environmental Resources Not in the Project Study Area or with Negligible Effects

Resource	Explanation
Air Quality	The Clean Air Act Amendments of 1990 (42 USC 7401 et seq.) control air toxic emissions in the United States and regulate 188 air toxics, including Mobile Source Air Toxics (MSAT). FHWA has developed a tiered approach to analyzing MSATs in NEPA documents, tailored to specific project circumstances. Burt County, Nebraska, is classified as an attainment or non-classifiable area for all National Ambient Air Quality Standards (NAAQS). Monona County, Iowa, is in attainment for all NAAQS. Because the Decatur Bridge Project is within an attainment or unclassifiable area, would not increase roadway capacity, and would not see a substantial increase in traffic volumes along N-51/IA-175 over the Missouri River by 2049, the proposed action is classified as an MSAT I project (requiring no further air quality analysis) and would not jeopardize the continued attainment status of the region.
Noise	FHWA's Noise Standard at 23 CFR Part 772 defines projects for the purposes of conducting traffic noise analyses under three types – <i>Type I projects</i> as federal or federal-aid projects likely to cause traffic noise impacts during regular operation. Such projects typically add capacity (e.g., additional travel lanes, frontage roads, etc.) to address future traffic growth and congestion. <i>Type II projects</i> are federal or federal-aid projects that would retrofit noise abatement along an existing highway. <i>Type III projects</i> do not meet the Type I or Type II project classifications and are unlikely to change the noise environment. NDOT's Noise Analysis and Abatement Policy (April 2024) only applies to all Type I federal highway projects. The Decatur Bridge project is classified as a Type III project as it would not add capacity to N-51 or IA-175 and is not anticipated to change the noise environment within the Project Study Area. Construction noise would be temporary, intermittent, and short-term, occurring only during the 2- to 3-year construction timeframe. FHWA does not require noise analyses for Type III projects.
Paleontology	The University of Nebraska–Lincoln's Highway Paleontology Program (UNL Program) has recorded a paleontological site in Burt County. In areas where new construction may threaten paleontologically sensitive areas, the UNL Program follows a basic three-phase strategy of salvage (1) preconstruction, (2) during construction, and (3) post-construction to recover the maximum amount of scientific information without causing construction delays. NDOT will continue coordinating with the UNL Program to further identify the location of the recorded site relative to the Project Study Area. In the event of a discovery of paleontological materials within the Project Study Area during construction, the Contractor would adhere to NDOT Standard Specifications for Highway Construction and the Iowa Standard Construction Manual.
Recreation Properties	No other recreation facilities are in the Project Study Area other than those addressed under 3.8 Section 4(f) of this EA.
Section 6(f)	Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965 (54 USC 200301–2000310) protects outdoor recreation resources created with LWCF assistance, restricting the conversion of recreational land to non-recreational land. In 2001, the Village of Decatur received \$20,000 in LWCF funds to construct a shower building for the campground. Neither the shower building nor the park/campground would be affected by the Project. Therefore, further assessment and consideration of a Section 6(f) conversion is not required.

Table 3-1 continued. Environmental Resources Not in the Project Study Area or with Negligible Effects

Resource	Explanation
Wild and Scenic Rivers	The National Wild and Scenic Rivers System preserves certain rivers with outstanding natural, cultural, and recreational values. Two rivers within Nebraska are designated as part of the National Wild and Scenic Rivers System, the Niobrara River and specific reaches of the Missouri River (Gavins Point Dam in South Dakota downstream to Ponca State Park, and Fort Randall Dam downstream to Lewis and Clark Lake). The Project is not located within the designated reaches of the Missouri or Niobrara Rivers. No Nationwide Rivers Inventory resources were identified in the Project Study Area (National Park Service 2025).

Environmental Resources Requiring Detailed Analysis

For this proposed Project, the following resources require detailed discussion in the EA because they occur within the Project Study Area and may be impacted by the Preferred Alternative.

3.1 Land Use

Transportation projects should strive to be consistent with the intent of local and regional land use plans while meeting the current and future needs of the travelling public. The evaluation of land use considers the Project's potential to change land use, including temporary changes, and the Project's consistency with local or regional land use and transportation plans.

3.1.1 Affected Environment

Land use within the Project Study Area includes agricultural, residential, commercial, and recreational (Beck Memorial Park and Campground) within Decatur, Nebraska, and recreational (Upper Decatur Bend WMA), agricultural, and rural residential on the Iowa side of the river. The Missouri River flows through the center of the Project Study Area, which is primarily used for commerce (shipping of various commodities via barge) and recreation (boating and fishing).

The State of Iowa owns the 642-acre WMA along the east bank (left descending bank) of the Missouri River. The WMA is managed by the Iowa Department of Natural Resources (IDNR). The US Army Corps of Engineers (USACE) acquired easements from the State of Iowa over the WMA (in 2000 and 2003) under the Missouri River Recovery Program (MRRP)⁶. Additional information on the use and management of the WMA and the purpose of the MRRP are provided in Section 3.8.

No established future land use plans or development plans have been published for the Project Study Area.

3.1.2 Impacts of the No-Build Alternative

There would be no construction of the Project with the No-Build Alternative. As a result, no impact on land use would occur because no land would be converted to a transportation use.

⁶ The USACE's Missouri River Recovery Program consists of two primary components: (1) identifying and implementing an action that will avoid a finding of jeopardy opinion for three federally listed species (piping plover, interior least tern, and pallid sturgeon), and (2) implementing the Bank Stabilization and Navigation Project Fish and Wildlife Mitigation Project (BSNP Mitigation Project). <https://www.nwo.usace.army.mil/MRRP/>

3.1.3 Impacts of the Preferred Alternative

Construction of the Preferred Alternative would change the use of the land being acquired from adjacent properties. On the Nebraska side of the river right-of-way (ROW) would be needed from a parcel in agricultural use, permanently converting an area in row crops to transportation use. Portions of properties adjacent to N-51 in residential and commercial use would be acquired, but no homes or businesses would be displaced. ROW acquisitions should not affect the continued current use of the remainder of those properties.

On the Iowa side of the river, land from the WMA and agricultural properties along IA-175 would be needed to build the Preferred Alternative. Approximately 23 acres of the WMA would be affected by construction of the Preferred Alternative: some areas would be permanently converted to ROW to shift IA-175 and build the bridge, and other areas would experience temporary impacts. Areas where temporary impacts would occur would be restored to pre-construction conditions and would continue to be managed for wildlife conservation and recreational purposes. The impacts of the Project on the WMA are described further in Section 3.8. Minor areas of farmed land adjacent to IA-175 would be converted to transportation use but would not affect the continued use of the rest of each property for agriculture.

3.1.4 Avoidance, Minimization, and Mitigation

The design of the Project was based on engineering standards, best practices, and minimizing impacts on all resources and the use of additional land. Both NDOT and Iowa DOT will continue to coordinate with the IDNR and USACE to determine the appropriate mitigation for the permanent and temporary use of WMA lands. No other land use mitigation is required or proposed for the Project.

3.2 Farmland

The Farmland Protection Policy Act (FPPA) of 1981 (7 USC 4201; 7 CFR 658) was enacted to minimize unnecessary conversion of farmland to other uses resulting from federally funded projects. In addition, the FPPA states that federal programs should be compatible with state and local policies or programs that protect farmland. The Natural Resources Conservation Service (NRCS) oversees FPPA compliance.

Prime farmland is of national importance and is defined as land with the best characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses. Unique farmland is land other than prime farmland that is used to produce specific high-value crops. Farmland of statewide or local importance is land, in addition to prime and unique farmland, of statewide or local importance to produce food, feed, forage, fiber, and oilseed crops (7 CFR 657.5).

3.2.1 Affected Environment

Areas of prime and statewide important farmland are mapped across the Project Study Area. Prime farmland soils are mapped under much of Decatur within the Project Study Area, while both prime and statewide important farmlands are mapped within the boundary of the WMA. Approximately 6.2 acres of prime farmland are mapped within the Nebraska portion of the Project Study Area and are actively farmed. Approximately 14 acres of prime farmland and 31 acres of statewide important farmland are mapped within the Iowa portion of the Project Study Area outside of the WMA. These areas are also actively farmed.

3.2.2 Impacts of the No-Build Alternative

No construction would occur under the No-Build Alternative. As a result, no impacts on or the conversion of farmland to transportation use would occur.

3.2.3 Impacts of the Preferred Alternative

Approximately 1.7 acres of prime farmland (actively farmed) within the footprint of the proposed west bridge abutment in Nebraska would be converted to transportation use. Approximately 1.4 acres of prime farmland (actively farmed) would be converted to transportation use to widen IA-175 in Iowa. The farmed area within the footprint of the west abutment is within the jurisdictional limits of the Village of Decatur. Under the FPPA, lands committed to development through local actions and impacts to farmlands of less than five acres do not require coordination with the NRCS.

3.2.4 Avoidance, Minimization, and Mitigation

The design of the Project was based on engineering standards, best practices, and minimizing impacts on all resources and the use of additional land. No mitigation for farmland conversion is required or proposed for the Project.

3.3 Right-of-Way and Relocations

Right-of-way (ROW) is a general term denoting land or property acquired for, or devoted to, a public use. If ROW on which to build or maintain a public project is not already owned by NDOT or the Iowa DOT, it would need to be acquired. The acquisition of property for ROW may require relocating residences, businesses, or both. Any property acquisition would be conducted by payment of fair market value for the property rights, and NDOT and Iowa DOT would conduct an acquisition program in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended (42 USC 4601 *et seq.*), Title VI of the Civil Rights Act of 1964 (42 USC 2000d), the Nebraska Relocation Assistance Act of 1989 (Nebraska Revised Statutes Section 76-1214 *et seq.*), and under Chapter 316 (Relocation of Persons Displaced by Highways) of the Iowa Administrative Code.

3.3.1 Affected Environment

As described under Section 3.1.1, land in agricultural, residential, commercial, and recreational use is present within the Project Study Area.

3.3.2 Impacts of the No-Build Alternative

No construction would occur under the No-Build Alternative. As a result, no ROW would be acquired, and no relocations would occur. Ongoing maintenance of the Decatur Bridge and connecting roadways (N-51 and IA-175) would continue and could involve the temporary occupancy of other public rights-of-way in the vicinity of the bridge.

3.3.3 Impacts of the Preferred Alternative

Construction of the Preferred Alternative would require the acquisition of approximately 13 acres of new ROW, in addition to obtaining temporary easements. ROW and easement acreages to be acquired in both Nebraska and Iowa will be determined during final design. Although property will be acquired from residential and commercial parcels adjacent to N-51 in Decatur and IA-175 in Monona County, no residences or businesses will be displaced. Access to adjacent properties would be maintained throughout construction. A Sovereign Lands Permit will be obtained to cover the use and transfer of

lands between the Iowa DOT and the IDNR within the WMA. The WMA areas are also under a USACE easement as part of the MRRP (as described in 3.1.1) and may need to be amended.

3.3.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during final design:

- ROW acquisitions, types, and amounts are based on conceptual design. Impacts on ROW and properties will be further refined and minimized to the extent possible during final design.
- Property will be acquired by paying fair market value for property rights and damages that may occur. ROW acquisition will be conducted in conformance with the Uniform Act (42 USC 4601 et seq.), Title VI of the Civil Rights Act of 1964, the Nebraska Relocation Assistance Act (Nebraska Revised Statutes Section 76-1214 et seq.), and under Chapter 316 (Relocation of Persons Displaced by Highways) of the Iowa Administrative Code.
- A Sovereign Lands Permit will be obtained to govern the exchange of lands between the Iowa DOT and the IDNR.

The following mitigation and environmental commitments will be met during construction:

- Access to adjacent properties will be maintained throughout construction, but temporary restrictions or detours may be needed. The Contractor will coordinate any access restrictions with the property owner before implementing them.

3.4 Community Impact Assessment

Transportation provides mobility and access to the daily activities of a community. A community impact assessment (CIA) considers changes to or impacts on population (including demographic analysis consistent with Title VI of the Civil Rights Act of 1964 [race, color, national origin, and limited English proficiency]), housing, income and employment, the tax base, and community resources and cohesion, such as accessibility to neighborhoods or communities, schools, emergency services, and community facilities.

3.4.1 Affected Environment

Populations within the Project Study Area are limited to the Village of Decatur and a small residential area north of IA-175, approximately 0.8 miles east of the Missouri River. According to U.S. Census Bureau data, the total population of the two block groups that overlap the Project Study Area in 2020 was 2,258. None of the population within the affected block groups is classified by the U.S. Census Bureau as speaking languages other than English or considered as having limited English proficiency (LEP).

No community facilities (e.g., schools, libraries, places of worship, government offices, health care or emergency providers) are within or adjacent to the Project Study Area. The only sidewalks within the Project Study Area extend along the north and south sides of N-51 from N. Broadway Street to Third Avenue in Decatur.

3.4.2 Impacts of the No-Build Alternative

No construction would occur under the No-Build Alternative, so no immediate impacts on the area's population would result. As stated in Section 2.2, in the future, when the existing bridge is closed to traffic, emergency responders from Onawa, Iowa, would have a nearly 80-mile round trip to serve the

Decatur community. Decatur residents working in Onawa or Onawa residents working in or visiting Decatur would also have the extended out-of-direction 80-mile round trip.

3.4.3 Impacts of the Preferred Alternative

Under the Preferred Alternative, no displacements would occur, and access across the Missouri River would be maintained via N-51/IA-175. Emergency providers would still be able to respond to incidents in the Decatur area from Onawa, Iowa, with no out-of-direction travel required. Construction would be completed under traffic, with short-term detours, used when needed, to reconnect the existing roads after the new bridge is complete. Pedestrian access along the one-block section of N-51 in Decatur would be closed during construction. NDOT and the Contractor would consider implementing additional measures during construction to address pedestrian connectivity around the construction area, if warranted. Access to Beck Memorial Park and Campground, and to the pedestrian bridge via Marina Drive, would not be affected.

