# Finding of No Significant Impact Cardinal-Hickory Creek 345-kV Transmission Line Project Proposal for Route Modification B-IA3 and Land Exchange

# Upper Mississippi River National Wildlife and Fish Refuge Winona, MN

The U.S. Fish and Wildlife Service (Service) worked as a cooperating agency with the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) and the U.S. Army Corps of Engineers (Corps) to complete the National Environmental Policy Act (NEPA) process for the Cardinal-Hickory Creek 345-kilovolt (kV) Transmission Line Project (C-HC Project) with the publication of the notice of intent to prepare an environmental impact statement (EIS) on October 18, 2016. RUS is the lead federal agency for the NEPA process for this project.

On January 16, 2020, the record of decision (ROD) was signed by RUS, Corps, and the Service for the C-HC Project. The ROD approved the C-HC Project route between the Cardinal substation in Dane County, Wisconsin, and the Hickory Creek substation in Dubuque County, Iowa, including the new Hill Valley substation near Montfort, Wisconsin, and several substation improvements (RUS et al. 2020, incorporated herein by reference). The selected C- HC Project route (Selected Route) was presented as Alternative 6 in the FEIS for the C-HC Project.

The three Federal agencies that signed the ROD in January 2020, RUS, Corps, and the Service approved various components of the C-HC Project. RUS, the lead Federal agency, provided approval of the environmental review, conditioned on completion of the National Historic Preservation Act (NHPA) process which enabled the C-HC Project to proceed to the RUS loan review and engineering review processes. The Corps granted the Easement for Electric Power or Communication Facility (DACW25-2-20-4030) to ITC Midwest LLC (ITC Midwest) and Dairyland Power Cooperative (Dairyland), dated September 23, 2020, for crossing Corps feetitle lands managed as part of the Upper Mississippi River National Wildlife and Fish Refuge (Refuge). On September 8, 2020, the Service granted a right-of-way (ROW) easement to ITC Midwest and Dairyland for the crossing of Service fee-title lands in the Refuge. On August 27, 2021, the Service revoked the ROW easement and rescinded the compatibility determination within the Refuge after learning that analysis supporting those actions was based on a factual error using an incorrect easement. Permits required by Section 10 and Section 408 of the Rivers and Harbors Act and Section 404 of the Clean Water Act (CWA) were attached to the ROD signed in January 2020.

Between September 2020 and January 2022, Dairyland, American Transmission Company LLC (ATC), and ITC Midwest, together referred to as "the Utilities," submitted a series of nine proposed route modifications to RUS, the Corps and the Service for the C-HC Project (see Supplemental Environmental Assessment [SEA] Table 1 and Table 2; Figure 1). Using proposed route modification B-IA3, on March 1, 2021, Dairyland and ITC Midwest submitted an application for an amended ROW to the Service for a revised crossing of Service fee-title lands in the Refuge.

RUS and the Service made the determination that the route modifications, including the application for an amended ROW in Iowa, were of such a nature that additional review was appropriate per 40 Code of Federal Regulations (CFR) 1502.9 to assess whether there was new information or changed circumstances that would be considered significant. An environmental assessment (EA) for the C-HC Project route modifications was completed in accordance with Rural Development Instruction 1970-C for these proposals, focusing the analysis on whether 40 CFR 1502.9(d)(1) standards for preparing a supplemental EIS had been triggered. On June 24, 2021, the notice of availability (NOA) of an EA to evaluate the route modification proposals was published with a 30-day public comment period, which closed on July 24, 2021.

On July 29, 2021, the Utilities made a proposal to the Refuge for an expedited consideration of an exchange of lands as an alternative to the pending proposal for an amended ROW to accommodate the C- HC Project crossing of the Refuge. The Utilities supplemented this proposal by letter dated July 25, 2023. SEA Appendix A provides the Statement of Proposed Land Exchange/Purchase between Service and ITC Midwest/Dairyland. A final copy of the Land Exchange Agreement is attached to this FONSI.

In January 2022, Dairyland identified a need to make a minor route modification to the proposed transmission tap line in Iowa, referred to as the N-9 tap line. Dairyland proposed the minor route modification to accommodate a landowner objection.

These new events have triggered analysis under 40 CFR 1502.9 to assess whether this new information and changed circumstances would be considered significant for purposes of preparing a supplemental EIS. RUS developed the SEA to update the information and alternatives considered in the EA dated June 24, 2021, particularly as a result of the revocation of the ROW easement on Service fee-title lands in the Refuge due to an administrative error and the proposal of a land exchange in lieu of a ROW amendment. Further, the SEA was prepared to disclose and assess the potential environmental impacts associated with the construction, operation, maintenance, and decommissioning of the proposed route modifications.

Portions of the nine proposed route modifications would occur outside of the analysis area previously reviewed in the FEIS (RUS 2019) and ROD (RUS et al. 2020). Together, the decision whether to approve the proposed route modifications and the associated administrative action necessary to facilitate the C-HC Project to cross the Refuge is a major Federal action requiring compliance with NEPA (42 United States Code [USC] 4321).

As noted above, the Utilities proposed nine route modifications and a land exchange. Eight of the route modifications do not involve any action by the Service, and they are covered by the RUS Finding of No Significant Impact (FONSI) dated October 6, 2023. This FONSI will not duplicate that analysis and will only discuss the one route modification that impacts the Service, referred to as the B-IA3 route and the land exchange. The B-IA3 route follows the same route evaluated in the EA dated June 24, 2021. This route modification would remove the C-HC Project from 14.3 acres of private land and 9.93 acres of Refuge land and would instead cross 6.78 acres of private land and 0.15 acre of additional Refuge land not previously analyzed in the

FEIS on a more direct route to the Turkey River substation. This route modification would eliminate the need for three transmission line structures within the Refuge (#70–72) and three outside the Refuge (#67–69) that had been previously approved as part of the 2020 Selected Route, for a total reduction of six previously approved structures. As proposed by the Utilities on July 29, 2021, route modification B-IA3 now includes a proposed land exchange instead of a ROW across 19.84 acres of Service fee-title lands within the Refuge. This land exchange would include the transfer of the 35.69-acre Wagner Tract, currently owned by the Utilities, to the Service in exchange for a 19.84-acre corridor along portions of Oak Road that was evaluated as a proposed ROW in the FEIS (see SEA Figure 2). The Utilities have made the following commitments:

- to manage the transferred corridor lands in full accord with the vegetation management protocols and access parameters previously identified and requested by the Service and Corps;
- to report any cultural resources that may be discovered in the corridor during construction; and
- to coordinate with the Service's Migratory Bird Program to limit potential impacts to bald eagles (Haliaeetus leucocephalus) if work occurs between February and July.

