

# **Draft Environmental Assessment**

## *McGregor District of the Upper Mississippi River and Driftless Area National Wildlife Refuges Headquarters and Maintenance Facilities*

July 2023

Prepared by

McGregor District of Upper Mississippi River National Wildlife and Fish Refuge  
Prairie Du Chien, Wisconsin

## Executive Summary

This Environmental Assessment is being prepared to evaluate the effects associated with the proposed action and complies with the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321 *et seq.*) in accordance with Council on Environmental Quality regulations (40 CFR 1500-1509) and Department of the Interior and U.S. Fish and Wildlife Service regulations and policies (43 CFR 46; 516 DM 8; 550 FW 3). The National Environmental Policy Act (NEPA) requires examination of the effects of proposed actions on the natural and human environment. Appendix A outlines all relevant laws and executive orders evaluated through this Environmental Assessment.

The U.S. Fish and Wildlife Service (USFWS, Service) is proposing to construct, operate, and maintain an administrative headquarters and Visitor Contact Station, i.e., a multi-purpose building and shop along with adequate parking and entrance road in Allamakee County, Iowa. Subsequent to this action, the Service will demolish and/or excess old storage and shop facilities. The multi-purpose building will serve two national wildlife refuge system units, Upper Mississippi River National Wildlife and Fish Refuge and Driftless Area National Wildlife Refuge (NWR). This project will be in accordance with the Upper Mississippi River National Wildlife and Fish Refuge Comprehensive Conservation Plan Goal 6, Objective 6.1, Office and Shop Facilities.

The Upper Mississippi River National Wildlife and Fish Refuge - McGregor District (District) is in Iowa, Minnesota, and Wisconsin between river miles 583 and 679 in Pools 9, 10, and 11 stretching from Genoa, Wisconsin to Dubuque, Iowa (Fig. 1). The Driftless Area NWR is comprised of 16 units located in northeast Iowa and southwest Wisconsin. The Driftless Area NWR is currently unstaffed, and District staff provide management. The current office space for both is in General Services Administration (GSA) leased space in a converted feed store in Prairie Du Chien, Wisconsin. The current maintenance shop is located at the former administrative site in McGregor, Iowa. The office at that former administrative site was condemned due to un-mitigatable human health and safety hazards. The District also has three equipment storage buildings located in Farmersburg and Lansing, Iowa and Genoa, Wisconsin (Fig. 2). There is a need to construct a new office and shop facility that is co-located to facilitate efficient operations, reduce administrative costs, and meet safety standards of the USFWS and the Occupational Health and Safety Administration (OSHA). Once a new co-located facility is completed, the current McGregor shop, former administrative site and two of the warehouses (Farmersburg and Genoa) will be excessed and/or demolished.

A proposed action may evolve during the NEPA process as the agency refines its proposal and gathers feedback from the public, federally recognized Tribes and Tribal entities, and other agencies or organizations. Therefore, the final proposed action may be different from the original. The agency action will be finalized at the conclusion of the public comment period after the incorporation of substantive comments received.

## Public Comment

This draft Environmental Assessment will be available for public review and comment for 45 days from July 20 to September 3, 2023. Members of the public will be notified of the availability of the draft documents through a press release sent to state news media outlets and posted on the refuge website. The draft document will be made available at the refuge visitor centers or offices (McGregor District: 471 Cliff Haven Rd, Prairie du Chien, WI 53821) via email ([uppermississippiriver@fws.gov](mailto:uppermississippiriver@fws.gov)), and can be downloaded from the refuge website (<https://www.fws.gov/refuge/upper-mississippi-river>). For access to the document in an alternative format contact the refuge. Comments may be submitted in writing via email to the email address listed above or by mail to the refuge. Any comments, concerns, suggestions, or other feedback will be included if substantive response is required.

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# Environmental Assessment for Office, Visitor Contact Station and Maintenance Building Facilities

## Background

National Wildlife Refuges are guided by the mission and goals of the National Wildlife Refuge System, the purposes of an individual refuge, federal laws and executive orders, U.S. Fish and Wildlife Service policy and international treaties. Relevant regulations include but are not limited to the Refuge Recreation Act of 1962 and the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd).

The mission of the National Wildlife Refuge System, as outlined by the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd), is: "... to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." (16 U.S.C. 668dd)

The National Wildlife Refuge System Improvement Act of 1997 directs the Secretary of the Department of the Interior to ensure that the mission of the refuge system and purposes of individual refuges are carried out to (16 U.S.C. 668dd(5)(a)(3)(A-M)).