Data for the Project Study Area, considering the total population affected by the Project, indicate that no LEP populations meet or exceed the federal DOT LEP outreach threshold of 5 percent of the population or 1,000 persons. Therefore, no translation of Project materials to languages other than English is required for public outreach but will be provided upon request.

3.4.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during final design:

- As final design progresses, impacts on adjacent properties will be minimized or eliminated to the extent practicable.
- As final design progresses, alternative accommodations to maintain pedestrian access during construction will be explored.

The following mitigation and environmental commitments will be met during construction:

- Short-term adverse effects on the community resulting from construction (e.g., traffic, noise, dust) will be addressed or minimized through both NDOT's and Iowa DOT's Standard Specifications for Highway Construction.
- In Decatur, existing sidewalk access along N-51 will be temporarily closed during construction. Alternative accommodations will be provided to maintain pedestrian access during construction.

3.5 Transportation

A transportation network consists of all modes of transportation for goods and people, including roadway, transit, rail, aviation, and pedestrian and bicycle facilities. Facility characteristics, as well as access to and circulation via these facilities, are considered in evaluating impacts.

3.5.1 Affected Environment

The Decatur Bridge provides an important crossing of the Missouri River, connecting US-75 in Nebraska and I-29 in Iowa via N-51 and IA-175, respectively. The Missouri River is classified as a navigable waterway. The US Coast Guard (USCG) regulates and maintains traffic within the navigation channel of the river, located along the west (Nebraska) bank within the Project Study Area. The USACE is responsible for maintaining the Missouri River for navigation and provides a navigable channel 9 feet deep and 300 feet wide. The USACE is responsible for dredging, structure maintenance (i.e., weirs, dams, etc.), and flood management. The Missouri River is used for commerce (shipping various commodities by barge) and recreation (boating and fishing).

No transit services span the Missouri River. Within the Project Study Area, Siouxland Regional Transit System (SRTS) provides on-demand services only in Monona County.

3.5.2 Impacts of the No-Build Alternative

As described in Section 2.2, the future closure of the existing Decatur Bridge would require crossing users to travel more than 80 miles round-trip to access the Village of Decatur or the City of Onawa and the services each provides. The future closure of this Missouri River crossing would negatively affect the Village of Decatur by affecting access and commerce. The future removal of the Decatur Bridge would not affect river transportation or river-based commerce. The No-Build Alternative would not affect on-demand transit services in Monona County.

3.5.3 Impacts of the Preferred Alternative

The Project would improve connectivity and mobility within the region by providing an upgraded and resilient crossing of the Missouri River. The Project would be constructed under traffic to minimize the reliance on 80 miles of out-of-direction travel by residents and emergency responders. Improvements to N-51 and IA-175 would be limited to what is necessary to connect to the new bridge and would be designed in accordance with current design standards. Removal of the existing Decatur Bridge after the new crossing is complete would occur in accordance with USACE and USCG permitting requirements and would not obstruct commercial river traffic. Construction of the Preferred Alternative would temporarily obstruct the Missouri River Paddling Route as described in Section 3.8.3. The Preferred Alternative would not affect on-demand transit service in Monona County.

3.5.4 Avoidance, Minimization, and Mitigation

The design of the Project was based on engineering standards, best practices, and minimizing impacts on all resources and on the existing transportation network. No mitigation for transportation impacts is required or proposed for the Project.

3.6 Historic Properties

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and its implementing regulations at 36 CFR 800, require projects using federal land, funds, or permitting to consider any effects a proposed action may have on historic properties. A historic property is a property listed on or eligible for listing on the NRHP. Historic property types include prehistoric or historic districts, archeological sites, buildings, structures, or objects. A historic property is eligible for the NRHP if the property is 50 years old or older and possesses significance in one or more of these criteria:

- **Criterion A:** Is associated with events that have made a significant contribution to the broad pattern of history.
- **Criterion B:** Is associated with the lives of persons significant in the past.
- **Criterion C:** Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** Has yielded, or may be likely to yield, information important in history or prehistory.

A historic property must also retain sufficient integrity to convey its NRHP significance. For the NRHP, the seven aspects of integrity include: location, design, setting, materials, workmanship, feeling, and association.

3.6.1 Affected Environment

The historic properties study area is known as the area of potential effects (APE). The APE for Section 106 purposes is defined at 36 CFR 800.16(d) as “the geographic area or areas within which [a project] may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” A narrative describing the APE and maps showing the APE are available upon request.

Evaluations of the potential for archeological and geomorphological resources within the APE were completed within the Nebraska portion of the APE in January 2024 and September 2025 (Burns & McDonnell Engineering Company, Inc.), and within the Iowa portion of the APE between January and August 2024 (Bear Creek Archeology, Inc.). Evaluations of the potential for architectural and structural resources within the APE were completed for the Nebraska portion of the APE, including the Decatur Bridge, in September 2023 (Burns & McDonnell Engineering Company, Inc.), and for the Iowa portion of the APE in January 2024 (Bear Creek Archeology, Inc.).

The only NRHP-eligible resource within the APE is the Decatur Bridge (S051 03644). The Decatur Bridge was determined NRHP eligible by the NESHPO in 2013 and by the Iowa SHPO in 2011 under Criterion A: History – Transportation, as a large highway bridge that established the first highway crossing of a major waterway as part of a major state bridge building initiative; and under Criterion C: Engineering, as a steel continuous through-truss bridge with an exceptional span length.

No archeological historic properties were identified within the APE.

The following agencies, interested parties, and tribes were invited to be consulting parties in the Section 106 process.

Table 3-2. Invited Consulting Parties

Jurisdiction	Consulting Parties
Local Organizations	Burt County Museum, Decatur Museum, Monona County Historical Museum, Monona County Historic Preservation Commission
Municipalities	Village of Decatur, City of Onawa
Counties	Burt County, NE; Monona County, IA
Tribes	Nebraska Commission on Indian Affairs, Arapaho Tribe of the Wind River Reservation, Cheyenne and Arapaho Tribes, Flandreau Santee Sioux, Iowa Tribe of Kansas and Nebraska, Iowa Tribe of Oklahoma, Lower Sioux Indian Community, Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Oglala Sioux Tribe, Omaha Tribe of Nebraska, Otoe-Missouria Tribe of Indians, Pawnee Nation of Oklahoma, Peoria Tribe of Indians of Oklahoma, Ponca Tribe of Nebraska, Prairie Band Potawatomi Nation, Prairie Island Indian Community, Rosebud Sioux Tribe, Sac and Fox Nation of Oklahoma, Sac and Fox Tribe of the Mississippi in Iowa, Santee Sioux Nation, Sisseton-Wahpeton Oyate, Spirit Lake Tribe, Three Affiliated Tribes-(Mandan, Hidatsa & Arikara), Upper Sioux Community, Winnebago Tribe of Nebraska, and the Yankton Sioux.
Agencies	Advisory Council on Historic Preservation (ACHP), USACE, USCG, NESHPO, Iowa SHPO

Supporting documentation for Project-specific consultation under Section 106 with both SHPOs, the ACHP, and potential consulting parties listed in Table 3-2 can be made available upon request.

3.6.2 Impacts of the No-Build Alternative

No construction would occur under the No-Build Alternative, but in the future, the NRHP-eligible Decatur Bridge would be closed and eventually removed, resulting in an adverse effect under Section 106.

3.6.3 Impacts of the Preferred Alternative

The Preferred Alternative would remove the NRHP-eligible Decatur Bridge after the new bridge is built roughly 80 feet north of and parallel to the existing bridge. On August 26, 2025, FHWA determined that the proposed action would result in an adverse effect on the NRHP-eligible Decatur Bridge under Section 106. Consultant parties have been given the opportunity to comment on the adverse effect determination.

A Memorandum of Agreement (MOA) has been drafted with input from consulting parties, outlining the mitigation measures proposed to address the adverse effect on the Decatur Bridge.

Documentation of coordination under Section 106 is available upon request. The draft MOA is included in Appendix D.

Figure 3-3: Adverse Effects

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

3.6.4 Avoidance, Minimization, and Mitigation

NDOT and the Iowa DOT marketed the Decatur Bridge for adaptive reuse from December 18, 2025, through January 19, 2026. No parties indicated an interest in taking ownership of the bridge.

The following mitigation will be met during final design:

- A draft MOA has been developed describing the mitigation required to address the adverse effect. Mitigation will be implemented by the NDOT and Iowa DOT in coordination with the other signatories to the MOA.

3.7 Visual

Visual resources include character-defining elements of an area that can consist of natural features (such as water features, vegetation, and natural outcrops), cultural features (such as architecture and skylines), and transportation elements (such as roadways, bridges, noise barriers, stormwater facilities, and pedestrian and bicycle facilities). Visual resources evoke strong emotions in human viewers, foster a sense of community among area residents, and may promote tourism. This analysis identifies the Project's potential effects on visually sensitive resources and locations based on changes in views of or from the resources and in viewers' perceptions.

3.7.1 Affected Environment

The viewshed of the Project Study Area is dominated by the expanse of the Missouri River through the center, with rural community features, a park, and agricultural lands on the Nebraska side of the river, and forested areas, grasslands, emergent wetlands, open water ponds, and agricultural fields on the Iowa side of the river. As discussed in Section 3.1.1, the land use is rural and is planned to remain so.

3.7.2 Impacts of the No-Build Alternative

The visual landscape would remain as-is under the No-Build Alternative. No new bridge spanning the Missouri River would be built. Over time, as the Decatur Bridge reaches the end of its useful life, it will be closed to traffic and eventually removed. Loss of the large through-truss structure would open the view of and from the river within the Project Study Area.

3.7.3 Impacts of the Preferred Alternative

The Preferred Alternative would remove the large through-truss structure from the viewshed, replacing it with a standard concrete-and-steel slab bridge without overhead trusses. The crossing would still serve as a visual point within the Project Study Area and as a visual navigation marker for river traffic. During Project public meetings, only 2 of the 53 public comments mentioned the existing truss structure. One comment requested that the existing bridge be maintained as a bike/pedestrian-only facility, and the second requested that a new bridge “honor” the truss style of the existing bridge. The impacts of the Preferred Alternative would be neutral on the visual environment.

3.7.4 Avoidance, Minimization, and Mitigation

The design of the Project was based on engineering standards, best practices, and impact minimization for all resources while minimizing impacts to the existing transportation network. No mitigation for visual impacts is required or proposed for the Project.

3.8 Section 4(f)

Section 4(f) of the US DOT Act of 1966 (23 USC 138 and 49 USC 303) provides special protection for publicly owned parks and recreational lands, wildlife and waterfowl refuges, and significant public or private historic properties. An impact, either direct or indirect, on one of these resources is considered a use. A use of a Section 4(f) resource, as defined in 23 CFR 774.17, occurs: (1) when land is permanently incorporated into a transportation facility, (2) when there is a temporary occupancy of land that is adverse in terms of the statute’s preservationist purpose, or (3) when there is a constructive (that is, indirect) use of land.

A Section 4(f)-eligible property must be publicly owned, except for historic sites, which can be either publicly or privately owned. Federally funded DOT actions cannot use Section 4(f) properties unless there is (1) no feasible and prudent avoidance alternative to the use of such land; and (2) the action includes all possible planning to minimize harm to the property resulting from such use; or FHWA determines that the use of the property will have a *de minimis* impact.

3.8.1 Affected Environment

Four resources were evaluated as part of the Section 4(f) review.

Decatur Bridge – As an NRHP-eligible historic resource (see Section 3.6).

Upper Decatur Bend WMA - Owned by the State of Iowa, the WMA is part of the larger Tieville Bend-Blackbird Bend-Upper Decatur-Ivy Island Wildlife Management Area Complex spanning more than 3,600 acres along the east bank of the Missouri River in Monona County, Iowa. The WMA covers approximately 642 acres and is managed by the IDNR. Historically, multiple side channels spread across the floodplain occupied by the larger Bends complex, spanning nearly 8 river miles and 1 river mile within the WMA. In 2000 and 2003, the USACE acquired easements from the State of Iowa on the WMA to implement features of the MRRP. The MRRP consists of two primary components (1) identifying and implementing an action that will avoid the finding of jeopardy for three federally listed species (e.g., Piping Plover, Interior Least Tern, and the pallid sturgeon) and (2) implementing the Bank

Stabilization and Navigation Project Fish and Wildlife Mitigation Project (BSNP Mitigation Project). The IDNR administers and performs operational and maintenance activities on behalf of the USACE, in accordance with MRRP easement agreements. The USACE's congressional authority and primary interest in the WMA is to mitigate the loss of fish and wildlife habitat resulting from past channelization efforts along the Missouri River. Recreational purposes (e.g., fishing, hiking, nature activities, etc.) are deemed secondary benefits to the public. For these reasons, FHWA has classified the WMA as a refuge⁷ and a significant resource⁸ under Section 4(f).

Together, the MRRP and the BSNP Mitigation Project are intended to mitigate or compensate for the loss of 522,000 acres of fish and wildlife habitat from the development of bank stabilization and navigation projects along 735 miles of the Missouri River. The BSNP Mitigation Project includes land acquisition and development of aquatic and terrestrial habitats, with a focus on the needs of the three protected species.

All lands within the WMA, including those under USACE easements, are open to the public for activities such as fishing, birdwatching, hiking, and hunting (in accordance with state regulations). The WMA also encompasses two boat ramps – one along the Iowa bank of the Missouri River and one north of IA-175, providing access to backwater ponds. Vehicle/trailer parking is associated with both boat ramps.