The Utilities would also restore the Wagner Tract and abandon and restore the existing 69-kV and 161-kV ROWs that currently cross the Refuge in accordance with the Updated Restoration Plan for the Upper Mississippi River National Wildlife and Fish Refuge near Turkey River, Iowa (Burns & McDonnell. 2020; SEA Appendix A). All of these commitments are conditions of the attached Land Exchange Agreement. These commitments would be enforceable through restrictions in the deed for the divested parcel.

The originally proposed route modification B-IA3 is a result of ongoing consultation under the Programmatic Agreement (PA) that is being implemented for National Historic Preservation Act (NHPA) Section 106 compliance for the C-HC Project (RUS et al. 2020: SEA Appendix D). In July 2020, consulting parties requested that a new route segment, B-IA3, be adopted to reduce impacts to cultural resources on private lands.

This new route segment was previously eliminated from consideration in the FEIS. The parcel which contains cultural resources is subject to a conservation easement on the private property that was initially thought to prohibit the placement of transmission poles. Consequently, the landowner and the lowa Natural Heritage Foundation (INHF) would not agree to this routing of the transmission line and informed the landowner that a powerline would not be permitted on the INHF easement. Following the request from the consulting/participating Tribes, the lowa SHPO, and the OSA, a site visit was conducted in November 2020 with the Utilities, Tribal members, an OSA staff member, and the private landowner.

During the site visits in 2020 and in subsequent meetings, the group engaged in discussions with INHF and the property owner of the affected private parcel that contains the cultural resources. As the Section 106 consultation process was carried out and the input from the consulting parties was received, the INHF reviewed the language of the easement and

concluded that there was some flexibility that would allow for modification of the easement, which allowed the route modification to be a viable option. As a result of those efforts, and a request directly from the participating Tribes to the property owner to agree to the use of proposed route modification B-IA3, the INHF agreed to consent to the alignment along B-IA3 and the property owner agreed to grant a second easement across the private property that would enable construction of the C-HC Project along B-IA3.

Another site visit was conducted in December 2022 and was attended by the Iowa SHPO, OSA, RUS, the Ho-Chunk Nation Tribal Historic Preservation Officer (THPO), the landowner, and the Utilities. The Ho-Chunk THPO reaffirmed that B-IA3 was indeed the appropriate alignment due to the fact that it would remove an existing 161-kV line from crossing over existing cultural resources and would also allow for the removal of the N-9 line. The route modification would allow for the removal of two existing electrical transmission lines across the bluff area and the Refuge.

In addition to reducing impacts to cultural resources, this route modification allows for a more direct approach into the Refuge, reducing the footprint overall. Use of B-IA3 would allow the Utilities to abandon plans to use 9.44 acres of Service fee-title land and 0.48 acres of Corps fee-title land along the railroad tracks, resulting in a net reduction in the Refuge of approximately 9.9 acres.

# Selected Action Alternative – Proposed Route Modification B-IA3 and Land Exchange Route modification B-IA3 is a result of ongoing consultation under the PA that is being

implemented for NHPA Section 106 compliance for the C-HC Project (RUS et al. 2020:Appendix D). Consulting parties required that Federal agencies consider the proposed route modification B-IA3 to reduce impacts to cultural resources along the Selected Route. The proposed route modification B-IA3 was not considered viable during the NEPA process for the EIS due to an INHF conservation easement. However, since the ROD was issued in January 2020, the INHF easement was modified in a way that facilitates the proposed B-IA3 alignment. Route modification B-IA3 is shown in SEA Figures 11 and 12 and would require 6.8 acres of surface disturbance not previously analyzed in the FEIS (Table 1).

Table 1. Summary of Proposed Route Modification B-IA3 for Crossing the Upper Mississippi River National Wildlife and Fish Refuge in Iowa

Proposed Route Modification	Divergence from FEIS Analysis Area	Rationale for Proposed Route Modification
B-IA3	6.8 acres to the west	This proposed route modification has been identified as a reasonable alternative for reducing impacts to cultural resources along the approved C-HC Project. This proposed route modification has been identified by parties working under the PA that is being implemented for NHPA Section 106 compliance. The proposed route modification would reduce the impact to the Refuge by reducing the footprint of the transmission line on USFWS fee-title land.

The route modification B-IA3 would continue to use the west-east section of the 2020 Selected Route through the Refuge and would provide a more direct route connecting the adjacent private land south of the Refuge boundary to the existing Corps Easement for Electric Power or Communication Facility (DACW25-2-20-4030) (see SEA Figure 11). Route modification B-IA3 would reduce the impact to the Refuge by reducing the footprint of the transmission line impacts by approximately 9.9 acres. This route modification would remove the C-HC Project from 14.3 acres of private land and 9.9 acres of Refuge land and would instead cross 6.78 acres of private land and an additional 0.15 acre of Refuge land not previously analyzed in the FEIS. Route modification B-IA3 would eliminate the need for three transmission line structures in the Refuge and three outside of the Refuge that had been previously approved as part of the 2020 Selected Route, for a total reduction of six previously approved structures. 1 In total, this route modification would result in 11 transmission structures being located on lands within or exchanged from (formerly within) the Refuge, which is a reduction from the 14 transmission structures that would be located within the Refuge under the 2020 Selected Route; all 11 of these structures were studied as part of the FEIS. Route modification B-IA3 would also result in the removal of 30 transmission structures from the Utilities' existing transmission ROW within the Refuge, resulting in a net reduction of 19 transmission structures in the Refuge.

The SEA analyzed the impacts of the entire B-IA3 route modification, which totals 26.7 acres (6.8 acres on private land and 19.84 acres within the Refuge). All but 0.15 acre of the C-HC Project footprint within the Refuge was previously analyzed in the FEIS and ROD as Segment B-IA2 (see SEA Figure 11) (RUS et al. 2020:20). However, the previously analyzed segment for crossing the Refuge was for a proposed ROW easement. Since the SEA is considering a proposed land exchange of the same area, the total 19.84 acres of Service fee-title land associated with proposed route modification B-IA3 is analyzed in the SEA (Table 2).