The Upper Mississippi River National Wildlife and Fish Refuge (Refuge) was established by an Act of Congress on June 7, 1924, as a refuge and breeding place for migratory birds, fish, other wildlife, and plants (Upper Mississippi River Wildlife and Fish Refuge Act, June 7, 1924, amended Public Law 105-312, October 20, 1998). The Refuge encompasses slightly more than 244,000 acres of Mississippi River floodplain and non-floodplain habitats. The Refuge is divided into four Districts in order to manage the expansive Refuge more efficiently, Winona District, La Crosse District, McGregor District, and Savanna District (Fig. 1). The McGregor District, the largest of the refuge, encompasses 91,737 acres, primarily composed of open water, submersed aquatic vegetation, marsh, and bottomland forest located in Iowa, Minnesota. The Driftless Area NWR was established in 1989 under the authority of the Endangered Species Act of 1973 for the protection and recovery of the federally threatened Northern monkshood plant (*Aconitum noveboracense*) and endangered Iowa Pleistocene snail (*Discus macclintocki*). The Refuge contains upland hardwood forests, grassland, stream and riparian habitats and rare and fragile habitat type termed algific talus slopes (i.e., cold air slopes).

Currently, refuge facilities consist of 1,200 square foot shop in McGregor, Iowa, unoccupied, condemned office space, 3,000 square foot leased office space in Prairie du Chien, Wisconsin,

and three cold storage buildings located in Farmersburg and Lansing, Iowa and Genoa, Wisconsin (Fig. 2).

## **Purpose and Need for the Action**

The National Wildlife Refuge System Improvement Act mandates the Secretary of the Interior in administering the National Wildlife Refuge System to (16 U.S.C. 668dd(a)(4)):

- Ensure that the mission of the National Wildlife Refuge System described at 16 U.S.C. 668dd(a)(2) and the purposes of each refuge are carried out;
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the National Wildlife Refuge System through which the American public can develop an appreciation for fish and wildlife; and
- Ensure that opportunities are provided within the National Wildlife Refuge System for compatible wildlife-dependent recreational uses;

More specifically, the purpose of this proposed action is to create a more efficient, safe, multifunctional work and public meeting space. The proposed action includes construction aimed at fulfilling these needs while reducing long-term costs and safety concerns with minimal disturbance to the environment. The existing facilities spread over several locations and/or in leased space, lack programmatic elements and amenities to serve the public, the District, and the staff. The previous office and maintenance shop were located in McGregor, Iowa until 2018. Due to health and safety concerns with the office building, office personnel relocated into leased office space in Prairie Du Chien, Wisconsin, 9 miles from the maintenance shop. The maintenance shop is still located in McGregor, Iowa.

The current Prairie du Chien office leased space does not exist on or adjacent to refuge lands, does not offer an opportunity for trails and/or public education experiences and has limited storage capacity or working shop space. The office is predominantly office space with a small public space (10 x 15 ft.) containing a brochure rack, interpretive signs and two-taxidermy eagle mounts. The conference room holds approximately 8 people and is not available for public use as it is within secured space. Finally, the office is not an intuitive location for visitors to find as it is a converted feed store and located in a commercial district sandwiched between an auto body shop, church, and Cabela's Sporting Goods.

The McGregor District of the Refuge manages 92 miles of river and maintains ten public boat landings. Various types of boats (outboard, shallow water and airboat) are required for Refuge biological and management activities; heavy equipment (skid steer and attachments, agriculture tractor, mowers) are used for habitat restoration, maintenance and improvement of public use facilities. A dump truck and trailer are used to haul heavy equipment as well as a

fleet of pick-up trucks, utility task vehicles, mowers, etc. Most of the equipment is stored in the auxiliary warehouses and/or outside. Because of the need for this equipment to accomplish Refuge management, current facilities are at capacity.

The McGregor shop and auxiliary warehouses have safety issues, need maintenance and/or are nearing the end of their useful life. Vehicular access to the McGregor shop site is dangerous due to the speed of traffic traveling along Highway 18 and the sharp 90-degree turns that are required to enter and exit the parking lot. Turning into and out of the parking lot is treacherous given the relatively limited site distance and speed of traffic. A number of vehicular accidents have occurred at the site. Additionally, the site is subject to frequent mudslides. Rocks tumbling from the adjacent steep bluff have plagued buildings and vehicles at the site.

The auxiliary warehouses are spread across many miles and do not adequately meet District needs. The Farmersburg warehouse is located 18 miles away on the Howard Creek unit of the Driftless Area NWR. The warehouse is more of a large cold storage shed and is not weatherized nor rodent proof. Although it is a better option than storing equipment outside, staff are constantly repairing equipment from rodent damage. The Genoa warehouse is located at the Genoa Fish Hatchery facilities, 38 miles to the north and is too far away to be regularly used. The Lansing warehouse is used to store boats and a small space is provided to the refuge Friends group for storage of their materials.

This need for a new facility is consistent with the Upper Mississippi River National Wildlife Refuge Comprehensive Conservation Plan Goal 6, Objective 6.1, Office, and Shop Facilities: construct new office and maintenance shop at McGregor Districts.