Missouri River Paddling Route – The IDNR has designated the Missouri River through the center of the Project Study Area as a paddling route for canoes, kayaks, and other non-motorized water-based recreation.

Beck Memorial Park and Campground – The 18-acre park and campground complex is owned and managed by the Village of Decatur. The campground is in the northern portion of the property, closest to N-51 and the Decatur Bridge, with access provided via Marina Drive. A pedestrian bridge over Elm Creek, built in 1997, connects the park/campground to Marina Drive. The campground has approximately 27 pull-in camping spots (based on aerial photograph interpretation), each equipped with water and electrical hookups. Both tent and RV camping are permitted. In 2001, the Village of Decatur received \$20,000 from the LWCF to construct a shower building for the campground.

The main portion of Beck Park is at the south end of the property, featuring the Mike Farber Memorial Field (a baseball/softball field), a small horse-riding arena, general greenspace, and storage buildings.

The NDOT Section 4(f) Properties Identification documentation, which describes the potential Section 4(f) resources in the area and how they were identified and evaluated, is included in the Project file.

3.8.2 Impacts of the No-Build Alternative

Under the No-Build Alternative, no construction would occur. As described in Section 2.2, the existing NRHP-eligible Decatur Bridge will be closed and eventually removed, resulting in a use under Section 4(f). Further, removing the bridge would require travelers to follow the 80-mile out-of-direction travel route to access the WMA and the Missouri River Paddling Route, especially if traveling from Nebraska. The future removal of the Decatur Bridge would temporarily disrupt the use of the Missouri River Paddling Route. Although the No-Build Alternative would add time and distance to accessing both recreational facilities, it would not permanently convert any part of the WMA or Missouri Paddling Route to a transportation use; therefore, the No-Build Alternative would not result in the use of any wildlife management area or recreation facility protected under Section 4(f).

⁷ FHWA Section 4(f) Properties Defining Criteria – “refuge” meaning the major purpose of the resources is conservation, restoration, or management of endangered species and their habitats, and other wildlife and waterfowl resources and their habitats.

⁸ FHWA Section 4(f) Properties Defining Criteria – “significant” meaning the WMA plays an important role in meeting the objectives of the Officials with Jurisdiction (IDNR and USACE).

3.8.3 Impacts of the Preferred Alternative

Decatur Bridge - As discussed in Section 3.6, the Preferred Alternative would result in an adverse effect under Section 106 for the NRHP-eligible Decatur Bridge. On August 20, 2025, FHWA determined that there are no feasible and prudent alternatives to the use of the NRHP-eligible Decatur Bridge and recommended that this use would fall under FHWA's *Programmatic Section 4(f) Evaluation and Approval of FHWA Projects that Necessitate the Use of Historic Bridges*. The Section 4(f) Programmatic Evaluation is included in Appendix E.

WMA - Construction of the Preferred Alternative would impact approximately 23 acres of the 642-acre WMA to realign a portion of IA-175 and build the new bridge north of and parallel to the existing Decatur Bridge. On December 11, 2025, FHWA provided concurrence to proceed with a Section 4(f) *de minimis* determination for the use of lands from the WMA pending the opportunity for the public to provide input. Additionally, the WMA access road entrance off IA-175 will be shifted east of its original location due to the adjustment of the east bridge abutment. The portion of the access road running parallel to the south side of IA-175 will be lowered to an elevation that allows for better water flow between wetland areas north and south of the highway. This portion of the access road will also be paved to prevent washout during more frequent flood events, with large riprap added to the embankment to reduce the risk of erosion. These changes provide mutual benefits to the WMA and the public by improving water flow during floods and shortening the time the access road remains closed afterward.

To the extent possible, closure of the access road and parking areas during construction will be minimized during peak recreation seasons (late April and September 1 through November 1). The realignment of IA-175 will also impact the boat channel along the north side of IA-175. The channel will be filled to support the new highway embankment and to reduce the risk of scouring along it. A new boat channel will be created within the WMA to maintain boat access between the boat ramp/parking areas and the open water ponds north of IA-175. To minimize the impact on the WMA, construction of the new boat channel and access road will be done, to the extent possible, during off-season periods of low water.

As discussed in detail in Section 3.15, the US Fish and Wildlife Service (USFWS), FHWA, NDOT, and the Nebraska Game and Parks Commission (NGPC) have developed a biological evaluation process to streamline coordination under Section 7 of the Endangered Species Act (ESA). The Iowa DOT and IDNR participated in that process for the Decatur Bridge project. Based on the analysis conducted, the Preferred Alternative "May Affect, Not Likely to Adversely Affect" eight species, including the Piping Plover and the pallid sturgeon. As outlined in Section 3.15, conservation measures will be implemented to minimize impacts on both species, including seasonal restrictions on in-water construction activities, soil/substrate disturbance, stormwater discharges, lighting and nighttime work, and the restoration of disturbed areas. The evaluation process also determined that the Action Area is not in the estimated range of the Interior Least Tern and does not include the requisite habitats to support the species. Therefore, the Preferred Alternative will have "No Effect" on the Interior Least Tern. With the implementation of conservation measures, the Preferred Alternative is not likely to jeopardize the continued existence of the Piping Plover or the pallid sturgeon.

It is FHWA's intent to make a *de minimis* impact determination for this wildlife conservation and recreation area based on the following criteria:

- The transportation use of the Section 4(f) resource, together with any avoidance, minimization, mitigation, and enhancement measures, does not adversely affect the activities, features, or attributes that qualify it for protection under Section 4(f).
- The public has been afforded the opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

During and after construction, the IDNR will continue to manage the WMA (including the lands under USACE easement) to support wildlife conservation and recreation. The IDNR, an official with jurisdiction over the WMA, was informed of the intent to make the *de minimis* impact determination on December 11, 2025. On March 2, 2026, the USACE was informed of the intent to make the *de minimis* impact determination. FHWA, NDOT, and Iowa DOT have continued coordination with IDNR and the USACE to develop minimization and mitigation efforts within the WMA. FHWA's final Section 4(f) determination will be made after the public hearing and agency and public review of this EA, and presented in the decision document for the Project.

Missouri River Paddling Route - The Preferred Alternative would build a new bridge over the Missouri River and remove the existing Decatur Bridge; both actions will occur along the Missouri River Paddling Route. During construction, the anticipated use of a temporary trestle or causeway built within the river extending from the Iowa bank to facilitate construction of the new bridge, along with activities and equipment used to remove the existing bridge, will temporarily block the paddling route. Coordination with IDNR will occur regarding signage, closure timeframes, and other considerations to minimize impacts on the paddling route during construction. The construction process will occur in compliance with the Programmatic Agreement "Regarding the Processing of Recreational Paddling Routes as Section 4(f) Resources," signed by FHWA Iowa Division, Iowa DOT, and IDNR in December 2020 and January 2021. The impacts on the Missouri River Paddling Route would be minor, given planned protections during construction. The impacts would constitute a Section 4(f) temporary use exception per 23 CFR 774.13(d), and the Missouri River Paddling Route would be unaffected following Project completion.

Beck Memorial Park and Campground – The 18-acre park and campground complex is south of Marina Drive on the Nebraska side of the river. No impacts to the park or campground will occur from the Preferred Alternative. In the event access via Marina Drive is temporarily closed during construction, the main access routes to the park and campground via Broadway Street and 13th or 14th Streets at the southern end of the property would remain unaffected by the Project. As described under 3.4.4, the design team is evaluating alternative accommodations to maintain pedestrian access along the existing sidewalk south of NE-51 in Decatur during construction. Therefore, no use under Section 4(f) of the Beck Memorial Park and Campground would occur.

3.8.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during final design:

- Decatur Bridge:
 - A draft MOA has been developed describing the mitigation required to address the adverse effect under Section 106 on the Decatur Bridge. Mitigation will be implemented by NDOT and Iowa DOT in coordination with the other signatories to the MOA.
- WMA:
 - Coordination will occur with IDNR during final design to confirm the inlet and outlet elevations of the culvert extensions. The culvert extension will keep an upstream gate, with IDNR open to considering an alternative gate style if elevations and functionality are maintained.
- Missouri Paddling Route:
 - Mitigation and minimization efforts will be followed in accordance with the Programmatic Agreement "Regarding the Processing of Recreational Paddling 24 Routes as Section 4(f) Resources," signed by FHWA Iowa Division, Iowa DOT, and IDNR on December 25, 2020, and in January 2021.

- The WMA, Missouri River Paddling Route, and Beck Memorial Park and Campground shall be marked on the Project plans as sensitive areas.

The following mitigation and environmental commitments will be met during construction:

- WMA:
 - To the extent possible, closure of the access road and parking areas will be minimized during peak recreation seasons (late April and September 1st through November 1st). Access may be disrupted during only short, temporary timeframes, with detours or alternate means of access to be provided by the Contractor.
 - The overhead power line north of the current bridge that supplies electricity to the pumps within the WMA will be relocated and buried at the new location, as it was prior to the 2011 flood.
 - Realignment of the boat channel north of the new bridge/IA-175 will occur, to the extent possible, during off-season periods of low water (generally August to December). Coordination with IDNR is required prior to beginning construction of the new boat channel.
 - The Project contract will include Special Provisions to ensure IDNR staff are allowed access to areas of the WMA, including the Contractor's use of temporary access roads, if necessary, to complete maintenance activities. Coordination between the Contractor and IDNR will be ongoing to ensure that any construction and/or maintenance activities are mutually beneficial and do not negatively impact the conservation goals of the WMA. Contractor will coordinate with IDNR to schedule construction-related activities, including dewatering, access road improvements, riprap placement, and use of the boat ramp.
 - After project completion and the old bridge is removed, any ROW no longer needed within the WMA will be transferred back to the IDNR. Preliminary design estimates the transfer of approximately 10 acres from Iowa DOT to IDNR, and 4 acres from IDNR to Iowa DOT. All temporary construction impacts are expected to be permitted with the use of a Sovereign Lands Permit. These acres are also in an easement with the USACE for the MRRP and may need to be amended as required. .
- Missouri Paddling Route:
 - The Missouri River Paddling Route will be closed for the duration of bridge construction (less than the time needed to complete the project). Coordination with IDNR will occur regarding signage, closure timeframes, and other considerations to minimize impacts on the paddling route during construction.
- Access to Beck Memorial Park and Campground would be maintained using the existing entrances on 13th and 14th Streets. Access to the campground from Marina Drive via the pedestrian bridge over Elm Creek may be interrupted during construction. Detours or alternate access will be provided by the Contractor.
- The Contractor would not complete work or stage, stockpile, or store materials outside of the boundaries of the permitted area defined within the WMA. If it is determined that additional areas are needed beyond the limits evaluated in this EA, coordination will occur with NDOT/Iowa DOT Environmental.
- The Contractor shall not complete work, stage, stockpile or store materials within the boundary of Beck Memorial Park and Campground. If it is determined that a temporary easement is required or that access to the property is restricted, coordination shall be conducted with NDOT Environmental.

3.9 Utilities

Utilities include electric powerlines and telecommunication lines (overhead and underground), and water, sanitary sewer, storm sewer, and oil and natural gas pipelines (underground). Roadway and bridge construction projects frequently require the revision and relocation of utilities, and NDOT and Iowa DOT are responsible for providing liaisons with publicly and privately owned utility companies. Utilities are typically disturbed during construction activities such as grading, paving, and pier placement.

3.9.1 Affected Environment

Multiple local utilities are present adjacent to and within the existing ROW of N-51 and IA-175. Utility ownership will be identified, and determinations of whether the utility can be avoided, adjusted, or relocated will be made during final design.

3.9.2 Impacts of the No-Build Alternative

The No-Build Alternative would not affect utilities. With no construction, all utilities would remain as they are today. When the Decatur Bridge is removed, the electric line that powers the bridge lights will be disconnected.

3.9.3 Impacts of the Preferred Alternative

Utilities in Decatur, such as water lines, storm sewer, and sanitary sewer lines would be adjusted or relocated, as warranted, based on the final design plans. Intermittent, short-term interruptions may occur. The electric line that serves the existing bridge lights would be transferred to serve the new bridge. The electric line serving the existing IDNR facilities north of IA-175 would be relocated and buried to meet IDNR needs.

Utilities would be relocated in accordance with NDOT's and Iowa DOT's respective utility relocation policies. Federal funding may be used for some utility relocations. Most impacted utility companies would be responsible for relocating their own facilities within NDOT's or Iowa DOT's ROW at their own cost. All required utility adjustments would be coordinated through NDOT and Iowa DOT, as applicable, and the Contractor in accordance with NDOT's and Iowa DOT's Standard Specifications for Highway Construction during the appropriate phase of construction. Additional environmental impacts are not anticipated. The utility owner is responsible for obtaining any environmental permits and approvals required for utility relocation.

3.9.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during final design:

- Opportunities to avoid and minimize utility impacts will be investigated during final design. Utility service to properties in the Project Study Area will be maintained during Project construction. If any unanticipated disruptions occur, the utility owners will promptly restore service.
- Impacts on utilities are unavoidable because several utilities are near or within existing rights-of-way. The Contractor shall follow the guidelines of NDOT's Utility Accommodation Policy. It is NDOT's responsibility to notify utility companies of the need for relocation during the design process. The NDOT Utility Section will coordinate utility agreements with the utility companies prior to construction. It is the Contractor's responsibility to notify utility companies of relocation needs during the construction phase of the Project for utilities that were not relocated before construction.

- If this utility work is identified during the design process, NDOT will initiate the re-evaluation prior to Project letting.