Table 2. Acreage Breakdown of Proposed Route Modification B-IA3

Ownership	Size (acres)	Notes	
Private	6.8	This area was not previously analyzed in the FEIS.	
USFWS	19.69	This area was previously analyzed in the FEIS as a portion of Segment B-IA2.	
USFWS	0.15	This area was not previously analyzed in the FEIS, but was analyzed in the EA dated June 24, 2021.	
Total	26.64		

# **Proposed Land Exchange for Route Modification B-IA3**

To facilitate a connection to the existing Corps Easement for Electric Power or Communication Facility (DACW25-2-20-4030) issued in 2020, and to avoid the need to expand within the

<sup>&</sup>lt;sup>1</sup>The proposal described in the Utilities' application for an amended ROW, as incorporated in the EA dated June 24, 2021, also proposed removing structure #73 in the Refuge. However, the Utilities have decided to keep structure #73 as part of this Proposed Action to ensure that no part of the transmission line in or adjacent to the Refuge would exceed 200 feet above ground level and require marking in accordance with Federal Aviation Administration standards.

existing 161-kV and 69-kV ROWs crossing the Refuge, the Utilities have proposed a land exchange. As described in SEA Appendix A, the land exchange would allow the Service to divest 19.84 acres of Service fee-title land in exchange for 35.69 acres of land in Wisconsin, referred to as the Wagner Tract, located approximately 2 miles east of the town of Cassville, Wisconsin. This land has been purchased by the Utilities and has been restored and proposed to be conveyed to the Service for incorporation into the Refuge through a land exchange. Included in the land exchange is 9.2 acres of the Wagner Tract, which is sufficient to meet the Corps mitigation requirements outlined in the Federal mitigation plan provided in Appendix B of the ROD (RUS et al. 2020). The Utilities would also abandon approximately 28.1 acres of their existing rights-of-way within the Refuge, which are used for an existing 161-kV and 69-kV transmission line; the Utilities would decommission these lines (resulting in the removal of 30 transmission structures from the Refuge), restore and revegetate the existing ROW in accordance with a previously approved restoration plan (Burns &McDonnell 2020), and release the two existing easements to the United States after Project construction is complete. Table 3 summarizes the proposed land exchange compared to the 2020 Selected Route.

Table 3. Acres of the C-HC Project Area within the Upper Mississippi River National Wildlife and Fish Refuge

Alternative	USFWS Fee-title Lands in Refuge (acres)	USACE Fee-title Lands in Refuge (acres)	Total in Refuge (acres)
2020 Selected Route	29.28	9.7	38.9
Proposed Route Modification B-IA3 with USFWS Land Exchange	None*	9.2	9.2
Wagner Tract to USFWS	36 <sup>+</sup>	None	36 <sup>+</sup>

<sup>\*</sup> USFWS would divest 19.84 acres of Refuge lands to the Utilities. See SEA Appendix A

The Wagner Tract is split into two separate parcels: a western parcel that is approximately 28.5 acres and an eastern parcel measuring approximately 7.5 acres. The Wagner Tract is mostly wooded except for two areas in the western parcel covered with reed canarygrass (Phalaris arundinacea) that is periodically mowed. ITC Midwest has restored these two grassy areas by completing tree planting for habitat mitigation in 2022 and they continue to monitor these areas for success (Rothfork 2023). Both tracts would be used for purposes of preservation with no construction activities taking place in these areas. Tables 1 and 2 of the Net Benefit Analysis (attached) reference the habitat benefits and the change in acres, respectively, resulting specifically from the proposed land exchange.

The Utilities commit to managing the 19.84 acres of transferred corridor lands in full accord with the vegetation management protocols and access parameters previously identified and requested by the Service and Corps. The Utilities also commit to comply with the post-review discovery plan as described in Section VIII. Post-Review Unanticipated Discoveries of the PA (RUS et al. 2020:Appendix D) if any cultural resources are discovered in the corridor during construction and will also coordinate with the Service's Migratory Bird Program to limit

<sup>&</sup>lt;sup>+</sup> USFWS would gain 35.69 acres from the Wager Tract. See SEA Appendix A

potential impacts to bald eagles if work occurs between February and July. The Utilities would restore the Wagner Tract and abandon and restore the existing 69-kV and 161-kV ROWs in accordance with the Updated Restoration Plan for the Upper Mississippi River National Wildlife and Fish Refuge near Turkey River, Iowa, dated December 6, 2021 (see SEA Appendix A). These commitments would be enforceable through restrictions in the deed for the divested parcel. For these reasons, expanded or additional uses by the Utilities are not reasonably foreseeable.

The land exchange would comply with 16 USC 668dd(b)(3) as well as the Refuge's 2006 Comprehensive Conservation Plan, which highlights the desirability of land exchanges as a tool to adjust land ownership in and around the Refuge for the benefit of the Refuge (USFWS 2006:13). The land exchange would also require a Net Benefit Analysis as confirmed in the recently issued M-Opinion on this topic (U.S. Department of Interior 2023:2). The Net Benefit Analysis is attached to this FONSI as supporting documentation.

The Service acknowledges that additional construction related to these off-Refuge modifications and other construction unrelated to the modifications has occurred since release of the final SEA and RUS's FONSI in October 2023. A press release from the Utilities dated December 11, 2023, states that the eastern half of the CHC Project has been placed into service, and the Utilities have constructed the majority of the western segment. This additional construction does not change the environmental analysis in the SEA as it relates to the proposed land exchange. No construction has occurred on the Refuge or immediately adjacent to the Refuge. The SEA's description and analysis of route modification B-IA3 and the proposed land exchange action remain accurate. Therefore, the construction that occurred since October 2023 does not necessitate supplementary NEPA analysis beyond the SEA.

# The preferred alternative was selected over the other alternatives because:

- 1. This alternative best meets the purpose and need for action as described in the SEA and the Service's priorities and mandates as outlined by the National Wildlife Refuge System Administration Act (NWRSAA) to "provide for the conservation for fish, wildlife, and plants, and their habitats within the System" in addition to "ensuring the biological integrity, diversity, and environmental health of refuges is maintained" (16 U.S.C. 668dd(a)(4)).
- 2. The preferred alternative is in compliance with Service policy regarding land exchanges (342 FW 5) on National Wildlife Refuges.
- 3. The preferred alternative supports implementation of the purpose for which the Refuge was established.
- 4. There are no conflicts with local, state, regional, or federal law, plans or policies.

The attached Net Benefit Analysis provides an explanation of how this alternative meets the Service's priorities and mandates under the NWRSAA, complies with Service policies regarding land exchanges, and supports implementation of the Refuge's purposes.