The need of the proposed action is to meet the Service's priorities and mandates as outlined by the NWRS Administration Act (16 U.S.C. 668dd(a)(4)).

The location of the multi-purpose building and maintenance facilities should facilitate accomplishment of the purpose, vision, goals, and objectives of the Refuge as directed in the Refuge's Comprehensive Conservation Plan (U.S. Fish and Wildlife Service 2006) and meet the purpose and need of this action. For the McGregor District and DANWR, a suitable location is one that:

- Is located on a tract of land large enough to facilitate administrative and management activities with enough space to accommodate future growth for visitor amenities and work capacity, e.g., walking trails or additional buildings;
- Lies adjacent to Refuge land and/or provides access to a diversity of habitats and supports opportunities to interpret those habitats and their management;
- Is easy to find, and has safe, accessible vehicle, pedestrian access for the public and staff;
- Is welcomed by neighbors and the community;



- Avoids environmentally sensitive locations. For example, no excavation into hillsides, filling wetlands, impacting viewscales, or building in floodplains; and
- Provides opportunities for education activities and other group outreach events and activities.

## **Alternatives**

### **Alternative A – [Continue in Leased Space] – [No Action Alternative]**

Under this alternative, the District would extend the current GSA lease and continue to use the old shop in McGregor, Iowa. We would keep the shop and excess the office space, i.e., transfer to another entity through our administrative processes and/or demolish the building. This alternative would also require continued use of the auxiliary warehouse facilities for equipment storage needed for refuge management activities. These buildings would continue to not meet refuge needs and staff would spend time traveling between the auxiliary warehouses, expending resources to maintain them and repair rodent damage. Our ability to connect with the public in a space located on a refuge with amenities for outreach, meetings and wildlife dependent recreation would remain limited.

Under this alternative, no construction would occur at Luster Heights and the refuge staff would focus on restoring the site. Habitat and vegetation quantity and quality would improve on approximately 14 acres. The restored areas would be 6.0 acres of oak savanna restoration, plus an additional 7.8 acres of severely degraded area, i.e., new building location (Fig. 3).

### **Alternative B - [Luster Heights Disturbed Area– [Proposed Action Alternative]**

Under the Proposed Action Alternative, the Service proposes to build a multipurpose building and associated facilities at Luster Heights (Fig. 1) in the footprint of the former buildings (Fig 4). This would include the construction of an approximately 5,000-6,000 square-foot one-story multi-purpose building, widening, and paving of an existing single lane gravel road to accommodate two-way traffic, construction of a hard- surfaced parking area and grass or gravel overflow area, on-site gravity septic system and construction of trails to connect to the off-site state forest trails. This facility will serve as a visitor contact station, staff office, and will include a multi-purpose space, which will be used for educational events, meetings, training, and volunteer events. To provide the space necessary to secure, properly store, and maintain valuable equipment necessary for the Refuge to meet habitat and public use goals, a maintenance facility and storage buildings would also be constructed. This would include a 6,000 square foot shop and 5,000 square foot cold storage building and associated infrastructure (security fence, fuel tanks, etc.).

A draft site plan (subject to revision) has been prepared for Luster Heights that also includes small single occupancy temporary dwellings (tiny houses) and RV pads with associated utilities

including water and electric hookups, to support seasonal staff, wildlife observation areas, and a small (<30 people) outdoor amphitheater. Funding may not be available to complete construction of the storage buildings, seasonal housing and visitor service infrastructure (i.e., trails and amphitheater) at time of publishing the EA, but general discussion of the environmental effects of construction of these facilities is considered, as they are a connected action under this alternative regardless of funding availability and may occur in the future if additional funding becomes available.

This 26-acre Luster Heights site was owned by the Iowa Department of Natural Resources (DNR) and leased to the Iowa Department of Corrections for use as the Luster Heights Prison Farm. The site was purchased by the Refuge in March 2020 after a determination by the DNR that it was excess to their needs. The Prison Farm, on this site from 1963 until it suspended operations in February 2017, was a satellite minimum-security facility of Anamosa State Penitentiary where the inmates worked for the Iowa Department of Natural Resources maintaining the surrounding state forest. The parcel is surrounded by Yellow River State Forest, owned, and managed by the Iowa Department of Natural Resources.

The project area exhibits significant surface disturbance ranging from intensely managed areas where sewage treatment ponds and a complex of buildings were constructed along with lightly managed sites including multiple small garden plots and a baseball diamond. The buildings were in a state of disrepair having been unoccupied for five years, suffered significant vandalizing and were considered unsafe and were demolished in 2022. The sewage treatment ponds were also decommissioned in 2022 and the liners were removed.