The following mitigation and environmental commitments will be met during construction:

- If utility work is identified during construction, NDOT will initiate a re-evaluation prior to commencing that work.
- If utility relocation or replacement is required in a later phase of the Project, a re-evaluation will be required if (1) federal funds will be used for the utility work, or (2) the Project construction Contractor will be responsible for the work. If either one of these conditions does not apply, later relocation or replacement of utilities will be coordinated through NDOT and the Contractor per NDOT's Standard Specifications for Highway Construction, Subsection 105.06. Any environmental permits required for these utility relocations or replacements will be the responsibility of the Utility.

3.10 Hazardous Materials

Hazardous materials are defined as substances that—because of their quantity, concentration, or physical, chemical, or infectious characteristics—may present a threat to public health or the environment. Hazardous materials are regulated by the Environmental Protection Agency (EPA) and other federal and state agencies under the Toxic Substances Control Act of 1976 (15 USC 2601 et seq.); the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq.); the Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.); the Superfund Amendments and Reauthorization Act of 1986; and the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 355), Nebraska Administrative Code Title 128, Nebraska Hazardous Waste Regulations, and Iowa Administrative Code Chapters 109, 131 and 141.

3.10.1 Affected Environment

A Hazardous Materials Review (HMR) was conducted to investigate regulated materials within the HMR Study Area and is included in the Project file. However, sites outside the Hazardous Materials Study Area were also evaluated to determine whether a release could affect the Project through groundwater migration or other criteria.

The HMR included the following:

- Obtaining an Environmental Data Resources (EDR) report
- Conducting a study of federal, state, and local environmental database records
- Reviewing aerial photographs and US Geological Survey (USGS) topographic maps
- Reviewing Nebraska Department of Water, Energy, and Environment (DWEE) records for well completion and static water level information
- Conducting a windshield reconnaissance survey

Table 3-3 lists the regulated sites identified during the records review and/or the windshield reconnaissance survey. The regulated sites were categorized as having a low, medium, or high potential to affect the Project. The categories are as follows:

- **Low Potential Site:** Through investigation, it is determined that it is unlikely that contamination would be encountered during construction.
- **Medium Potential Site:** During an investigation, it is determined that it is unclear whether contamination is located within the Project footprint. A subsurface investigation or further coordination with regulatory agencies indicates that contamination is unlikely to be located within the Project footprint. On a case-by-case basis, a commitment to the Contractor and

NDOT Project Manager to look for signs of contamination in specific areas can be included in the HMR rather than proceeding with a subsurface investigation.

- **High Potential Site:** Through file review or subsurface investigation, it is determined that it is likely that contamination would be encountered during construction.

Table 3-3 shows the locations of identified sites in relation to the Project Study Area.

Table 3-3. Hazardous Materials Sites

Facility	Site Address	Regulatory Database ¹ and Facility Status ²	Distance Relative to Project	Potential to Affect Project
#1 BJ's Mini Mart (NDEE IIS #3617)	702 Broadway Decatur NE	LST inactive	0.26 miles west of the west bridge abutment	Low
#2 Beck Oil Co. (NDEE IIS #3619)	853 S. Broadway Street Decatur NE	LST inactive	0.32 miles southwest of the west bridge abutment	Low
#3 Smith Repair (NDEE IIS # 61136)	852 S. Broadway Street Decatur NE	LST inactive	0.27 miles west of the west bridge abutment	Low
#4 NDOT Decatur Yard (NDEE ISS #3864)	Jct. 8th Street and 3rd Avenue Decatur NE	TL3 inactive RCR inactive	0.14 miles southwest of the west bridge abutment	NA

NDEE = formerly Nebraska Department of Environment and Energy, now DWEE

IIS = Integrated Information System

LST = leaking underground storage tank

RCR = Resource Conservation and Recovery Act

TL3 = Title Three of the Superfund Amendment and Reauthorization Act

3.10.2 Impacts of the No-Build Alternative

No construction or acquisition of ROW would occur under the No-Build Alternative. The No-Build Alternative would leave the Decatur Bridge crossing in place with scheduled maintenance and repairs. Over time, as the Decatur Bridge reaches the end of its useful life, it will be closed to traffic and eventually removed. The Decatur Bridge has been sampled for asbestos-containing materials (ACM), and none were found. When the bridge is demolished, the bridge members would be retrieved from the river as soon as possible (per USCG requirements) and transported to an appropriate construction materials landfill.

3.10.3 Impacts of the Preferred Alternative

Based on the review of the NDEE (now DWEE) Interactive Mapping System, IDNR database, visual reconnaissance, and the proposed scope of the Project, the potential is low to encounter contaminated soil and groundwater during construction. None of the identified sites is anticipated to impact project construction or cause materials management or worker health and safety concerns related to the Project. The Decatur Bridge has been sampled for ACM, and none was found. Lead-based paint on the bridge has been removed during previous repairs/rehabilitation or has been covered with new paint, but some may remain. When the bridge is demolished, the bridge members would be retrieved from the river as soon as possible (per USCG requirements) and transported to an appropriate construction materials landfill. Any utility relocations involving polychlorinated biphenyl (PCB)-containing components (e.g., pole-mounted electrical transformers) must follow the prescribed PCB mitigation.

3.10.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during construction:

- **Unexpected Waste** - If contaminated soils/groundwater or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall secure the discovery area and notify the Highway Project Manager (HPM). The Contractor shall not re-enter the discovery area until notified by the HPM. At the time of discovery, the HPM and Contractor shall utilize the NDOT Unexpected Waste Action Plan (UWAP) to coordinate appropriate actions. The actions to be carried out by the HPM are (but not limited to): verifying that the Contractor has suspended construction activities in the discovery area, contacting the Roadside Development & Compliance Unit (RDCU) hazmat representative, and making an entry in AASHTOware Project that an unexpected waste discovery was made. The HPM shall then utilize the UWAP Notification Form (NDOT Form 691) to properly document the extent and type of waste. The HPM will ensure that the Contractor properly disposes of the waste and implements any required health and safety mitigation. The Contractor is required by NDOT's Standard Specification section 107.11 (Hazardous Material Discoveries) to handle and dispose of regulated material in accordance with applicable laws.

If contaminated soils/groundwater, or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall limit access to authorized personnel within the discovery area and notify the HPM. The Contractor shall not re-enter the discovery area until notified by the HPM. At the time of discovery, the HPM and Contractor shall utilize the NDOT UWAP to coordinate appropriate actions. The Contractor is required by NDOT's Standard Specification section 107.11 (Hazardous Material Discoveries) to handle and dispose of regulated material in accordance with applicable laws.

- **Depainting/Painted Component Removal Involving Toxic Metal-Based Paint on Bridge/Building Surfaces**– There is potential for lead or toxic metal-based paint to be found on the structures to be demolished or repaired. Regardless of toxicity, extreme caution shall be taken to minimize the amount of painted material or debris from causing or threatening to cause pollution of the air, land, and waters of the State. The Contractor shall create an implementation plan to dispose of paint waste in accordance with NDOT's Standard Specification for Highway Construction Section 732 (Lead-based Paint Removal) and Title 128 Nebraska Hazardous Waste Regulations. The Contractor's implementation plan shall be provided to the HPM and documented in OnBase.
- **PCB Handling and Disposal** – If PCB-containing transformers or other equipment are identified, NDOT requires that they be managed and disposed of according to the Toxic Substance Control Act (TSCA) regulations. Releases of PCBs to the environment at levels requiring action under TSCA must be managed or remediated according to TSCA regulations. Any transformer with no label is assumed to be "PCB contaminated equipment" per EPA regulation. The Contractor shall notify the utility for remediation of PCB-contaminated soils or transformer repair.
- **Handling Lead Plates and Shims** - The Contractor shall create an implementation plan to recycle any lead-bearing plates and/or lead shims at a legitimate recycling facility as found in Paragraph 3 (lead plate recycling) in Section 203.01 of the Standard Specification for Highway Construction and in accordance with Title 128, Nebraska Hazardous Waste Regulations. The Contractor's implementation plan shall be provided to the HPM and documented in NDOT's OnBase.
- **Other Wastes** - Other than waste generated during normal construction and demolition activities, the Project would not generate any regulated materials. All known and unknown hazardous materials encountered during roadway construction would be handled in

accordance with federal, state, and local laws and regulations. Where hazardous material or solid waste is identified in the required ROW acquisitions, resolution with the property owner would be conducted prior to purchase. If an unknown site is encountered during construction, Iowa DOT and IDNR would be contacted, and appropriate laws and EPA regulations would be followed to eliminate or minimize any adverse environmental consequences. Any underground storage tanks found during construction would be mitigated and managed individually. Any contaminated material excavated during construction would be addressed, but Iowa DOT has no obligation to investigate or otherwise address a contamination plume extending beyond the grading and excavation limits. If any contamination above regulatory limits is encountered at any point during Project construction, work would stop, and Iowa DOT would be notified. Proper handling and disposal of any contaminated soil (including decontamination of equipment) would be warranted. In the event of the release of a hazardous substance in an amount equal to or greater than the reportable quantity established by the EPA, the responsible party would contact the EPA's National Response Center. Details of the incident would be reported, and measures would be taken to reduce the effects of the release. Standard best management practices would be used for demolition, clearing, and grubbing. Buildings identified for demolition would be thoroughly inspected for stored hazardous materials and hazardous materials used in the building's construction, such as asbestos and mercury-containing materials.

3.11 Floodplains

A floodplain is a lowland area that is periodically inundated by floodwaters. A flood zone is a geographic area defined by the Federal Emergency Management Agency (FEMA) based on varying levels of flood risk and types of flooding. FEMA defines high-risk areas as Zone A (or AE, AH, AO, AR, and A99), which are subject to inundation by the 1 percent annual chance exceedance event, also known as the 100-year or base flood event. A regulatory floodway is the area within the floodplain that is reserved for conveyance of the 100-year flood and must remain free of encroachment to avoid increasing the base flood elevation during a 100-year flood event. Executive Order (EO) 11988, *Floodplain Management*, directs federal agencies to avoid long- and short-term adverse impacts associated with modifying floodplains. USDOT Order 5650.2, *Floodplain Management and Protection*, outlines the DOT policies and procedures for implementing EO 11988. An Only Practicable Alternative Finding in response to EO 11988 would be included in the decision document published by FHWA.

FEMA administers the National Flood Insurance Program (NFIP), which also establishes standards for compliance. Local jurisdictions (counties and cities) enforce the federal requirements to maintain participation in the FEMA NFIP, including reviewing and approving construction projects that may affect the floodplains in their jurisdictions. In both states, floodplain regulations require a floodplain permit for any project that could affect a mapped, regulated 100-year floodplain or floodway.

3.11.1 Affected Environment

The Missouri River flows through the center of the Project Study Area, with 100-year floodplain areas mapped from the Nebraska bank on the west extending east across the channel and into the WMA on the Iowa side of the river (see Figures 1-3 and 3-1 for reference). A regulatory floodway is mapped from the center of the Missouri River east into the WMA on the Iowa side.

3.11.2 Impacts of the No-Build Alternative

No construction or acquisition of ROW would occur under the No-Build Alternative. The No-Build Alternative would leave the Decatur Bridge crossing in place with scheduled maintenance and repairs. Over time, as the Decatur Bridge reaches the end of its useful life, it will be closed to traffic and

eventually removed. The existing layout of the bridge's east abutment continues to make the crossing susceptible to scour and to potential overtopping of IA-175 during flood events.

3.11.3 Impacts of the Preferred Alternative

The Preferred Alternative provides a new bridge that is almost 775 feet longer than the existing Decatur Bridge, providing additional flowage capacity within the floodplain and overbank areas on the Iowa side of the river. The longer bridge improves resiliency against flood-induced closure of IA-175, enhances scour performance during large floods, and reduces the risk of scour-induced closure of the bridge compared to the existing crossing.

Construction of the Preferred Alternative across the floodplain is unavoidable, given the nature of the river crossing and its function of connecting Nebraska and Iowa. As presented in Chapter 2 of this EA, the Preferred Alternative was identified as the most practicable alternative, based on its ability to meet the identified needs, the established design criteria, and agency and public comments, while minimizing environmental impacts.

The Missouri River floodplain is approximately 4,000 feet wide at the Project location, so spanning the entire floodplain is impractical. As part of the preliminary design, the bridge length has been maximized to address hydraulic concerns and reduce the amount of embankment needed within the floodplain. The lateral (perpendicular) encroachment into the floodplain is less than that of the existing crossing. No longitudinal encroachment (parallel to the flow) of the floodplain would occur.

Although the Preferred Alternative would improve the movement of flood flows through the floodplain and floodway and lessen the risk of IA-175 overtopping during flood events, it would raise the 100-year base flood elevation by less than one foot (based on hydraulic modeling) across areas south of IA-175. The potential rise would not affect residential properties or buildings, nor would it increase the potential for loss of life or property. Hydraulic modeling and a Conditional Letter of Map Revision (CLOMR) application will be submitted to FEMA to request a revision of the mapped 100-year boundary based on the anticipated rise in the base flood elevation. FEMA approval of the CLOMR is required prior to the issuance of any floodplain permits for the Project.

The Preferred Alternative would have a beneficial effect on the natural and beneficial values of the floodplain by slowing flood flows and reducing the potential for scour. The longer bridge would enhance the floodplain's flood storage capacity, allowing wetlands, open water areas, and other habitats to continue benefiting from flood waters. The floodplain would continue to store and filter flood waters and recharge groundwater sources. With a longer bridge, less embankment within the floodplain is needed to support the approach roadway (IA-175) than under existing conditions. No reduction in floodplain storage is anticipated.

The Preferred Alternative would maintain local and regional access to existing recreational and agricultural areas and would not create new access to undeveloped lands. The proposed improvements would not support or promote incompatible floodplain development. Temporary impacts on floodplains may include grading or the placement of fill materials to create construction access points and the construction of temporary structures. Floodplain development permits will be obtained prior to construction, and the Preferred Alternative would comply with local floodplain regulations.