Other Alternatives Considered and Analyzed
No Action Alternative

The No Action Alternative "provides a benchmark, enabling decision-makers to compare the magnitude of environmental effects of the action alternatives" (CEQ 1981:Question 3) (40 CFR 1502.14). The No Action Alternative provides the environmental baseline against which the other alternatives are compared (7 CFR 1970.6(a)). This No Action Alternative is specific to nine proposed route modifications and the proposed land exchange associated with route modification B-IA3. In the SEA, the No Action Alternative for all proposed route modifications is based on the 2020 Selected Route as described in the 2020 ROD as Alternative 6 (RUS et al. 2020:19–23).

Permitting conditions have changed within the C-HC Project area since the ROD was signed by RUS, Corps, and the Service in January 2020. The SEA analyzed the alternatives based on the following changes which had occurred as of October 2023:

- Approximately 12.2 miles of the C-HC Project were constructed on private land in lowa, pursuant to private or non-federal entity authorizations such as the Order Granting Petition for Electric Franchise and Right of Eminent Domain granted to ITC Midwest and Dairyland by the Iowa Utilities Board (IUB) on May 27, 2020. Private construction on private land that does not implicate federal authority is expected to continue in a manner consistent with the previous environmental analysis and ROD on the C- HC project, except for those areas under analysis here. Construction is not expected in the areas under analysis in this document.
- Approximately 73 miles of the C-HC Project were constructed on non-federal land in Wisconsin, pursuant to private or non-federal authorizations such as the certificate of public convenience and necessity (CPCN) granted by the Public Service Commission of Wisconsin (PSCW) on September 26, 2019. The Hill Valley Substation grading is substantially completed, all the foundations are constructed, and the majority of station equipment installed.
- Corps authorizations have been issued in Wisconsin for the route modifications RUS evaluated in the SEA and applications are pending in Iowa. Corps authorizations are based on the 2019 FEIS and Clean Water Act (CWA) and Rivers and Harbors Act (RHA) permit applications.
- On August 27, 2021, the Service revoked the ROW permit within the Refuge that was issued in September 2020 after it made a determination that its issuance was based on an erroneous interpretation of existing easements.
- The existing 69-kV and 161-kV transmission line ROWs that cross the Refuge are still valid due to the revocation of the Service ROW previously approved as part of the 2020 ROD.

Considering these changed conditions, the SEA's No Action Alternative includes the following assumptions for the purpose of establishing the environmental baseline:

- In Iowa, the C-HC Project would be constructed on non-federal land where consistent with the IUB Order Granting Petition for Electric Franchise and Right of Eminent Domain issued to ITC Midwest and Dairyland for the C-HC Project on May 27, 2020.
- In Wisconsin, the C-HC Project would be constructed according to the Utilities' PSCW authorization.
- RUS would not provide funding for Dairyland's portion of the C-HC Project.
- The Service would not grant the land exchange and/or any regulatory permits necessary for the C-HC Project to cross the Refuge. The existing two ROWs would remain in place with full operational capacity.
- The Corps Easement for Electric Power or Communication Facility (DACW25-2-20-4030) would remain unused if the Service does not approve the land exchange or ROW according to the B-IA3 route along Oak Road.
- The Hill Valley Substation would be completed and placed into service in the near term. The new 345-kV line from the Cardinal Substation to the Hill Valley Substation would be placed into service, as would the 138-kV circuits that connect to the Hill Valley Substation.
- The built portion of the C-HC Project from the Hill Valley Substation to the Hickory Creek Substation would be stranded and unable to connect operational transmission infrastructure.
- The existing 69-kV and 161-kV transmission lines that cross the Refuge would remain in service until they are relocated or replaced.

As noted above, further construction has occurred since October 2023, when RUS finalized its SEA and FONSI. However, that construction is consistent with the assumptions contained in the No Action Alternative. The majority of the CHC project has been constructed in Wisconsin and Iowa, and the eastern segment was placed into service. The western portion is incomplete and cannot connect without the land exchange, or some other route allowing the line to cross the Mississippi River. Because the No Action Alternative accounted for these potential future conditions, the SEA's analysis remains accurate.

As discussed in detail in FEIS Chapter 1, the wind generation currently developed, under construction, or proposed west of Wisconsin would not be adequately served with increased transmission capacity to population centers in the east under the No Action Alternative until the C-HC Project is constructed and energized. As of January 12, 2023, 115 renewable generation projects in MISO's planning documents with a combined capacity of 17,369 MW are waiting for completion of the C-HC Project to go into service or to be able to operate at full capacity. These generators and regional grid operators were expecting completion of the C-HC Project no later than the end of 2023 (Wheeler, Van Sickle, and Anderson, S.C. 2021). All of the transmission studies that MISO has conducted since 2011 have assumed that the C-HC Project would be in place and have built incremental improvements based on that assumption. If this Project is not built, MISO would need to restudy all of the generators that have interconnected

since 2011 to determine what additional transmission upgrades are needed for those generators. Also under the No Action Alternative, operating guides would need to stay in place to help mitigate the risk of cascading outages in southwestern and south-central Wisconsin. Other transmission system improvements could be necessary to solve the reliability problems that would otherwise be solved by the C-HC Project.

# This alternative was not selected, because:

- This alternative would limit the ability of the Utilities to meet the project purpose and intent of providing transmission of renewable energy as outlined in MISO's planning documents.
- 2. The alternative would prevent the Refuge from consolidating existing transmission lines occupying perpetual easements into a single transmission corridor along the existing gravel road and restoring habitats previously occupied by those perpetual easements.
- 3. With this alternative the Refuge would not be expected to meet its purpose or mission as the Refuge would miss the opportunity to acquire the Wagner tract, which is listed as a high priority acquisition in the Refuge's 2006 Comprehensive Conservation Plan.
- 4. This alternative does not allow the benefits outlined in the Net Benefits Analysis to be achieved and does not best meet the purpose and need as described in the SEA. Additionally, this alternative does not allow the Service to meet its priorities and mandates as outlined by the NWRSAA.
- 5. If the Service took no action on the land exchange and allowed the no action alternative, there is a high risk that the transmission line would still be built through the Refuge but on a more environmentally harmful route that would not further the purposes of the Refuge or the NWRSAA. As described in the Net Benefit Analysis, it is expected that without the land exchange, the Utilities would assert their legal rights to use their existing easements to construct the remaining segment of the transmission line. This would include construction of towers twice as tall which would negatively affect Refuge resources like migratory birds, resident wildlife, and threatened and endangered species. The loss of habitat diversity due to continued and increased habitat fragmentation would negatively affect wildlife-dependent recreation and the Refuge's environmental health.