In this alternative, the buildings would be placed within the previously disturbed areas. The multi-purpose building is proposed to be located on the area that once held the green house, placing it on the highest point of the disturbed area along the crest of the hill and orienting it toward the opening of the tree line and out towards the view of the river valley. The building will also overlook the old sewage treatment ponds. Two of the ponds have been abandoned and are proposed to be filled in and restored to savanna, with a third being used for storm water management of the proposed buildings. The multi-purpose building will have an excellent seasonal view over these restored areas and northeast to the river bluffs. The shop building and facilities will be placed where the ballfield and former workshop were located (Fig. 4).

The former inmates at Prison Farm planted an onsite apple orchard. The apple orchard is not recognized as an historically important feature and is not listed on the National Register of Historic Places. It is not the policy of the USFWS to plant or maintain non-native vegetation. However, as the apple orchard is of particular interest to some of our constituents and is remnant of the previous landowner, offers shade for users and some wildlife browse, the Service is not proposing it for removal. It is possible construction of the multi-purpose building may result in the removal of some of the trees.

The refuge is surrounded by the Yellow River State Forest on all sides except the bluff facing the river. Visitors will pass a small parking lot that was purchased from Iowa as part of the Luster Heights tract. This parking lot serves as the trailhead to the state forest trails. Future trail development on Luster Heights tract will be limited and will focus on connecting the multi-purpose building to the existing state forest trails.

The proposed multi-purpose building would include a one-story building design consisting of two main compartments: a visitor contact area and office. The visitor contact area will include a mobility impaired accessible public entrance, a reception desk, exhibit area, restrooms and a multipurpose area for meetings and educational events. The office area will include workspaces for employees, a copy/print room, an IT room, office storage, a conference room equipped with a kitchenette, restroom, and a mechanical room. In addition, hard surfaced parking would include a drop-off zone, 30 stalls for visitors, 10 stalls for employees, and 1-2 stalls for buses and RVs. Overflow parking would include a reinforced grass parking area to accommodate approximately 50 vehicles. One electric vehicle charging station will also be available in the public and employee parking lots.

Under this alternative, the former administrative site containing the McGregor District office building and shop would be excised through proper procedures. Depending on local interest and need, this could potentially include the Service no longer owning this administrative site and/or continue to own it but demolishing the existing facilities. The Farmersburg warehouse would also be excised. The building foundation, i.e., concrete pad, would be removed and restored to prairie habitat. The Lansing warehouse would be kept, as this space is needed for boat storage, particularly since construction of the cold storage building could be delayed. The Genoa warehouse would be transferred to the Fish Hatchery.

### **Measures to Minimize Potential Conflict and Mitigate Impacts**

The preferred action alternative will minimize conflict related to biological resources by adopting a “wildlife first” principle explicitly stated in the Refuge Improvement Act as well as conducting compatibility determinations. The refuge will not build on a site in the floodplain, bluff edge or on a site that would create significant habitat loss. Proposing to build in the previously disturbed area on the Luster Heights prison site is consistent with the refuge’s legislation and mission. Following building construction, the remaining site acres will be restored to savanna improving conditions for wildlife.

The refuge follows recovery plan guidelines for the management of federally threatened and endangered species. Federally listed threatened and endangered species that have been documented to occur within the acquisition boundary of the refuge. Critical habitat of threatened and endangered species is not found within the action area of the refuge. An analysis and Endangered Species Act Intra-Service Section 7 consultation was conducted, and it

was determined that the proposed alternative is not likely to adversely affect any listed species or candidate species.

The Yellow River State Forest Luster Heights unit surrounds the 26-acre Luster Heights parcel. The State Forest allows the public to hunt the unit and mountain bike on their trails. We will not allow either of these uses on the Service's Luster Heights unit. We will work closely with the state forest to educate their users and assure proper signage notifies visitors of the appropriate boundaries.

The Yellow River State Forest trail head is on the Luster Heights tract just after the entrance. Construction traffic will pass it. We will work closely with the state forest and contractors to assure construction activities are kept safely away from visitors, including posting signs, and temporarily re-locating parking if necessary.

Additional mitigation measures that will be implemented include:

- The minimizing of impacts through seasonal restrictions for tree felling and general construction.
- Rectifying impacts by repairing, rehabilitating, or restoring any affected environment, and offsetting impacts through the restoration of habitat surrounding the bunkhouse.
- Following best management practices (erosion and sediment control, requiring clean machinery to avoid weed spread, etc.)
- Planting with native plants
- Close communication with Yellow River State Forest

### **Alternative(s) Considered, But Dismissed from Further Consideration**

The CCP identified that the district needed a new office objective 6.1 however, specific locations were not discussed (2006). The District has been in search for a new office location for well over ten years to implement the CCP direction. The refuge is located predominantly in the floodplain and upland sites that meet the desired criteria and that have minimal environmental impact are limited. Three additional alternatives were considered but dismissed from further consideration.