3.11.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during final design and construction:

- The new N-51/IA-175 crossing of the Missouri River will be designed to convey flood flows along existing drainage patterns. Construction of the Project will have floodplain and floodway

encroachment. A CLOMR will be prepared and submitted to FEMA to address the modeled increase in base flood elevation caused by the longer bridge span.

- Floodplain Development Permits will be obtained from the appropriate jurisdictions prior to construction. All conditions of the permits would be adhered to during construction.
- Since there will be temporary soil disturbance in the floodplain during construction activities, sediment and erosion control best management practices will be utilized during construction and disturbed areas will be seeded following construction.

3.12 Water Quality

Section 303(d) of the Clean Water Act (CWA; 33 USC 1251 et seq.) requires states, territories, and authorized tribes (states) to identify and establish a priority ranking for all waterbodies to determine which ones are impaired. Once identified, states are to establish total maximum daily loads (TMDLs) for pollutants impairing those waterbodies and to submit a biennial list of impaired or unique waterbodies and their TMDLs to the EPA.

In Nebraska, the 303(d) List of Waters is identified through programs administered by DWEE and documented in the *2022 Water Quality Integrated Report*. In Iowa, the 303(d) List of Waters is identified through programs administered by the IDNR and documented in the *2024 Integrated Report*. The 303(d) List of Waters reports on streams and lakes identified as impaired for one or more pollutants and that do not meet one or more water quality standards. It also identifies streams and lakes characterized as unique and sensitive. Impaired and unique waters are identified through assessment and monitoring programs administered by DWEE and other federal, state, and local agencies.

Groundwater is defined as “water occurring beneath the surface of the ground that fills available openings in rock or soil materials such that they may be considered saturated” (Nebraska Administrative Code Title 118). Nebraska Administrative Code Title 118, Ground Water Quality Standards and Use Classification, is the foundation of the regulatory programs in Nebraska that protect groundwater quality and prevent contamination in designated areas. Administered by DWEE, it establishes numerical standards for many parameters and requires that any substance introduced into groundwater, directly or indirectly, not cause groundwater to exceed those standards. DWEE is responsible for permitting and maintaining records related to groundwater wells throughout the state.

The Wellhead Protection Area Act (Nebraska Revised Statutes 46-1501 et seq. 2010) provides for Wellhead Protection Areas (WHPAs) to regulate potential sources of contamination near municipal and other public wells used to provide drinking water in Nebraska. The DWEE is the lead agency for WHPA Plan approval. Established under the Safe Drinking Water Act (42 U.S.C. § 300f et seq. [1974]), Iowa’s Source Water Protection (SWP) is a voluntary program that assists communities and other public water suppliers in preventing contamination of their water supplies. The SWP has established a process to help communities through initial source water assessments and the development and implementation of an SWP Plan.

3.12.1 Affected Environment

The 303(d) List of Waters, included in the *2022 Water Quality Integrated Report* generated by DWEE and approved by EPA (DWEE 2022) and the *2024 Integrated Report* by the IDNR, were reviewed for the Project. As discussed in the report, waters are classified based on the following five categories:

- Category 1 – Waterbodies where all designated uses are met.
- Category 2 – Waterbodies where some of the designated uses are met, but there is insufficient information to determine if all uses are being met.

- Category 3 – Waterbody where there is insufficient data to determine if any beneficial uses are being met.
- Category 4 – Waterbody is impaired, but a TMDL is not needed.
- Category 5 – Waterbody where one or more beneficial uses are determined to be impaired by one or more pollutants and all TMDLs have not been developed.”

Two designated waters are within the Project Study Area - the Missouri River (MT1-10000) is classified as a Category 5 impaired stream, and Elm Creek (MT1-11700), a tributary to the Missouri River, is classified as a Category 2 stream. According to DWEE and IDNR, the Missouri River impairments are for recreation (E. coli) and public drinking water supply (sulfate, arsenic). IDNR’s 2024 303(d) listing indicates the Missouri River’s designated uses are “Class A1” primary contact recreation, “Class BW1” warmwater aquatic life (including fish consumption), and “Class HH” human health/fish consumption. The Category 5 classification is due to bacterial contamination (E. coli).

The Project falls within the limits of the Village of Decatur WHPA, which is mapped to include the Village of Decatur extending east to the Iowa bank of the Missouri River. The Iowa portion of the Project Study Area does not overlap with any SWP areas. All registered groundwater wells within the Project Study Area have been decommissioned and are outside of the anticipated limits of construction for the Preferred Alternative.

It is possible that unregistered wells may be located near the Preferred Alternative; however, none were observed during visual reconnaissance activities. Any registered or unregistered wells within the acquired ROW would be properly decommissioned. A licensed water well Contractor would decommission the groundwater well(s) as specified in the Nebraska Department of Health and Human Services regulations under Nebraska Administrative Code Title 178, Water Well Standards, Chapter 12, Water Well Construction, Pump Installation, and Water Well Decommissioning Standards. Proper decommissioning of affected wells would not have a considerable impact on groundwater quality.

3.12.2 Impacts of the No-Build Alternative

No construction would occur under the No-Build Alternative. Minor impacts to water quality, especially 303(d) impaired waters, may occur during bridge maintenance, repairs, and future bridge removal, requiring implementation of stormwater best management practices (BMPs) following NDOT/Iowa DOT standards and applicable state and federal regulations. The presence of the open grate decking would continue to allow all liquids and roadway/bridge treatments to drain directly into the river.

3.12.3 Impacts of the Preferred Alternative

The Preferred Alternative would require work in the Missouri River, including the construction of piers and foundations, removal of existing bridge piers, and placement of riprap for bank stabilization. Minor changes to the physical movement of water in the Missouri River are anticipated with the placement of riprap, intended to maintain the position of the existing channel. This activity would not obstruct or change the flow direction within the Missouri River.

Construction of the Preferred Alternative is not anticipated to have a substantial effect on the chemistry and/or physical characteristics of water in the Missouri River and would not contribute to or exacerbate contaminant levels. The CWA requires preparation and submission of a storm water general permit (National Pollutant Discharge Elimination System [NPDES]) to DWEE and Iowa DNR, and preparation of a Storm Water Pollution Prevention Plan (SWPPP) before construction activities can begin. The SWPPP would be based on BMPs, such as seeding/mulching bare slopes as soon as practicable, and measures to contain spillage and prevent contaminants from entering waterways. Once the new bridge is open to traffic, storm water would be collected along the bridge deck and

released through vertical drains along the length of the bridge. The use of standard deicing solutions during inclement weather, vehicle fluids, and compounds used in emergency response should not exacerbate contaminant levels within the Missouri River.

Under the Preferred Alternative, implementation of BMPs would minimize erosion from construction-related activities and reduce stormwater runoff that could have substantial impacts on the water quality of the Missouri River. Minor, adverse impacts are possible within a small footprint of the Missouri River (<1 percent of the overall stream area), which would cease after construction is completed. BMPs would also be used to avoid construction runoff from entering Elm Creek, south of Marina Drive.

Adverse impacts to the Decatur WHPA from the Preferred Alternative are not anticipated, as the Project would shift an existing roadway to a new location and remove areas of existing pavement, making any increase in impermeable surfaces within the WHPA negligible.

It is possible that unregistered wells may be located within or near the anticipated limits of construction; however, none were observed during visual reconnaissance. Any registered or unregistered wells within the acquired ROW would be properly decommissioned in accordance with applicable Nebraska and Iowa regulations.

3.12.4 Avoidance, Minimization, and Mitigation

With the implementation of BMPs, no mitigation is required. The following permits will be obtained prior to construction: (1) CWA Section 404 permit; (2) CWA Section 401 Water Quality Certification; and (3) NPDES permit, with implementation of a SWPPP, to address impacts resulting from disturbance of more than 1 acre of land during construction. The Project traverses the Village of Decatur WHPA. NDOT's Standard Specifications for Highway Construction, Subsections 107.01, 107.09, and 107.16 and Iowa's Standard Construction Manual address the Contractor's responsibility to keep fully informed of, observe, and comply with all federal, state, and local laws and ordinances that affect the conduct of the work.

The Missouri River is the only impaired water in the Project Study Area. BMPs shall be developed and reviewed as necessary during the erosion control review process. If mitigation is required for impaired waters, it shall be captured in the Project's erosion control plan sheets and special provisions.

The following environmental commitment will be met during final design:

- During the ROW process, NDOT and Iowa DOT will coordinate with the owners of wells that would be directly impacted by the Project during construction.

The following mitigation and environmental commitments will be met during construction:

- If the well is actively used, NDOT and Iowa DOT will relocate and replace the well. If a well is not currently in use, the Contractor will decommission the well, as needed, during construction in accordance with Nebraska Administrative Code Title 178, Chapter 13 and Iowa Administrative Code Section 567, Chapter 49.

3.13 Wetlands and Water Resources

Wetlands are "those areas that are inundated or saturated by surface or groundwater 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" (33 CFR 328). Water resources are non-wetland aquatic resources, such as stream channels, rivers, ponds, or lakes.

A water of the US is defined as "the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide; tributaries, lakes and ponds, and impoundments of

jurisdictional waters; and adjacent wetlands” (33 CFR 328.3(a)). Waters of the State are defined as “all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state” (Nebraska Administrative Code Title 126, Chapter 1). “State Waters” in Iowa include all surface and subsurface water within the state’s jurisdiction (Subtitle 2 – Land and Waters, Chapter 461B of the Iowa Administrative Code).

The USACE is the agency charged with administering and enforcing federal laws related to wetlands under CWA Section 404 (33 USC 1344). USACE has jurisdiction over wetlands affected by the Project. DWEE and the IDNR are responsible for Section 401 Water Quality Certification for any project that requires a federal permit or license and includes a discharge into a water of the State. In addition, DWEE determines whether projects comply with Nebraska Administrative Code Title 117, Nebraska Surface Water Quality Standards. IDNR would do the same for projects in Iowa.

EO 11990, *Protection of Wetlands*, requires federal agencies (including FHWA) to implement “no net loss” measures for wetlands (42 Federal Register 26961). These measures include a phased approach: first, wetland impact avoidance; second, minimizing impacts if wetlands cannot be avoided; and finally, mitigation. In both states, “no net loss” is tracked and applied on an annual, program-wide basis for federally funded projects rather than on an individual-project basis.

3.13.1 Affected Environment

Wetlands and other water resources were identified within the Project Study Area during wetland and water resource delineations on September 27-29, October 2, and October 17, 2023. The findings of the delineations are summarized below. The full report is included in the Project file.

Wetlands

Thirty-four wetland features, four channel features, and three open water features were delineated within the Project Study Area as described in Tables 3-4 and 3-5.

Table 3-4. Wetland Resources Delineated Within the Project Study Area

Wetland Type ¹	Acreage (approx.)
PEMA/C	10.1 ac
Farmed Wetland (PEMA/C)	0 ac
PEMF	3.0 ac
PSSA	2.8 ac
PFOA	0.3 ac
Non-Functioning PFOA	0 ac
Total Wetlands	16.2 ac
PUB (open water)	10.1 ac
Total Ponds	10.1 ac

PEMA/C = palustrine emergent temporarily / seasonally flooded; PEMF = Palustrine emergent semi-permanently flooded; PFOA = palustrine forested temporarily flooded; PSSA = palustrine scrub-shrub temporarily flooded; PUB = palustrine unconsolidated bottom (open water).

Waterways

The Missouri River and a portion of Elm Creek (in Decatur) are the only waterways within the Project Study Area.

Table 3-5. Waterways Within the Project Study Area

Waterway Type	Linear Feet (approx.)
Ephemeral	945 LF
Intermittent	0 LF
Perennial	1,720 LF
Total Waterways	2,665 LF

3.13.2 Impacts of the No-Build Alternative

No construction or acquisition of ROW would occur under the No-Build Alternative. Under the No-Build Alternative, the Decatur Bridge will be removed in the future. At that time, temporary impacts within the Missouri River channel would occur to remove the piers below the river bottom and to drop the bridge into the river, most likely using explosives. The bridge components would be retrieved in accordance with USCG and USACE permits issued for the demolition. At the same time, the pavement of IA-175 would be removed, and the remaining roadway embankment would be lowered.

3.13.3 Impacts of the Preferred Alternative

The Preferred Alternative would require the acquisition of ROW adjacent to the existing N-51/IA-175 ROW. Along IA-175, the additional ROW would be primarily within the WMA, where fill materials would be placed in wetlands and open water habitats managed by the IDNR. On the Nebraska side, a small emergent wetland would be filled to build the new bridge abutment. The Elm Creek channel and its associated wetlands, south of Marina Drive, would not be affected.

A total of approximately 13.4 acres of wetland impacts would occur within the Project Study Area based on the conceptual design evaluated for the Preferred Alternative. Approximately 0.3 acres of wetlands in Nebraska and approximately 13.1 acres of wetlands in Iowa would be impacted. Based on the preliminary design, a total of 5.8 acres of permanent wetland impacts would occur.

Mitigation for wetland impacts will occur within the state where the impacts occur and at mitigation ratios negotiated by each state with its respective USACE District. Impacts are anticipated to be mitigated using existing mitigation banks or permittee-responsible mitigation.

Temporary impacts on wetlands and water resources during construction are anticipated. These impacts would be included in the Section 404 permitting process. Any resources that would be temporarily impacted would be restored to pre-construction condition or better and planted with an appropriate seed mix.