# Other Alternatives Considered and Dismissed from Detailed Analysis

The purpose of considering alternatives to a proposed action is to explore and evaluate whether there may be reasonable alternatives to that action that may have fewer or less significant negative environmental impacts. Those alternatives with greater adverse resource impacts are not considered for this analysis.

### Non-Refuge Alternatives for Crossing the Mississippi River

The Alternatives Crossing Analysis documents the Utilities' investigation and assessment of potential Mississippi River crossing locations for the proposed C-HC Project and identifies the Utilities' preferred crossing alternatives in the Refuge (Burns & McDonnell 2016). Beyond the

two Mississippi River crossing locations analyzed in detail in the FEIS, the five alternative corridors identified for crossing the Mississippi River were dismissed from detailed analysis, as described in FEIS Section 2.2.1.2 (RUS 2019:53–58). The Service contacted the City of Dubuque, the Iowa Department of Transportation, and the Corps in January 2024 and confirmed that the five non-Refuge options —crossing through the City of Dubuque, crossing using Iowa DOT bridge infrastructure at Highway 20 or Highway 151, and crossing using Corps Lock and Dam infrastructure at Lock and Dam 10 or 11—are still not viable options as identified in the 2016 Alternatives Crossing Analysis.

# **Crossing the Refuge using Existing Utility Easements**

One alternative considered and dismissed from detailed analysis is the use of Dairyland's existing 69-kV (approximately 80-foot-wide) and ITC Midwest's 161-kV (150-foot-wide) transmission line ROWs that currently cross the Refuge along the southern Refuge boundary using the same entry point as the 2020 Selected Route (shown in yellow in SEA Figure 13). This alternative would not require any new easement rights from USFWS. Assuming the utilities can construct and maintain the CHC Project pursuant to the rights granted by their existing easements, there would be no compatibility determination, in accordance with 603 FW 2.10.B. Under this dismissed alternative, the C-HC Utilities could plan to construct the C-HC Project within the existing ROW easements, using additional and taller structures (up to 200 feet tall) to stay within the confines of the existing ROWs. This alternative has been dismissed from detailed analysis for the following reasons:

- The taller transmission structures would have greater adverse impacts to migration corridors and bird species when compared to the low-profile H-frame structures (75 feet tall) proposed for crossing the Refuge and the corridor along Oak Road under the Proposed Action. The installation of these transmission structures in this location would also have significant additional impacts to wetlands within these existing ROWs.
- The transmission structures would cross over 19 sensitive receptors in the Village of Cassville, as disclosed in the FEIS under Alternatives 2, 3, and 4 (RUS 2019:469–472). These adverse impacts to the local community would be greater than the Proposed Action.
- The transmission structures would come into closer proximity (approximately 2,000 feet) to the Cassville Municipal Airport, as disclosed in the FEIS under Alternatives 2, 3, and 4 (RUS 2019:280). These adverse impacts to the airport would be greater than the Proposed Action.
- The transmission structures would be built within a sensitive cultural resource located south of the Refuge on private land in Iowa. Per discussions with PA consulting parties, this alternative would result in significant adverse impacts to the cultural resource.

The utilities stated in comments on the SEA that if the Service does not complete the proposed land exchange, they will attempt to construct the CHC Project across the Refuge within their existing transmission line ROW along what is referred to as the Stoneman Route in the FEIS. The Net Benefit Analysis acknowledges and discusses the risk that the utilities would seek to proceed with this more environmentally harmful alternative. Dismissing this alternative from

detailed analysis in the current SEA and FONSI does not prevent the utilities from pursuing it in the future.

A second alternative considered and dismissed from detailed analysis would use Dairyland's existing 80-foot-wide 69- kV ROW to enter the Refuge and across part of Lot 1 and then connect with ITC Midwest's 161-kV transmission line ROW (shown in red in SEA Figure 13). This alternative would avoid the sensitive cultural resources located on private land just south of the Refuge in Iowa by following Dairyland's existing 69-kV transmission ROW that parallels the railroad tracks on the western edge of the Refuge and connects to ITC Midwest's 161-kV transmission line ROW also within the Refuge. Under this dismissed alternative, the Utilities could plan to construct the C-HC Project within the existing ROW easements, using additional and taller structures (up to 200 feet tall) to stay within the confines of the existing ROWs. This alternative has been dismissed from detailed analysis for the following reasons:

- This alternative is technically infeasible as the 80-foot ROW across Lot 1 within the Refuge and private land immediately west of the Refuge is inadequate to accommodate the 345-kV transmission line and structures for the C-HC Project and the easement would not support widening the occupied strip in this location.
- ITC Midwest reviewed the estimated tree heights based on mature growth potential in the Refuge at approximately 100 feet tall. Given this height, ITC Midwest has determined that, for the C-HC Project, a minimum of 150 feet of ROW is required to safely and reliably operate the C-HC Project in accordance with Northern American Electric Reliability requirements (ITC Midwest and Dairyland Power Cooperative 2021).

### **Summary of Effects of the Selected Action**

A Supplemental Environmental Assessment (SEA) was prepared in compliance with the National Environmental Policy Act (NEPA) to provide decision-making framework that 1) explored a reasonable range of alternatives to meet project objectives, 2) evaluated potential issues and impacts to the Refuge, resources and values, and 3) identified mitigation measures to lessen the degree or extent of these impacts. The SEA evaluated the effects associated with alternatives as outlined above. The SEA and all other compliance documentation are incorporated as part of this finding.

# Implementation of the agency's decision would be expected to result in the following environmental, social, and economic effects:

The SEA preferred alternative should have minimal effects on the environment and social and economic human environment beyond what was already analyzed in the FEIS. The SEA contains information on new anticipated impacts and Table 4 below provides a comprehensive summary of new impacts to affected resources specifically related to the alternatives considered in this FONSI (Table 4).