#### **Expand/remodel former McGregor District Administrative site facilities**

The District still owns the former office and shop in McGregor, Iowa. The less than an acre site is sandwiched between Highway 18 and the bottom of a bluff. The site holds a 2,000 square foot office and 1,200 square foot maintenance facility at McGregor. Vehicular access to the site is dangerous due to the speed of traffic traveling Highway 18 and the sharp ninety-degree turns that are required to enter and exit the office parking lot as no turning lanes are present. Turning into and out of the parking lot is treacherous given the relatively limited site distance and speed of traffic and is particularly dangerous during winter months and during snow removal.

Additionally, the site is subject to frequent mudslides. Rocks tumbling from the adjacent steep bluff have caused damage to buildings and vehicles. Several mudslides resulted in flooding of the office building and problems with mold. Due to health and safety concerns, employees were moved out of this space and into leased space in 2015.

There is no room to physically relocate buildings away from the bottom of the cliff nor expand the shop for additional storage space. Therefore, the location of the facility (bottom of a cliff and adjacent to a busy highway) cannot cost effectively be modified, nor does the site have sufficient room to meet the current needs of the staff. Expanding or remodeling of the existing facility would not meet many of the needs identified in the Purpose and Needs section as safety hazards at the site would persist. As this alternative is not economically or technologically feasible and does not meet the purpose and need of this environmental assessment it was dismissed from further consideration.

#### **Develop a Facility on Ballard Tract**

An Environmental Assessment was presented to the public in January 2010 for construction of a new office on 15 acres of the Ballard Tract, located in Clayton County, Iowa. At the time of publishing the environmental assessment, the 108-acre Ballard Tract had recent history of agriculture use. Portions of the tract, where construction of administrative facilities were proposed, were dominated by non-native cool season grasses which invaded fields previously cultivated for agriculture. Some native grasses and forbs were established by the previous landowner, but these were sparsely scattered throughout the tract. The steeper slopes which transition from the higher terrace to the floodplain of the Mississippi River are forested with a mixture of oak, maple, and basswood. Neighboring land use is primarily agriculture and/or forestry as well as a nearby private residence. Comments received on the EA from the public were predominantly from adjacent landowners and raised concern about safe vehicular access, habitat impacts, construction on the bluff and viewshed from Wyalusing State Park. Following the comment period, USFWS withdrew the Ballard site from further consideration as one of the objectives in locating a suitable site was to avoid constructing this facility in environmentally sensitive locations. The agricultural areas have since been restored to prairie. As this alternative would not provide safe access to the site for visitors or staff and would have negatively impacted environmentally sensitive habitat, this alternative has been dismissed from further evaluation under this environmental assessment.

#### **Luster Tract Bluff Side**

The District briefly considered placing the multi-purpose building at Luster Heights closer to the bluff's edge with all other proposed improvements as described in Alternative B. Placing the multi-purpose building in this location increases the likelihood of unwanted visitor interaction with maintenance operations and potential conflicts between light duty vehicles and heavy equipment. This alternative would also require more extensive utility and infrastructure but provides a clear pathway for visitors to the river, addresses ADA concerns of getting the visitor

to the river overlook (i.e., not easily ADA accessible because of drop in elevation), and creates clear separation between the maintenance staff and their activities. It would also require more infrastructure thereby increasing costs, but more importantly, would increase disturbance to natural habitat by not utilizing the most disturbed areas of the site. Constructing the building close to the bluff edge would also require removal of the current narrow tree buffer. In addition, it would not maintain the viewscape and overall be more impactful to the little existing habitat that is present. This alternative was dismissed because it would not be found compatible as required by the Refuge Improvement Act (16 U.S.C. 668dd-668ee) and it would cause irreversible adverse impacts to the only remaining habitat on this unit.

## **Affected Environment and Environmental Consequences**

This section is organized by affected resource categories and for each affected resource discusses both (1) the existing environmental and socioeconomic baseline in the action area for each resource and (2) the effects and impacts of the proposed action and any alternatives on each resource. The effects and impacts of the proposed action considered here are changes to the human environment, whether adverse or beneficial, that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives. This EA includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an “affected resource.” Any resources that will not be more than negligibly impacted by the action have been dismissed from further analyses.

Direct, indirect, and cumulative impacts are evaluated in this environmental assessment. Direct effects are those which are caused by the action and occur at the same time and place. Indirect effects are those which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.

### **Affected Environment Summary**

Additional detailed information on the affected environment is included for each affected resource, but a general summary of the affected environment for each refuge is as follows.

The refuge encompasses one of the largest blocks of floodplain habitat in the lower 48 states. Bordered by steep wooded bluffs that rise 100 to 600 feet above the river valley, the Mississippi River corridor and Refuge offer scenic beauty and wild character. The Refuge covers more than 244,000 acres and extends 261 river miles from north to south at the confluence of the Chippewa River in Wisconsin to near Rock Island, Illinois (Fig. 1). More than 300 species of birds, 51 species of mammals, 42 species of freshwater mussels, 119 species of fish, 31 species of reptiles, and 14 species of amphibians have been recorded on the Refuge.