3.13.4 Avoidance, Minimization, and Mitigation

Throughout the conceptual design process, efforts were made to minimize impacts on wetlands and other waters of the US. Based on the conceptual design impacts, wetland and stream mitigation is anticipated. Where wetland impacts could not be avoided or minimized, mitigation will occur at ratios determined by USACE and at locations approved by USACE. Mitigation ratios are determined based on the type and location of mitigation proposed for the affected wetlands.

The following mitigation and environmental commitments will be met during final design:

- To reduce impacts on adjacent water/wetland features, especially within the WMA, the grading of slopes and ditches will be optimized to accommodate drainage.
- Avoidance and minimization measures will be further refined throughout the final design process as appropriate. Additionally, any project using federal transportation funds must adhere to the net gain of wetlands policy (23 CFR 777.11(g)), which requires no net loss of wetlands across the program each year.
- Wetland impacts occurring in Iowa will be mitigated in Iowa. Wetland impacts occurring in Nebraska will be mitigated in Nebraska. Mitigation type, location, and ratios will be coordinated by each state with its respective USACE District as part of the Section 404 permitting process.
- Prior to starting construction, a CWA Section 404 permit will be obtained. An Individual Permit will likely be the mechanism for authorization of permanent and temporary impacts. All terms and conditions of the permit will be implemented, and no work will occur prior to obtaining the permit.
- All wetlands within the Project limits that are not permitted for impact will be marked on the Project plans and on the E-Sheet as avoidance areas. Exclusionary fencing may be installed before construction begins.

The following mitigation and environmental commitments will be met during construction:

- The Contractor shall not stage, store, waste, or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear “bed and bank” channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation, or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas.

3.14 Fish, Wildlife, and Vegetation

Both states are home to numerous mammal, bird, reptile, amphibian, fish, invertebrate, and plant species. In relation to NDOT and Iowa DOT transportation projects, the term “fish and wildlife” denotes the aquatic (fish) and terrestrial (wildlife) species of interest along a project. Fish, wildlife, and vegetation are protected by several laws and regulations, as discussed below. Threatened and endangered species (a subset of all fish, wildlife, and plant species) and their associated habitats are discussed in Section 3.17.

The Fish and Wildlife Coordination Act of 1934, as amended (16 USC 661–667e), requires consultation with the USFWS and the state fish and wildlife agencies (NGPC and IDNR) for the purpose of giving equal consideration to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed projects. The Fish and Wildlife Coordination Act requires federal agencies to consider the effect that water-related projects may have on fish and wildlife resources, to take action to avoid impact on these resources, and to provide for the enhancement of these resources.

The Bald and Golden Eagle Protection Act of 1940 (BGEPA), as amended (16 USC 668–668d), provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) by prohibiting the taking, possession, and commercial use of such birds, except under certain specific conditions. Violations of this law can be charged as misdemeanors or felonies, and conviction can result in fines of more than \$100,000 and/or imprisonment.

The Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 USC 703–712), states that construction activities in grassland, wetland, stream, and woodland habitats, and those that occur on bridges (for example, that may affect swallow nests on bridge girders) that would otherwise result in the taking of migratory birds, eggs, young, and/or active nests should be avoided. Although the MBTA provisions apply year-round, most migratory bird nesting activity in Nebraska and Iowa occurs from April 1 to September 1.

The Nebraska Nongame and Endangered Species Conservation Act of 1975 (Nebraska Revised Statutes Section 37-801 et seq.) and Chapter 481A of the Iowa Administrative Code specify that the state should conserve non-game species, as well as species determined to be endangered or threatened, for human enjoyment, for scientific purposes, and to ensure their continued existence as a part of our natural world.

Noxious weeds are typically non-native, invasive species that are detrimental to natural ecosystems. Several regulations and guidelines have been issued to help limit the spread of noxious weeds, including EO 13112, *Invasive Species*; the Nebraska Noxious Weed Control Act (Nebraska Revised Statutes Sections 2-945.01 to 2-970); the Nebraska Noxious Weeds Regulations (Nebraska Administrative Code, Title 25, Chapter 10), and Chapter 317 of the Iowa Administrative Code.

3.14.1 Affected Environment

The Project Study Area is within the Tallgrass Prairie Ecoregion of Nebraska. This ecoregion is the easternmost one in Nebraska. The land surface is mainly rolling hills intersected by stream valleys. After the glaciers receded, windblown loess was deposited over the till. These materials, enriched with organic matter from thousands of years of prairie vegetation, form the basis for the deep, fertile soils that typify eastern Nebraska. Although historically upland, tallgrass prairie was the dominant plant community of the region, eastern Nebraska has a diversity of other community types ranging from deciduous woodlands to saline wetlands. Most of the woodlands and prairies that historically occurred in the area, however, have been cleared and converted to agricultural use.

The Project Study Area also spans the Missouri River Landscape, comprised of the Missouri River channel, its floodplain, and bluffs from the Nebraska/Kansas border to the Nebraska/South Dakota border. The Missouri River drains approximately 529,350 square miles of land, including the entire state of Nebraska. Historically, the Missouri River was one of the most dynamic large rivers in North America. Flood events from March through June were instrumental in creating the river's constantly meandering course. Alteration of the Missouri River began in 1829 when the removal of tree snags was initiated to improve steamboat navigation. From the 1930s through the 1960s, bank stabilization projects by the USACE armored the banks and created a navigational channel between St. Louis, Missouri and Sioux City, Iowa. From 1940 to 1964, six mainstream dams were constructed to manage river flows. Attempts to tame the river have negatively affected the diversity of flora and fauna. Channelization has resulted in the loss of sloughs, backwaters, and oxbows. Most riverine species depend on spring flood flows as spawning cues and on floodplain habitat for shelter.

Other than the Missouri River, most of the Project Study Area in Iowa is dominated by the WMA, which includes open water, emergent, scrub-shrub, and forested wetlands, and floodplain/riparian forests. Managed primarily for wildlife conservation and secondarily for recreation, the WMA is undeveloped except for boat ramps, parking lots, and an access road.

A habitat assessment was conducted within the Project Study Area in October 2023. Riparian woodlands within the Project Study Area are dominated by honey locust (*Gleditsia triacanthos*), Siberian elm (*Ulmus pumila*), silver maple (*Acer saccharinum*), eastern cottonwood (*Populus deltoides*), black willow (*Salix nigra*), and green ash (*Fraxinus pennsylvanica*). Emergent wetlands (PEMA/C) were dominated by reed canary grass (*Phalaris arundinacea*). Scrub-shrub (PSSA) and forested (PFOA) wetlands were dominated by peachleaf willow (*Salix amygdaloides*), sandbar willow (*Salix interior*), and eastern cottonwood. Two large open-water areas (PUB) connected by a manmade boat channel sit

just north of the Iowa approach spans and IA-175. Areas of row crops are present along the southern edge of IA-175 outside of the WMA and north of the existing west bridge abutment in Decatur.

Common wildlife species within the Project Study Area include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and white-tailed deer, along with numerous species of ducks, geese, and wading birds as seasonal residents within the WMA. The Missouri River and deeper backwater habitats support lake sturgeon, sturgeon chub, catfish, gar, and numerous panfish species (e.g., sunfish and bluegill).

Suitable bald eagle nesting and/or roosting habitat exists within the Project Study Area and within 0.5 miles of the Project Study Area. No bald eagle nests have been recorded in the vicinity of the Decatur Bridge.

3.14.2 Impacts of the No-Build Alternative

No ROW would be obtained, and no construction would occur under the No-Build Alternative. Planned maintenance of the Decatur Bridge would continue, which may require the removal of birds or nests under the provisions of the MBTA and in accordance with NDOT's Avian Protection Plan (APP).

3.14.3 Impacts of the Preferred Alternative

Temporary construction impacts on adjacent vegetation are expected. Areas disturbed during construction would be planted with an NDOT-approved or Iowa DOT-approved/IDNR-approved seed mix following construction. Waterways disturbed during construction would require having flow maintained through temporary means identified during final design or by the Project Contractor.

3.14.4 Avoidance, Minimization, and Mitigation

The following mitigation and environmental commitments will be met during construction:

- In accordance with NDOT's APP (NDOT 2018), NDOT and Iowa DOT will make every effort to schedule clearing and grubbing, large tree removal, or other work activities that may impact migratory bird nests, outside of the primary Nebraska nesting season of April 1 to September 1. If any of these activities are required during this period, a nesting survey will be completed by a qualified biologist prior to work commencing. Specific to bridge and culvert work, the required survey period extends through September 30.
- Suitable bald eagle nesting and/or roosting habitat exists within 0.5 miles of the Project Study Area. If construction begins between February 1 and April 15, a nest survey must be completed at least 1 day but not more than 14 days prior to construction. If construction begins between April 15 and October 1, a nest survey completed in March is sufficient because nests will likely already be constructed if nesting occurs that year. However, a nest survey may be conducted at any time during this timeframe, if it is completed prior to starting construction. If bald eagles are nesting in the area, consultation with NGPC, IDNR, and USFWS will be required prior to beginning construction activities. Eagle roosting surveys will be conducted if construction occurs between October 1 and January 31.
- In efforts to maintain aquatic wildlife connectivity, temporary structures (e.g., causeway) may be used to build the Preferred Alternative. Using temporary structures will continue to facilitate the movement of aquatic life during construction, in accordance with CWA Section 404 Nationwide Permit General Condition No. 2: Aquatic Life Movements. Proposed structures will be built at appropriate sizes and elevations to avoid impeding the movement of aquatic life.
- To avoid impacts on fish and other aquatic organisms, an erosion control plan and a SWPPP will be developed and implemented. In accordance with the SWPPP and the requirements in the Construction Storm Water General Permit, NDOT and Iowa DOT will inspect all erosion and

sediment control BMPs once every 14 days and after every precipitation event of 0.25 inch or greater, or once every 7 days. Any BMP adjustments and repairs will occur within 7 days of the inspection to ensure that water quality is being protected to the maximum extent practicable. The SWPPP will be maintained, and discharge points will be monitored by NDOT and Iowa DOT until the site is 70 percent of native background vegetation.

- According to NDOT's Standard Specifications for Highway Construction, Subsection 202.01(2)(b) and the Iowa Standard Construction Manual, the Contractor will be responsible for the disposal of all vegetation for NDOT ROW and the limits of construction. Disturbed areas would be seeded in accordance with NDOT's Standard Specifications, Subsection 803.02. Revegetation of the area following construction will occur using seed mixtures containing native grasses, legumes, and forbs for the appropriate landscape region, as specified in NDOT's Plan for the Roadside Environment for a rural highway corridor (NDOT 2008).
- As stated in NDOT's Standard Specifications for Highway Construction, Subsection 107.12, and the Iowa Standard Construction Manual, the Contractor shall prevent the transfer of invasive plant and animal species and should wash all equipment at the Contractor's storage facility prior to entering the construction site. The Contractor shall inspect all construction equipment and remove all attached vegetation and animals prior to leaving the construction site.
- Appropriate mulching materials, as defined in NDOT's Standard Specifications for Highway Construction, Subsection 806.02(1) and the Iowa Standard Construction Manual, shall be applied and should not include brome hay, rushes, cattails, reed canary grass, wide-bladed grass, or invasive species. All sod, if required, to be applied to the Project shall be free from noxious weeds and all other weeds.

3.15 Threatened and Endangered Species

The Endangered Species Act of 1973 (ESA), as amended (16 USC 1531–1544), protects federally listed endangered and threatened species, and the Nebraska Nongame and Endangered Species Conservation Act of 1975 (Nebraska Revised Statutes Section 37-801 to 37-811) and Chapter 481B of the Iowa Administrative Code provide protection for state-listed species. Violation of these laws can be charged as misdemeanors or felonies, and conviction can result in fines of more than \$100,000 and/or imprisonment.

USFWS, FHWA, NDOT, and NGPC have developed a Nebraska biological evaluation process for all federally and state-listed species in Nebraska to streamline the Section 7 coordination process. The *Programmatic Agreement among the Federal Highway Administration, US Fish and Wildlife Service, Nebraska Department of Transportation, and Nebraska Game and Parks Commission for the Determination of Effects to State and Federally Listed Species from the Federal-Aid Highway Program* was signed by all parties in March 2023. The Iowa DOT and IDNR provided input into the Nebraska biological evaluation process. The Programmatic Agreement describes the Nebraska biological evaluation process for species identification and impact assessment based on a list of construction activities that occur as part of transportation projects.

3.15.1 Affected Environment

The data for federally listed and state-listed threatened and endangered species with the potential for occurrence in the Project Action Area⁹ were reviewed, and each species was assessed individually to determine the potential presence or absence of suitable habitat within the Project Action Area, as described in the following paragraphs.

For the Project Action Area, USFWS lists eight federally protected and proposed species, NGPC lists six state-protected species, and the IDNR lists three state-protected species. Table 3-6 lists federally and state-listed threatened and endangered species with the potential for occurrence in the Project Action Area, as well as a brief description of suitable habitat for each listed species.