# Table 4. Summary of the Impact Analysis for Proposed Route Modification and Land Exchange

Resource	No Action	B-IA3	
Geology and Soils	No new impact	19.8 acres of prime farmland; 5.3 acres of farmland of statewide importance; 1.1 acres of steep slopes; 5.3 acres of severe erosion potential; 19.8 acres of wet soils; 36 acres of geology and soils would be conserved and 28.1 acres would be restored	
Vegetation	No new impact	26.6 acres of adverse vegetation impacts; 36 acres of vegetation would be conserved and 28.1 acres would be restored	
Wetlands and Special Status Plants	No new impact	18 acres of wetland impacts; no special status plants present; 36 acres including wetlands would be conserved and 28.1 acres including wetlands would be restored	
Wildlife, including Special Status Species	No new impact	26.6 acres of minor adverse wildlife habitat impacts; 36 acres of wildlife habitat would be conserved and 28.1 acres of wildlife habitat would be restored	
Water Resources and Quality	No new impact	20 acres of floodplain would be crossed; 36 acres including floodplain would be conserved and restoration of 28.1 acres would have beneficial impacts	
Air Quality and Climate Change	No new impact	No new impact	
Noise	No new impact	No new impact	
Transportation	No new impact	No new impact	
Cultural and Historic Resources	Continued adverse impacts to previously recorded cultural resources	Reduced impacts to cultural resources compared to 2020 Selected Route and No Action Alternative	
Land Use, including Agriculture and Recreation	No new impact	26.6 acres of impact to agricultural land, forest, grassland, urban/barren land, and wetlands; beneficial impacts to 36 acres including forest, grassland, and wetlands, which would be conserved and 28.1 acres which would be restored; route modification reduces 3 transmission line structures within the Refuge and 3 transmission line structures on private lands for a total reduction of 6 structures; abandonment of existing ROW would remove 30 structures within the Refuge	
Visual Quality and Aesthetics	No new impact	Similar long-term adverse impacts as disclosed in FEIS with beneficial impacts from abandonment and restoration of 28.1 acres of existing ROW and minor beneficial impact from restoration activities in Wagner Tract	
Socioeconomics and Environmental Justice	No new impact	Beneficial impacts to tourism and recreation access from incorporation of 36-acre Wagner Tract into Refuge land base and restoration of 28.1 acres	
Public Health and Safety	No new impact	No new impact	
Upper Mississippi River National Wildlife and Fish Refuge	No new impact	Beneficial impacts include avoidance of impacts to 9.9 acres; 19.84 acres of lower ecological value area would be divested and 36 acres of higher value ecological area would be added to the Refuge land base; 28.1 acres of existing ROW would be abandoned and restored; route modification would reduce 3 transmission line structures within the Refuge and 3 transmission line structures on private lands for a total reduction of 6 structures; abandonment of existing ROW would remove 30 structures within the Refuge	

# Measures to mitigate and/or minimize adverse effects have been incorporated into the selected action. These measures include:

- For the portion of the C-HC Project within the Refuge and the parcel proposed to be divested, preliminary low-profile structures are proposed with a design height to match the existing tree cover within the corridor along Oak Road and the Corps easement (approximately 75 feet tall) to reduce the potential of avian collisions.
- The structures will be horizontal-symmetrical H-frame structures on concrete foundations with a typical span length of approximately 500 feet and will consist primarily of tubular steel H-frame structures.

- All conductors on these low-profile structures will be placed on one horizontal plane and the shield wire will be marked with avian flight diverters.
- Construction on the Corps easement and divested corridor along Oak Road will occur
  outside the eagle nesting season (typically January 15 to June 15) or outside a 660-foot
  exclusion zone to avoid disturbance to nesting adult, chick, and fledgling eagles.
- For the Selected Route and proposed route modification B-IA3, the revegetation plan and habitat replacement plan would be retained as follows: The Utilities propose to compensate for adverse impacts to forest resources in the Corps easement through restoration and enhancement of forest resources both within and off Refuge lands. A restoration plan was developed in consultation with the Service and Corps. The restoration plan supplemented existing Service efforts to restore bottomland hardwood forest within the Refuge, specifically on the floodplain of the Turkey River. The Utilities would exchange the 35.69 acre Wagner Tract, which is composed primarily of mature floodplain forest, for 19.84 acres of Service fee-title land along Oak Road required for the B-IA3 route.
- In November 2023, the Utilities coordinated with the Service and the Corps to complete a transmission line retirement plan (Burns & McDonnell 2023) outlining steps for the removal of the existing 69kv and 161kv lines within the Refuge after construction of the C-HC project. The final plan is more protective than the previous proposal to use matting and heavy equipment, as generally described in the restoration plan. Instead, the utilities will use helicopters to position staff and equipment within the sensitive areas, minimizing the amount of habitat disturbance. Timing of helicopter use will avoid active bald eagle nesting and times when migratory birds are present so there will be no new impacts to wildlife associated with this approach. The Service prefers this approach for maintenance of transmission lines in wetlands as opposed to matting and use of heavy equipment on the refuge.
- Revegetation within the Corps easement and within the corridor along Oak Road would be conducted in concert with Service and Corps review and direction and in compliance with applicable North American Electric Reliability Corporation vegetation standards. The Utilities have prepared, coordinated, and received approval for a revegetation plan for the Selected Route (see SEA Appendix A). As with the design of the project, the Utilities worked closely with the Corps and the Service to identify the location, type, and overall revegetation plan that would be appropriate for the project and this specific location of the Refuge. The revegetation plan approved for the Selected Route would be retained for the proposed route modification B-IA3 (see SEA Appendix A).
- In addition to the environmental commitments outlined above and other habitat replacement planned with the Service and Corps, as part of the Corps and Service permit application processes, the Utilities have developed a project-specific mitigation plan. The habitat restoration/replacement plans developed for the Selected Route have been deemed acceptable by the Corps and the Service for the proposed route modification B-IA3. ROD Appendix B contains the Federal mitigation plan for the C-HC Project. The mitigation plan in the FEIS included donating the Wagner Tract to the Service to compensate for habitat loss as well as abandoning and restoring the 69-kV

and 161-kV ROWs. The plan developed for the Selected Route would be retained for the proposed route modification B-IA3, with one change. The mitigation plan would no longer include donation of the Wagner Tract to ensure no net loss of habitat quantity and quality for the USFWS ROW because that ROW has been revoked. Instead, USFWS would acquire the Wagner Tract through the land exchange. Included in the exchange is 9.2 acres of the Wagner Tract that will cover the mitigation requirements for the USACE ROW. The Utilities will honor all commitments made under the ROW proposal on the divested lands granted to them via the land exchange and these commitments would be enforceable through restrictions in the deed for the divested parcel. The terms that will be included in the deed are outlined in the attached Land Exchange Agreement.