The proposed action is located on the 26-acre Luster Tract of the McGregor District of the Refuge in Allamakee County, Iowa on a bluff in an area of Wisconsin and Iowa known as the Driftless Area. The Driftless area is a non-glaciated “island” within a huge area of central North America shaped by a series of glaciers (Albert 1995). This region has minimal amounts of glacial deposits known as “drift” and is therefore known as the Driftless Area. This landscape features a combination of steep, exposed bluffs and eroded ravines that bound the wide floodplain of the Upper Mississippi River, creating an unmatched wild and scenic character prized by many viewers. The bluff tops mark the edge of a plateau, extending many miles from the river that is capped with loess soils that range in depth from 2 to 20 feet, the thinnest being along the valley walls.

The auxiliary warehouses are located near Farmersburg and Lansing, Iowa and Genoa Fish Hatchery, Genoa, Wisconsin (Fig. 2).

For more information regarding and the general characteristics of the refuge’s environment, please see Chapter 3 of the Refuge’s Comprehensive Conservation Plan, which can be found here: <https://ecos.fws.gov/ServCat/Reference/Profile/115578>.

### **Affected Resources Not Further Evaluated**

Impacts that are speculative (i.e., there is a remote possibility that the impact would occur, but no meaningful information exists on which to base a prediction) or indefinite will not be included in the analysis of this environmental assessment (43 CFR 46.30). If a resource is not expected to be affected, a brief justification will be provided as to why it was dismissed. The following resources either (1) do not exist within the project area or (2) would either not be affected or only negligibly affected by the proposed action:

- Wilderness – The refuge does not have any designated wilderness areas per the Wilderness Act, 16 U.S.C. 1131 et seq. nor does the refuge have any waterways that fall under the Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq. Given this, no effect to wilderness or wild and scenic rivers are expected. The proposed action complies with the Wilderness Act, 16 U.S.C. 1131 et seq. and the Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq.
- Floodplains and Wetlands specific to Executive Orders – The proposed building construction occurs all in upland habitat so will not affect water flows or other factors relevant to flooding and floodplain landscapes. Therefore, no effects to floodplains are expected as a result of the proposed construction. No modifications will be made that will increase the floodplain elevation or negatively impact its function and value and thus there will be no impacts to E.O. 11988 – Floodplain Management. Executive Order 11990-Protection of Wetlands does not apply as no wetlands are on the site
- Air Quality - The Service’s proposed building construction will produce short term and negligible impacts to air quality from construction equipment.

Individuals using vehicles for transportation to and from the new site on the refuge will produce emissions, but the amount of air pollution from these sources is negligible and the pollutants produced do not have substantial localized effects.

## **Natural Resources**

### **Habitat and Vegetation (including vegetation of special management concern)**

#### **Affected Environment**

##### ***Description of Affected Environment for the Affected Resource***

Nearly 92,000 acres of the Refuge are located in the McGregor District. These lands consist primarily of open water, wetlands and floodplain forest with a small percentage classified as upland. Historic habitat on Luster Heights tract would have likely been similar to the adjacent State Forest and/or bluff prairies. Upland forests growing on hills near the edge or outside of the river floodplain are characterized by oaks, hickories, and elms (Dieck and Robinson 2004, Dieck et al. 2015). Tree species composition of upland forests in this region can shift abruptly based on combinations of slope, aspect and soil type (Curtis 1959, Peet and Loucks 1977). South- and southwest-facing slopes, with exposure to solar radiation and summer winds, are typically characterized by species adapted to xeric, or dry, conditions. Conversely, north- and northeast-facing slopes can be characterized by tree species adapted to more mesic, or wet, conditions.

The 26-acre site was owned by the Iowa Department of Natural Resources and leased to the Iowa Department of Corrections for use as a prison farm. The State operated the Luster Heights Prison Farm on this site from 1963 until it suspended operations in February 2017. Because of its historical use, including several buildings, sewage treatment ponds, a baseball diamond and mowed grass, little intact native habitat exists. The land use/habitat classification for the site is: 15 acres of developed area (buildings, sewage treatment ponds, ballfield), 8 acres of upland forest, and 3 acres of oak savanna (i.e., the knoll). The areas surrounding the ball field and the sewage treatment ponds are comprised predominantly of cool season grasses such as brome (*Bromus rubens*) and Kentucky blue grass (*Poa pratensis*).

The native habitat remaining is comprised of a wooded buffer along the bluff and perimeter of the parcel and a 3-acre oak savanna on the knoll. There are no wetlands within the proposed footprint of the multi-purpose building site. The parcel does have two ravines that border the site, meandering between Service ownership and the State Forest boundary. There are also three sewage treatment ponds on site that were constructed in the late 1980s. Two of the ponds had liners and the third does hold water. The ponds were decommissioned in 2022 and the liners removed. Restoration of these areas has not yet occurred. They currently are large holes lined with fill sand that do not hold water.