Table 3-6. Federally and State-listed Threatened and Endangered Species in the Project Action Area

Category	Listing Status	Common Name	Scientific Name	Habitat Description
Mammal	FE, NE-T	Northern long-eared bat	<i>Myotis septentrionalis</i>	Hibernate in caves and mines in the winter, forage in forested areas and roost in trees with sloughing bark, cracks, crevices, or hollows.
Bird	FE	Eskimo Curlew	<i>Numenius borealis</i>	Highly disturbed areas such as parts of prairies burned from fires and disturbed areas along rivers and lake banks.
Bird	FT, NE-T, IA-E	Piping Plover	<i>Charadrius melodus</i>	Areas of shallow open water, mudflats, sandbars, and lake shores.
Bird	FT, NE-T	Rufa Red Knot	<i>Calidris canutus rufa</i>	Vegetated sandy beaches.
Fish	NE-T, IA-E	Lake sturgeon	<i>Acipenser fulvescens</i>	Shallow, turbid waters and sandy-gravelly substrate present within the Missouri River.
Fish	FE, NE-E, IA-E	Pallid sturgeon	<i>Scaphirhynchus albus</i>	Documented within the Missouri River drainage basin, the lower Platte River, and has occupied tributary streams, such as the Loup River.
Fish	NE-E	Sturgeon chub	<i>Macrhybopsis gelida</i>	Missouri River drainage basin, the lower Platte River, and has the potential to intermittently occupy tributary streams, such as the Loup River.
Insect	FPT	Monarch butterfly	<i>Danaus plexippus</i>	Grasslands and meadows with milkweed (<i>Asclepias spp.</i>).
Insect	FPT	Western regal fritillary	<i>Argynnis idalia occidentalis</i>	Non-degraded prairies and wetlands where violet species (<i>Viola spp.</i>) are present.
Insect	FPE	Suckley's cuckoo bumble bee	<i>Bombus suckleyi</i>	Areas with abundant floral resources.

Sources: USFWS, 2025; NGPC, 2025; IDNR, 2025.

⁹ The Project Action Area, as defined in the Nebraska Programmatic Biological Evaluation process, was determined based on anticipated noise, visual, waterway, and lighting impacts. The action area for this Project extends 1.1 miles from the centerline of the Decatur Bridge. This distance represents the greatest likely extent of effects on species and critical habitat.

F = Federal, UR = federal listing status under review, IA = Iowa listed, NE = Nebraska listed, E = Endangered, T = Threatened, PE-Proposed Endangered, PT = Proposed Threatened

¹ Tricolored bat is proposed to be federally listed as endangered; an official federal listing opinion is anticipated in 2024. All species federally listed as threatened or endangered are also listed by the state of Nebraska under State Statute 37-802(1).

An Acoustic Bat Survey was conducted in July 2024 (available upon request). The initial software classification across the three sites surveyed indicated eight bat species were potentially present: big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), northern long-eared bat (*Myotis septentrionalis*), little brown bat (*Myotis lucifugus*), evening bat (*Nycticeius humeralis*), and tricolored bat (*Perimyotis subflavus*); of which only the northern long-eared bat (endangered) and the tricolored bat (proposed endangered) are protected. The northern long-eared bat is listed at both state and federal levels; the tricolored bat is proposed for federal listing but not listed at the state level. During manual review of the recorded calls, all potential protected species calls were found to be other bat species or of insufficient quality for identification. Manual review determined the northern long-eared bat and tricolored bat were likely absent from the Project Study Area.

The federally endangered and threatened species review was conducted in accordance with the 2023 *Programmatic Agreement among the Federal Highway Administration, the US Fish and Wildlife Service, the Nebraska Department of Transportation, and the Nebraska Game and Parks Commission for the Determination of Effects to State and Federally Listed Species from the Federal-Aid Highway Program* (Programmatic Agreement review process). Forms completed for the Project based on this Programmatic Agreement are included in the Project file.

3.15.2 Impacts of the No-Build Alternative

No construction or acquisition of ROW would occur under the No-Build Alternative. Impacts on threatened and endangered species may occur as part of other routine roadway and bridge maintenance activities. Impacts on threatened and endangered species for those projects would be evaluated on a project-by-project basis.

3.15.3 Impacts of the Preferred Alternative

Based on the analysis conducted using the Programmatic Agreement review process (draft biological assessment is included in Appendix F), the Preferred Alternative "May Affect, Not Likely to Adversely Affect": northern long-eared bat, pallid sturgeon, lake sturgeon, sturgeon chub, monarch butterfly, Piping Plover, Rufa Red Knot, and Suckley's cuckoo bumble bee. These species are the only listed species identified through the Programmatic Agreement review process that may potentially be impacted by the Preferred Alternative. Activities that may occur during construction that would result in a "May Affect, Not Likely to Adversely Affect" on aquatic species include in-water work involving the use of barges, drilled shaft installation, pile driving, construction of a temporary causeway/work platform, blasting and removal of the existing bridge, removal of river piers, and riprap removal and installation. Activities during construction that would result in a "May Affect, Not Likely to Adversely Affect" on terrestrial species include clearing and grubbing, grading and paving, pile driving, drilled shaft installation, and slope stabilization.

The USFWS has reviewed the draft biological assessment for this project and has provided "Reasonable Assurance" that their requirements can be met. On behalf of FHWA, on February 4, 2026, NDOT provided the draft biological assessment to the Bureau of Indian Affairs (BIA) and the Omaha Tribe of Nebraska for review and comment. On February 20, 2026, the BIA concurred with the biological assessment's findings. When consultation with all parties is concluded, a summary of the findings will be incorporated into the FHWA's decision document, and supporting documentation added to the Project file.

Wetland mitigation will be required to offset the aquatic resource impacts from the Preferred Alternative (see Section 3.13.3). Once mitigation is determined, NDOT and Iowa DOT will reinitiate consultation with USFWS, NPGC, and IDNR. Consultation with these agencies is ongoing but will be completed before the NEPA decision is issued.

3.15.4 Avoidance, Minimization, and Mitigation

The following conservation conditions and avoidance and minimization measures for each species will be met during construction.

General

- A-1 **Changes in Project Scope.** If there is a change in the project scope, the project limits, or environmental commitments, the HPM shall coordinate with the NDOT Environmental Section to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section.
- A-2 **Conservation Conditions.** Conservation conditions are to be fully implemented within the project limits as shown on the plans.
- A-3 **Early Construction Starts.** Contractor requests for early construction starts must be coordinated by the Project Construction Engineer with the NDOT Environmental Section for approval to ensure avoidance of listed species-sensitive lifecycle timeframes. Early start requests may require consultation with the USFWS and NGPC. Agency coordination time will vary depending on species and project location.
- A-4 **T&E Species.** If federal or state-listed species are observed during construction, the HPM will contact NDOT Environmental Section to determine if additional species conservation conditions would be required prior to continuing project construction activities. Contact NDOT Environmental for a reference of federal and state-listed species. Coordination with the USFWS and NGPC may be required depending on the species identified and construction activities.
- A-5 **Refueling.** Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field.
- A-6 **Restricted Activities.** The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the ROW designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the Contractor should refer to the NGPC website to determine which species ranges occur within the off-site area. The Contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site, or other off-site activities. The Contractor should review the T&E Matrix agreement (on NDOT's website), where species survey protocols can be found, to estimate the level of effort and timing requirements for surveys.

Any project-related activities that occur outside of the project limits must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the Contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above-listed project activities. The Contractor shall submit information such as an aerial photograph showing the proposed activity site, a soil survey map with the location of the

- site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photographs showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The Contractor must receive notice of acceptance from NDOT environmental, prior to starting the above-listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat.
- A-7 Waste/Debris.** Construction waste/debris will be disposed of in areas or a manner that will not adversely affect state and/or federally listed species and/or designated critical habitat.
- A-8 Post Construction Erosion Control.** Erosion control activities carried out by NDOT Maintenance or others after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project limits during construction.
- S-1 Fencing.** When project-related fence construction/relocation work is required to be done prior to the start of construction, and if the fence work occurs outside urban or cropland areas that are not within swift fox or mountain plover range, then fencing can be installed/relocated at any time using the following criteria:
- the fencing is temporary in nature and/or consists of only hand-driven posts
 - the work does not compact the soils (e.g., through the use of heavy equipment) or cause soil disturbance beyond the driving of posts
 - within the Whooping Crane migration corridor, work occurring within a half of a mile of wetlands or perennial waters will occur between the hours of 10:00 am to 4:00 pm when the work is between March 6–April 29 or October 9 – November 15. If the fencing work cannot meet these criteria, then NDOT Right-of-Way Division shall coordinate with NDOT Environmental Section prior to the completion of ROW negotiations.
- S-3 Revegetation.** All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder or within high erosion-prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified, any seed mix requirements identified during resource agency consultations shall be used for the project.
- S-4 Sensitive Areas.** Environmentally Sensitive Areas will be marked on the plans, in the field, or in the contract by NDOT Environmental for avoidance.
- S-5 Species Surveys.** If species surveys are required during the construction phase of the project (including pre-construction surveys), results will be sent by NDOT Environmental Section to the USFWS, NGPC, and if applicable, the USACE.
- S-6 Permanent LED Lighting (NDOT Design Commitment):** Only LED roadway luminaries listed on the NDOT "Nebraska Qualified Material Vendors List" will be considered for use on Nebraska highway lighting projects. Proposed changes to the following LED lighting requirements would require resource agency (USFWS and/or NGPC) coordination and approval prior to installation:
- Nominal CCT – 3000 +/- 300 K

- Backlight Uplight and Glare (BUG) Ratings – Maximum nominal Backlight (N/A), Uplight (0), Glare (N/A)
- Lumen Output – N/A

Any proposed changes to the listed requirement(s) must be presented to the NDOT Environmental Section for Agency Coordination and approval.

- R-4** Asphalt plants and staging areas for construction supplies and Contractor's equipment shall be located in areas that are frequently disturbed such as, but not limited to, field entrances, crop fields, abandoned roadway, farmsteads, and roads. If this is not possible, the Contractor shall coordinate with NDOT Environmental with a site plan showing the desired staging/stockpile location(s), which will be sited in such a way as to avoid impacting protected species.

Pallid Sturgeon/Lake Sturgeon/Sturgeon Chub

- PS/LS/SC-1** No vibratory or impact pile driving from March 1 through July 31 within the channel.
- PS/LS/SC-2** Any detention basin outlets will be designed such that they are stabilized to prevent streambank erosion and will not otherwise impact stream channel/bank.
- PS/LS/SC-3** The Contractor will dispose of drill cuttings in areas or a manner that will not adversely affect state and/or federally listed species and/or designated critical habitat.
- PS/LS/SC-5** No discharge of water or spoil directly into the channel from March 1 through July 31.
- PS/LS/SC-6** No flow modifications or disturbance in the channel from March 1 through July 31. Work is allowed within a cofferdam or above the waterline if the work is conducted from the temporary work platform or another location not directly in the channel (i.e., the riverbank or barges). Vibratory or impact pile driving from March 1 to July 31 is **NOT** permitted within or outside of cofferdam. Temporary bridges or causeways can be constructed between August 1 and March 1, provided they are built according to the terms and conditions of the associated 404 permit. Barges may be secured with spud piles and relocated year-round.
- PS/LS/SC-7** Any upland soil disturbances will be designed to avoid or minimize sedimentation.
- PS/LS/SC-A** The proposal for the temporary structure, if not already provided, shall be submitted to the USFWS and NGPC at least 30 days prior to construction.
- PS/LS/SC-B** During all phases of the bridge removal that do not involve dropping the bridge into the channel, such as the removal of the bridge deck and rails, all debris will be captured and/or contained. During phases of bridge removal that include dropping the bridge into the channel, all materials will be removed from the channel as promptly as feasible, as required per USCG and 404/408 permitting. Dropping and removal of the bridge from the channel will not occur between March 1 and July 31.
- PS/LS/SC-C** Bridge demolition activities involving explosives will be avoided between March 1 through July 31.
- PS/LS/SC-D** Prior to use at the construction site, barges and any equipment that will be used in the water must be decontaminated of invasive aquatic species according to protocol.

Northern Long-eared Bat and Tricolored Bat

General AMM 1

Ensure all operators, employees, and Contractors working in areas of Indiana bat, northern long-eared bat, or tricolored bat suitable habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs.

Lighting AMM 1 - Direct temporary lighting away from suitable habitat during the active season (April 1 – November 15).

Lighting AMM 2 -When installing new/additional permanent lighting or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those Transportation Agencies using the BUG system developed by the Illuminating Engineering Society, the project should be as close to 0 for all three ratings with a priority of “uplight” of 0 and “backlight” as low as practicable. http://www.escolighting.com/PDFfiles/BUG_rating.pdf

TREE REMOVAL/TRIMMING AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal/trimming in excess of what is required to implement the project safely.

TREE REMOVAL/TRIMMING AMM 2

Ensure tree removal/trimming is limited to that specified in project plans and ensure that Contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree removal/trimming to ensure Contractors stay within clearing limits).

TREE REMOVAL/TRIMMING AMM 3a

Ensure tree removal/trimming is limited to the inactive season (November 16–March 31).

BRIDGE/CULVERT/STRUCTURE AMM3A

Ensure bridge, culvert, or structure removal, replacement, and/or alteration activities conducted during the active season will not disturb roosting Indiana bats, northern long-eared bats, or tricolored bats using the bridge, culvert, or structure.

Monarch Butterfly

MB-A To avoid impacts on monarch caterpillars during construction, Contractors shall complete all initial vegetation disturbance before May 1 or after October 1. This initial disturbance can be a mow out of the entire area and does not require a full clearing and grubbing. Vegetation shall be maintained at below 6-inches height or less starting May 1 to October 1. If construction or Contractor activities within areas of suitable habitat are complete before October 1, the area no longer needs to be mowed. This timing restriction ensures that vegetation removal does not occur during the period when monarch caterpillars are present on milkweed plants.

Piping Plover

PP-4 Herbaceous species used for re-seeding within 0.25-miles of the following locations: the west (Nebraska) and east (Iowa) banks of the Missouri River and several unnamed waterbodies will be native grass or forb species. Native shrub or woody species used in restoration should reach no more than 4 feet in height at maturity. These unnamed waterbodies are located at Mile Markers 0+30 (north and south) and 0+40 to 0+60 (north and south).