## **Documentation of significance**

Refuges, by their nature, are unique areas protected for conservation of fish, wildlife and habitat. The FEIS analyzed the environmental effects of the CHC project in detail, including effects on the Refuge. The SEA and this FONSI document that changes to the proposed action or new circumstances or information relevant to environmental concerns are not significant and therefore do not require a supplemental EIS. 40 CFR 1502.9(d)(4). The minor modifications to the proposed route through the Refuge and the change from a ROW to a proposed land exchange will not have a significant impact on Refuge resources and uses beyond what was already analyzed in the FEIS. As defined in 40 CFR 1508.27, significance is determined by examining the context (including duration) of an impact, and its intensity, including a consideration of the criteria that follow. Based on the analysis in the SEA, which is summarized in these sections, the Service has determined that the preferred alternative can be implemented without resulting in significant changed circumstances or new significant impacts to geology and soils; vegetation, including wetlands; wildlife; historic properties listed or eligible for listing on the National Register of Historic Places; federally listed threatened and endangered species, candidate species, or federally designated critical habitat; water resources and quality; 100-year floodplains; air quality and climate change; noise; land use; transportation; visual resources; or human health and safety. The proposed project would not disproportionately affect minority or low-income populations. The Service has determined that the environmental effects of the route modification B-IA3 and the proposed Land Exchange have been adequately addressed in the FEIS and SEA and that no new significant impacts to the quality of the human environment would result from construction and operation of the route modifications. Any final action by the Service related to the route modification B-IA3 and Land Exchange will be subject to, and contingent upon, compliance with all relevant federal and state environmental laws and regulations. Because the changes to the proposed action and new circumstances or information relevant to environmental concerns are not significant, a Supplemental Environmental Impact Statement will not be prepared for the route modification and land exchange.

# <u>Public Involvement, State Coordination and Tribal Consultation</u>

The proposal has been thoroughly coordinated with all interested and/or affected parties.

# **Consultation Under Section 7 of the Endangered Species Act**

RUS engaged in formal consultation under Section 7 of the ESA, the Service has twice amended the Incidental Take Statement for the C-HC Project, issued on June 3, 2021, and on June 9, 2022, to address the proposed route modifications that cross rusty patched bumble bee habitat in Wisconsin (see Appendix C). ESA consultation between RUS and the Service has been completed for the proposed route modifications. For impacts on the Refuge, intra-service section 7 consultation was completed.

### **Public Involvement**

RUS made available to the public the original EA to evaluate the significance of proposals for eight route modifications through issuance of an NOA on June 24, 2021. The 30-day comment period associated with this announcement closed on July 24, 2021. Legal notices were placed in local newspapers for 1 week in late June (the week of June 21, 2021) announcing the NOA and EA. The legal notices identified locations where hard copies of the EA were available and information on how to provide comment. In response to the NOA, RUS received 94 comment letters which encompassed 262 individual comments. Comments were received from one Federal agency, two non-governmental organizations, and 91 members of the public. The Draft EA did not include the proposed land exchange or the proposed route modification N-9A, as they were identified after the issuance of the NOA.

The draft SEA was made available for a 14-day public review period between September 8 to September 22, 2023, which was announced in local Wisconsin and Iowa newspapers and on USDA Rural Development's website. RUS collected electronic public comments during the 14-day review period and revised the SEA, as needed, to address substantive public comments. RUS received 40 comment letters which encompassed 209 individual comments. Comments were received from three representatives of non-governmental organizations, and 37 members of the public. Appendix C of the Final SEA summarizes the public comments received on the Draft SEA and the agency responses, including those specifically related to the Refuge. Supplemental responses to certain Refuge-related comments contained in SEA Appendix B have been added here to provide additional clarification.

**Comment on the legality of the existing easements alternative**: One commenter stated that the SEA should clarify that the alternative described in SEA 2.3.2, crossing the Refuge using existing utility easements, is not legally available because of the compatibility requirements in the Refuge Act for expansions of existing uses.

**Response:** Compatibility requirements do not apply to the exercise of existing legal rights. As explained in the Service Manual, "Where reserved rights or legal mandates provide that we must allow certain activities, we should not prepare a compatibility determination. In the case of reserved rights, the refuge manager should work with the owner of the property interest to develop stipulations in a special use permit or other agreement to alleviate or minimize adverse impacts to the refuge." 603 FW 2.10.B. Because this alternative was not analyzed in detail, the Service does not have enough information to determine whether it is technically feasible for the CHC Project to be built within the scope of the existing legal rights, and such a

determination is not necessary at this time. However, given the broad terms of the existing easements and the utilities' consistent assertion that they could construct the project pursuant to those terms, the SEA properly identified use of the existing easements as a potential alternative.

**Comment on applicability of Refuge right-of-way policy and regulations:** One commenter claimed that the regulations and policy for rights-of-way found in 50 CFR part 29 and 340 FW 3 take precedence over the Refuge Act's land exchange provision and apply to the proposed action.

Response: Although the selected alternative will have the effect of allowing construction and maintenance of a transmission line, the Service's right-of-way regulations and policy do not apply because the Service is not granting a right-of-way permit or easement. Which policy applies to a transaction (right-of-way or land exchange) is determined by the type of land transaction and what property interest is granted, not the planned land use. 50 CFR part 29 regulations also will not apply to the CHC Project because if the land exchange is completed, the Project will not be built on Refuge land. This interpretation is consistent with the Service's treatment of other land exchanges involving land uses that can also be permitted on refuges. Roads are one example. The Service has completed land exchanges to allow expansion or modifications of public roads and has followed land exchange policy and procedures. Roads may also be permitted under the right-of-way regulations and policy. Another example is agriculture. The Service often engages in land exchanges with private parties to acquire tracts with greater conservation value where the other party is likely to use the divested land for agriculture, and the Service follows land exchange policies and procedures for such transactions. The Service also allows certain agricultural uses on refuges through cooperative agriculture agreements under 50 CFR 29.2. Because the selected alternative involves a land exchange rather than a right-of-way permit, 50 CFR part 29 and 340 FW 3 do not apply.

Comment on compliance with Comprehensive Conservation Plan: Commenters expressed concerns that the land exchange would not comply with the Refuge's Comprehensive Conservation Plan (CCP) because it would create habitat fragmentation. One commenter noted that the CCP only refers to land exchanges with states, not private parties.

**Response:** The Service regularly engages in land exchanges with private parties in order to acquire land with greater habitat value. According to the Service's official land records, there were 9 completed land exchanges in the Service's Midwest region between January 1, 2019, and September 30, 2023 (most recent data available). Of the 9 exchanges, 4 were with public entities, 3 were with private entities/individuals, and 2 were multiparty exchanges with private individuals and a public entity. In addition, 5 of the 9 were related to roads. The reason that the Refuge's CCP specifically mentions states as land exchange partners is because exchanges, rather than cash purchases, are the customary tool used when state and federal agencies conduct land transactions. The specific mention of exchanges with states in the CCP is not intended to and does not prevent exchanges with private parties.