The Farmersburg auxiliary warehouse is a 4,800 square foot cold storage facility constructed in 2004. It is located on the Howard Creek unit of the Driftless Area NWR just outside of Farmersburg, Iowa. The Howard Creek unit is located in north central Clayton County, IA about one mile south of Farmersburg, IA. This unit totals 217 acres and was acquired in 1989/1990. It is comprised of upland forest, grassland, and riparian areas.

### ***Description of Environmental Trends and Planned Actions***

The Luster Heights tract is surrounded by the Yellow River State Forest, owned and managed by the Iowa Department of Natural Resources. Upland habitats of the Driftless Region, a region that encompasses nearly the entire refuge, were historically subjected to frequent fires resulting in woody plant and herbaceous communities characterized by fire-tolerant species (Shea et al. 2014, Knoot et al. 2015). Historically, these frequent fires often resulted in upland forests of this region being characterized by a relatively open canopy composed of oaks and other fire-tolerant species (Iowa Department of Natural Resources 2005, Minnesota Department of Natural Resources 2006). Dey and Kabrick (2015) describe a continuum of tree density and crown canopy closure that differentiates between savanna, open oak woodland, and closed oak woodland. However, decades of fire exclusion have likely resulted in most of these forests being characterized by a greater degree of canopy closure and a shift in species composition in both the over story and understory vegetation (Nowacki and Abrams 2008).

Climate change may not impact the Luster Heights parcel as upland forests dominated by oak species generally have lower vulnerability to increasing hot and dry conditions. However, local patterns can influence forest succession and changes in precipitation patterns, disturbance and/or lack thereof, disease outbreaks and competition for invasive species are all expected to influence the forest (Swanston et al. 2018) and could contribute to the success of the restoration or lack thereof.

Currently, no habitat management occurs on the Luster Height unit. Without management, the site will eventually succeed into a low-quality upland forest, likely dominated by early pioneer species and lacking in diversity. Management on Howard Creek includes prescribed fire, invasive species control and prairie planting.

### **Impacts on Affected Resource**

#### **Alternative A**

Under this alternative, no construction would occur at Luster Heights and the refuge staff would focus on restoring habitat on the site. Habitat and vegetation quantity and quality would improve on approximately 14 acres. The areas would be approximately 6.0 acres of oak savanna restoration, plus an additional 7.8 acres of severely degraded area, i.e., building location (Fig. 3). Site restoration would be dependent on the station's appropriated operations and management budget. Staff would work to prevent or reduce significant pioneer and/or invasive species establishment, particularly in the highly disturbed 7.8 area. The significant disturbance, soil compaction and lack of soil profile may make establishing target habitat

communities in this are challenging and expensive. In addition, funding support would be needed to fill and grade the sewage treatment ponds.

There would be no impact to the old office site and auxiliary warehouse locations because use of these facilities would not change.

### **Alternative B**

The preferred alternative would also result in an increase in habitat quantity and quality. Approximately 15 acres of the Luster Heights parcel was previously disturbed by the old buildings and associated infrastructure. New construction (multi-purpose building, shop and associated infrastructure) would occur on 7.8 acres of the previously disturbed area. Two of the sewage treatment ponds would be graded towards natural grade and restored to oak savanna habitat. One pond (approximately 1.2 acres) would be used for onsite surface water management (Fig. 3). The restoration areas, 6.0 acres, would be planted with native species such as red oak (*Quercus rubra*), pin oak (*Quercus palustris*), side oats gramma (*Bouteloua curtipendula*), little bluestem (*Schizachyrium scoparium*); partridge pea (*Chamaecrista fasciculata*), large-flowered beardtongue (*Penstemon grandifloras*), black-eyed Susan (*Ruedbeckia hirta*) and butterfly weed (*Asclepias tuberosa*). All landscaping around the buildings would also be planted with native vegetation.

The old shop and office building and Farmersburg warehouse would be excessed following proper administrative procedures and the resulting site use would likely not change as the entire area is currently under asphalt and/or buildings. The Farmersburg warehouse footprint would be restored to prairie consistent with previous habitat restorations that have occurred on the site.

## **Terrestrial Wildlife and Aquatic Species**

### **Affected Environment**

#### ***Description of Affected Environment for the Affected Resource***

The Refuge, which lies within the Mississippi Flyway, was designated in 1997 by the American Bird Conservancy as a Globally-Important Bird Area. The Refuge provides a vital migration corridor for millions of songbirds and other landbirds, many species of which fly thousands of miles each year between Central and South America and the United States and Canada. Birders and researchers have documented over 160 species of songbirds, including 32 species of warblers, on the Refuge. Songbirds nesting on the refuge include the American robin, downy woodpecker, great-crested flycatcher, prothonotary warbler, tree swallow, yellow-headed blackbird, belted kingfisher, northern cardinal, brown creeper, and cerulean warbler.