PP-5 If nighttime work is planned between April 15 and August 15, lighting shall be limited to a Nominal CCT of 3000 +/- 300 K, shielded and directed away from the suitable habitat at

the following locations: the west (Nebraska) and east (Iowa) banks of the Missouri River and several unnamed waterbodies located at Mile Markers 0+30 (north and south) and 0+40 to 0+60 (north and south).

Rufa Red Knot – No conservation measures specified.

Suckley's Cuckoo Bumble bee - No conservation measures specified.

3.16 Permits and Approvals

Permits and approvals that would be required to implement the Project are listed in Table 3-7.

Table 3-7. Permits and Approvals

Permit or Approval	Granting Agency(ies)	Reason
Clean Water Act Section 404 permit	USACE	Authorization is required for placement of dredged or fill material in wetlands or other waters of the US. An Individual Permit with mitigation is anticipated.
Clean Water Act Section 401 Water Quality Certification	DWEE IDNR	This certification is required as part of the Section 404 permit issuance.
Rivers and Harbors Act Section 9 Permit	USCG	USCG approval to construct a new bridge or reconstruct or modify an existing bridge over navigable waters of the United States. The purpose of the act is to preserve the public right of navigation and prevent interference with interstate and foreign commerce.
Rivers and Harbors Act Section 408 Authorization	USACE	Approval under Section 408 (Section 14 of the Rivers and Harbors Act of 1899; codified at 33 USC 408) to remove existing bridge piers and foundations within critical areas near the levee systems and construct new bridge piers and other improvements within these areas. Approval by the USACE and levee district is dependent upon review of the final design plans.
Sovereign Lands Permit (Iowa only)	IDNR	The Missouri River is classified as a meandering river in the State of Iowa and the Upper Decatur Bend WMA is owned by the IDNR, therefore a Sovereign Lands Permit is required. It will be approved concurrently with the Section 404/10/401 process, possibly through a joint application. IDNR has assigned the following tracking number for the Project: 2025-0696ER-01.
NPDES Construction Storm Water General Permit, including a Stormwater Pollution Prevention Plan	DWEE IDNR	The NPDES permit, required for construction sites greater than 1 acre in size, authorizes (with the implementation of permit-specified mitigation) the discharge of stormwater associated with activities from a construction site. A SWPPP is required under the general permit to help prevent stormwater pollution, and control erosion and sedimentation.
Floodplain Development Permit	Burt and Monona Counties	As participating parties in FEMA's National Flood Insurance Program, Burt and Monona Counties regulate activities that encroach within their FEMA-designated Zone A 100-year floodplains.
Section 106 Consultation, National Historic Preservation Act, including execution of a MOA to resolve the adverse effect on the Decatur Bridge	NESHPO, NDOT, Iowa SHPO, Iowa DOT, FHWA	NESHPO concurred with the adverse effect on September 5, 2025. Iowa SHPO concurred with the adverse effect on October 5, 2025.

Table 3-7 continued. Permits and Approvals

Permit or Approval	Granting Agency(ies)	Reason
Section 4(f) of the US Department of Transportation Act	FHWA	FHWA must approve the use of properties protected by Section 4(f). <i>Programmatic Section 4(f) Evaluation for Projects that Necessitate the Use of Historic Bridges</i> (Decatur Bridge), <i>de minimis</i> Section 4(f) for the conversion of lands from the Upper Decatur Bend WMA, and Section 4(f) Exception for Temporary Occupancy is anticipated for the Missouri River Paddling Route. Section 4(f) documentation and coordination would occur following the public hearing.
Air Quality Construction Permit	DWEE IDNR (if plants in both states are possible)	This permit would be required if a new emission unit (such as a portable batch plant for paving applications) were needed for construction. It has not yet been determined if a portable plant would be needed for the Project. Acquisition of this permit, if needed, would be the responsibility of the roadway construction Contractor.
Section 7 of the Endangered Species Act	USFWS	Section 7 consultation with USFWS must occur regarding potential impacts on federally threatened and endangered species and their habitat. Evaluation according to the 2023 NDOT Programmatic Agreement for Biological Assessment with USFWS, FHWA, and NGPC has indicated a "May Affect, Not Likely to Adversely Affect" determination for the pallid sturgeon, lake sturgeon, sturgeon chub, northern long-eared bat, tricolored bat, little brown bat, monarch butterfly, Piping Plover, Rufa Red Knot, and Suckley's Cuckoo Bumble Bee with implementation of conservation conditions and avoidance and minimization measures.
Nebraska Nongame and Endangered Species Conservation Act	NGPC	Consultation with NGPC must occur regarding potential impacts on state-listed threatened and endangered species and their habitat. Evaluation according to the 2023 NDOT Programmatic Agreement for Biological Assessment with USFWS, FHWA, and NGPC has indicated "May Affect, Not Likely to Adversely Affect" determination for the pallid sturgeon, lake sturgeon, sturgeon chub, northern long-eared bat, tricolored bat, little brown bat, monarch butterfly, Piping Plover, Rufa Red Knot, and Suckley's Cuckoo Bumble Bee with implementation of conservation conditions and avoidance and minimization measures.
Bird Depredation Permit	USFWS	Allow removal of migratory bird nests from the bridge before starting construction/demolition. Include Special Provision in the construction contract.

Chapter 4 Comments and Coordination

This chapter summarizes agency coordination and public involvement that has taken place during the development of this EA. NDOT used a variety of methods to provide information to and obtain input from interested parties. A Project stakeholder is anyone who has an interest in or may be affected by the proposed Project, either directly or indirectly, including businesses, resource agencies, elected officials, and public officials. Agency scoping and coordination documentation, including comments/input received, is available upon request. The *Public Involvement Summary Memo*,¹⁰ documenting the information shared and comments received is included in Appendix H and posted on the NDOT Decatur Bridge website.

4.1 Resource Agency Coordination

A resource agency is a division of government with a specific regulatory role and technical expertise that can provide knowledge or assistance. Involving agencies early and throughout the Project's development can help identify potential issues and streamline permitting processes. Agencies have had the opportunity to comment on the Project during Project development.

4.1.1 Decatur Bridge Location and Environmental Study

Early outreach to regulatory and reviewing agencies was initiated during the *Location/Environmental Study* to inform them of the potential Project and to obtain information regarding an agency's jurisdiction by law, properties they may own or manage, and design or operational criteria applicable to the Project's design and construction. Meetings were held with the USACE, USCG, USFWS, IDNR, and NGPC.

4.1.2 Agency Scoping

On May 19, 2025, NDOT, on behalf of FHWA, distributed agency scoping/early coordination packets to numerous local, state, and federal agencies and federally recognized tribes to obtain input on the development of the EA. The comment period extended through June 13, 2025, with no agencies providing comments or feedback.

On April 22, 2025, FHWA invited the USACE (Omaha District) and the USCG (Heartland District, Western Rivers) to serve as Cooperating Agencies during the NEPA process. On May 28, 2025, FHWA updated the invitation to the Rock Island District. Each agency has jurisdiction by law with the authority to issue permits required to build the Project. Both agencies also have special expertise and knowledge used in ongoing Project development. Each agency accepted the role of Cooperating Agency.

4.1.3 Pre-Application Meetings (Section 404/408 and Section 9)

During the *Location/Environmental Study* and development of this EA, several meetings have been conducted with the USACE and USCG to prepare the permit applications needed to build the Project. Meetings with the USACE have engaged their Regulatory (Section 404 of the Clean Water Act and Section 408 [Section 14 of the Rivers and Harbors Act of 1899]), Real Estate, and Hydraulics Divisions. Meetings with the USCG have discussed both the vertical and horizontal (bridge span length) clearances required to cross the Missouri River's navigation channel, in-river construction methods,

¹⁰ *Public Involvement Summary Memo* is available at: https://dot.nebraska.gov/media/1sdlo4tw/public-and-interested-party-involvement-report_2026-mar.pdf

including temporary construction structures, and the demolition and removal of the existing Decatur Bridge. Meetings with both agencies will continue through the NEPA process and into final design to provide the appropriate information to obtain the required permits. Records of the meetings conducted to date are included in the Project file.

4.2 Public and Interested Party Coordination

The purpose of public involvement during the NEPA process is two-fold: (1) it provides interested parties with information about the proposed Project and its status; and (2) it allows NDOT and Iowa DOT to get input on the proposed Project or Project Study Area. Ideally, public involvement builds agreement on a project solution by identifying benefits and impacts and addressing identified concerns.

4.2.1 Public Involvement During the Decatur Bridge Location and Environmental Study

A **Community Advisory Group (CAG)** was formed, including city and county officials (including sheriff, fire and EMS), healthcare providers, economic development and business owners, education institutions (including the Nebraska Indian Community College), the Omaha Nation, state agencies, and other interested parties. The DOTs met with the CAG in January 2024 to introduce the Project and obtain input on the need for improvements, and in April 2024 to obtain input on the alignments to be studied. A Community Survey was posted from February 2024 through March 2024, to obtain public input on the needs to be addressed by the Project. Both NDOT and Iowa DOT coordinated with the federally recognized tribes with potential interests in the Project Study Area through early coordination under Section 106 of the NHPA. In addition, outreach was conducted to the Omaha Tribe of Nebraska and the Nebraska Indian Community College in Macy, Nebraska (north of Decatur) to encourage their participation in the CAG. Blackbird Bend Casino and WinnaVegas Casino, both in Monona County, Iowa, were also contacted to participate in the CAG.

A **community survey** was conducted between February 1 and March 15, 2024. The survey was hosted online through the Project website, with hardcopy surveys available for pickup and drop-off at five community locations in Decatur and Onawa. The survey was promoted by social media and word of mouth; news releases were distributed by both DOTs, promotional flyers were made available at community facilities, and CAG members were encouraged to share the survey email with friends and family. A total of 1,092 surveys were submitted with 58 percent of respondents indicating they heard about the survey through social media and 20 percent by word of mouth. By the end of March 2024, more than 3,500 people had visited the Decatur Bridge Project website. More than 80 comments were received by dropping pins on a virtual map of the Project Study Area, and 164 people signed up for email updates. Survey results indicated that 34 percent of respondents use the Decatur Bridge 4 or more times per week, and 35 percent use it 1 to 4 times per month. In doing so, 73 percent of respondents indicated they would be severely affected if the bridge were permanently closed.

Two **public information open house meetings** were held, one in Nebraska and one in Iowa. Meetings originally scheduled for June 2024 were postponed to August 2024 because of flooding along the Missouri River and across the Project Study Area. The first meeting was held at the Onawa Community and Recreation Center, 320 10th Street, in Onawa, Iowa on Wednesday, August 28, 2024, from 11:30 AM – 1:30 PM, with 57 people attending. The second meeting was held at the Decatur City Hall, 913 S. Broadway Street, in Decatur, Nebraska on Thursday, August 29, 2024, from 5:00 – 7:00 PM, with 81 people attending.

Nearly 750 residents and business owners within the vicinity of the Decatur Bridge were notified by postcard (via the mail) prior to both meeting timeframes. Additionally, 325 public and private agencies with potential interest in the Project, including the Nebraska Trucking Association, were notified. CAG

members were also invited and encouraged to share information about the meeting with friends, family, and the community at large. The public comment period extended from June 5 through September 16, 2024. A total of 49 comments were received during the extended comment period.

Comments generally favored building a new bridge, with commenters preferring alignments that would maintain connectivity between Decatur and Onawa, minimize disruption to existing N-51 and IA-175 during construction (especially through Decatur), and remain as close to the existing bridge as possible. In general, the public comments submitted reflected the feedback communicated by the CAG. More than 53 percent of the comments received mentioned the Blue alignment (north of and parallel to the existing bridge) as a preferred location, with 32 percent mentioning the Orange alignment (south of and parallel to the existing bridge) as a preferred location.

4.2.2 Public Notification of the Start of the NEPA Process

On August 15, 2025, NDOT sent emails to the public, interested parties, and CAG members announcing the official start of the NEPA process.

4.2.3 Community Advisory Group (CAG) Meeting #3

A third CAG meeting will be held prior to the public hearing on the EA in Decatur, Nebraska, on March 24, 2026.

4.3 Public Hearing

Following the approval and publication of the EA by FHWA, a public hearing will be held to seek comments on the EA and to present the Preferred Alternative. The public hearing is planned for Tuesday, March 31, 2026, at the Decatur City Hall in Decatur, Nebraska, from 5:00 PM-7:00 PM. A formal presentation will be made in addition to providing information in an open-house format. Comments should be provided by April 17, 2026, to be considered and included in the Project file. All public hearing materials will also be available online on the NDOT website at ndot.info/32395 and the Iowa DOT website at <https://iowadot.gov/nepa-compliance/nepa-projects-documents/iowa-175-decatur-bridge> during the comment period. A public notice advertising the hearing time and location will be provided in newspapers and targeted mailers.

4.4 Availability of EA for Review

An electronic version of the EA is available for review on the NDOT website at ndot.info/32395 and the Iowa DOT website at <https://iowadot.gov/nepa-compliance/nepa-projects-documents/iowa-175-decatur-bridge>.

Hard copies of the EA are available for review at the following locations:

- Decatur City Hall (913 S Broadway Street, Decatur, NE 68020)
- Onawa City Hall (914 Diamond Street, Onawa, IA 51040)
- NDOT District 3 Headquarters (408 N 13th Street, Norfolk, NE 68701)
- NDOT Headquarters (1500 Nebraska Parkway, Lincoln, NE 68502)
- Iowa DOT District 3 Headquarters (6409 Gordon Drive, Sioux City, IA 51106)
- Iowa DOT Headquarters (800 Lincoln Way, Ames, IA 50010)
- FHWA Nebraska Division (100 Centennial Mall N, Suite 220, Lincoln, NE 68508)
- FHWA Iowa Division (105 6th Street, Ames, IA 50010)

Chapter 5 References

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