The CCP refers to land acquisition as a "critical component of fish and wildlife conservation since it permanently protects their basic need of habitat." Exchanges are one method of acquisition, and some properties may only be available through an exchange. The Service has unsuccessfully sought to acquire the Wagner parcel for over 15 years, since it was identified as a priority acquisition parcel in the 2006 CCP, Appendix G. The Wagner tract is a portion of two larger parcels that have been identified in the CCP as Resource Classification A, which is defined as "High value fish and wildlife habitat which is unique and irreplaceable on a national basis or in the ecoregion." The proposed land exchange would finally allow the Refuge to acquire and protect this valuable habitat.

This exchange will benefit the Refuge by exchanging lower quality habitat for higher quality habitat, increasing the total protected acreage in the Refuge, reducing habitat fragmentation in the long term, and allowing the Refuge to acquire a high-priority tract that would not otherwise be available. The proposed exchange, which would require removal, restoration, and abandonment of the existing transmission line easements, would move existing transmission line impacts on the Refuge from more sensitive wetland habitat to the Oak Road location, which has poorer quality, already fragmented habitat. These changes would eliminate fragmentation and transmission line visual impacts in the more sensitive area where the existing lines are located. Conservation benefits of the exchange are further addressed in the Net Benefit Analysis and the response to comments in Appendix C of the Final SEA.

**Comment regarding the construction of a parking area:** Commenters raised questions about the draft SEA's statement that the Service might build a parking area at the Wagner parcel.

**Response:** The possible parking area referred to in the SEA would have been a small lot that would facilitate access for wildlife-dependent recreation. However, because of legal issues with land access to the parcel that were discovered during a review of the easements, the Service does not plan to create a parking area. Access to the Wagner parcel for land management and wildlife-dependent recreation will be available via water and through adjacent Refuge lands.

# **State and Tribal Coordination**

The Programmatic Agreement for the C-HC Project was signed and executed with the Advisory Council on Historic Preservation on October 10, 2019. Contractors to the Utilities conducted cultural resources surveys within the physical Area of Potential Effects for the route modifications and RUS submitted the cultural resources reports to the consulting parties for review in accordance with 36 CFR 800.4(b)(2) and 36 CFR 800.5(a)(3), and pursuant to the PA. After any comments from consulting parties were received and addressed, RUS issued a finding of no adverse effect for eight of the nine route modifications. Consultation is still ongoing for the off-refuge portion of proposed route modification B-IA3 related to impacts and mitigation on project areas on private lands. The Service is an active partner and signatory participating in the PA.

# **Finding of No Significant Impact**

Based upon a review and evaluation of the information contained in the SEA as well as other documents and actions of record affiliated with this proposal, the Service has determined that the changes to the proposed action analyzed in the FEIS and new circumstances or information relevant to environmental concerns that has arisen since the ROD are not significant and therefore do not require a supplemental EIS. 40 CFR 1502.9(d)(4). Additional construction that has occurred since RUS finalized the SEA in October 2023 does not alter this analysis. This document was authored by the Refuge Manager in coordination with RUS and Corps of Engineers.

# **Decision**

The Service has decided to proceed with the proposed route modification and land exchange under the terms of the attached Land Exchange Agreement. The action is consistent with applicable laws and policies.

# Signature Refuge Manager Acting Assistant Regional Director, National Wildlife Refuge System

Regional Director

Attachments: Net Benefit Analysis, Land Exchange Agreement

### **Literature Cited**

- Burns & McDonnell. 2016. Cardinal Hickory Creek Transmission Line Alternative Crossings Analysis. https://www.cardinal-hickorycreek.com/wp-content/uploads/2018/06/Cardinal-HickoryCreekAlternativeCrossingsAnalysis.pdf. Accessed January 2024.
- Burns & McDonnell. 2020. Cardinal to Hickory Creek Transmission Line Project Updated Restoration Plan for the Upper Mississippi River Refuge Near Turkey River, Iowa. August 5. Available in project file.
- Burns & McDonnell. 2023. Transmission Line Retirement in the Upper Mississippi River National Wildlife and Fish Refuge Connected to Cardinal to Hickory Creek 345-kV Transmission Line and Effects Cultural Resources. November 7, 2023. Available in project file. <a href="https://www.cardinal-hickorycreek.com/wp-content/uploads/2018/06/Cardinal-HickoryCreekAlternativeCrossingsAnalysis.pdf">https://www.cardinal-hickorycreek.com/wp-content/uploads/2018/06/Cardinal-HickoryCreekAlternativeCrossingsAnalysis.pdf</a>
- Rothfork, Mark. 2023. Email communication. [EXTERNAL] Fwd: [EXT] Wagner Final site visit for 2023. December 15, 2023.
- Rural Utilities Service (RUS). 2019. Final Environmental Impact Statement for the Cardinal-Hickory Creek 345-kV Transmission Line Project. Available at:

  <a href="https://www.rd.usda.gov/resources/">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/</a>

  <a href="mailto:environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line</a>

  <a href="mailto:environmental-studies-nine-statemental-studies-ni
- RUS, USFWS, and USACE. 2020. Record of Decision for the Cardinal-Hickory Creek 345-kV
  Transmission Line Project. Available at:
  <a href="https://www.rd.usda.gov/resources/environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line">https://www.rd.usda.gov/resources/environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line</a>. Accessed January 2024.
- U.S. Department of the Interior. 2023. National Wildlife Refuge Land Exchanges Memorandum. May 31. Available at: <a href="https://www.doi.gov/sites/doi.gov/files/m-37078-national-wildlife-refuge-land-exchanges-5.31.23-508-compliant.pdf">https://www.doi.gov/sites/doi.gov/files/m-37078-national-wildlife-refuge-land-exchanges-5.31.23-508-compliant.pdf</a>. Accessed January 2024.
- U.S. Fish and Wildlife Service (USFWS). 2006. *Upper Mississippi River National Wildlife and Fish Refuge Comprehensive Conservation Plan*. Available at: <a href="https://ecos.fws.gov/ServCat/DownloadFile/1452">https://ecos.fws.gov/ServCat/DownloadFile/1452</a>. Accessed January 2024
- Wheeler, Van Sickle, and Anderson, S.C. 2021. Letter from C-HC Utilities (Dairyland, ATC, ITC Midwest) to USFWS Upper Mississippi River National Wildlife and Fish Refuge regarding consideration of exchange of lands. Dated July 29, 2021. Available in project file.