There are 22 species of reptiles and 13 species of amphibians that occur on the Refuge (U.S. Fish and Wildlife Service 2006). The majority of the refuge provides good turtle habitat with sandy shorelines for nesting habitat and backwater marshes for hatchling nurseries. Eleven

species of turtles are found on the Upper Mississippi River including Blanding's, painted, snapping and common map turtles, species that prefer quiet backwater habitats.

Terrestrial invertebrates play important roles in food webs of refuge habitats. Recently, native bee surveys have been conducted at various locations within the refuge and the federally endangered rusty patched bumble bee has been found at locations in the McGregor Districts, one location of which is the Ballard Tract. The refuge may also provide habitat for a substantial number of butterflies.

Species surveys have not been conducted at Luster Heights tract. However, minimal native habitat is present on Luster and the site is highly disturbed (Fig. 4). Wildlife use is minimal and includes common species such as white tail deer (*Odocoileus virginianus*) and Virginia opossum (*Didelphis virginiana*) which are likely transient from the adjacent Yellow River State Forest. Three sewage treatment ponds exist on the site. Two were lined and surrounded by a fence. Even with the fence around the two lined ponds, it was not unusual for deer and raccoons to get trapped in the ponds and unable to navigate the slippery liners to get out, resulting in mortality. FWS removed the liners as soon as water testing allowed the sewage treatment ponds to be decommissioned. The resulting pits are comprised of fill sand that do not hold water nor provide habitat for wildlife. The ponds had fluctuating water levels and due to the liners, no emergent or submerged aquatic vegetation. One unlined pond holds water but would not be considered wildlife habitat as little to no emergent or submerged vegetation exists.

## **Impacts on Affected Resource**

### **Alternative A**

The headquarters/visitor and maintenance facilities, along with ancillary infrastructure, would not be constructed. The Luster Heights tract, predominantly gravel, cool season grasses and annual weeds would be restored to grassland and/or savanna habitat. Successfully restoring this tract may require several years of active management, including mowing/haying, herbicide application, and prescribed burning. After restoration, these same management actions would be required on a periodic basis, ideally a three-to-five-year burn cycle and annual mowing/haying and herbicide application to maintain the health of the oak savanna habitat.

One pond would be left, and the two others would eventually be filled and returned to natural grade. The less disturbed areas (i.e., ball field and pond perimeters) would have less compaction and fill than the previous building locations thereby being more conducive to restoration. The whole site would eventually be restored, but restoration success of the highly disturbed and compacted soils, i.e., previous building locations, would be challenging and most likely restoration success of these areas would be low to moderate thereby leading to low or moderate wildlife use.

Wildlife use of the area would likely be limited to transient species from the adjacent Yellow River State Forest. The site would likely have significant invasive species and/or annual weed problems thereby further limiting use by wildlife. Assuming habitat restoration was successful, nesting habitat for grassland nesting birds should increase and as well as use by pollinators. Mourning dove abundance may increase, at least temporarily, particularly if mowing is used as a post-seeding management tool. As the restoration matures, use by cottontail rabbits, white-tailed deer, and furbearing animals should increase.

The unit would be open to some public use and wildlife that do use the unit could be subject to temporary disturbance from use by visitors likely hiking and observing wildlife.

The Farmersburg warehouse would not be demolished, and the footprint would not be restored to native habitat. Staff would continue to use the old shop and auxiliary warehouses as they do now. This unit is not open for public use and as such no disturbance to wildlife occurs.

### **Alternative B**

The headquarters/visitor and maintenance facilities, along with ancillary infrastructure, would be constructed within an 8-acre area that historically was the footprint of the Luster Heights prison buildings and ballfield. These acres will remain in gravel and/or cool season grasses during the construction period, which is proposed to begin in late 2023 and be completed in spring 2025. After the facilities are constructed, the remaining 6 acres would be restored to oak savanna habitat. Successfully restoring this tract may require several years of active management, including mowing/haying, herbicide application, and prescribed burning. After restoration, these same management actions would be required on a periodic basis, ideally a three-to-five-year burn cycle and annual mowing/haying and herbicide application to maintain the health of the oak savanna habitat. Additionally, landscaping around the constructed facilities would consist solely of native plants for pollinator and migratory songbird use.

Wildlife response is expected to be similar as described in the no action alternative.

The tract would be closed to hunting but there would be opportunities for wildlife observation, photography, interpretation, and environmental education would continue. The site will be closed to hunting because it is part of a 26-acre administrative site and hunting could not be safely allowed. As there would be no hunting on these acres, harvest of wildlife would not occur and there would be not impact to wildlife from this use.

Disturbance to wildlife, such as the flushing of feeding, resting, or nesting birds, can occur with these activities and during construction. There is only one new proposed trail connecting the multi-purpose building to the Yellow River State Forest parking lot and visitor use will be concentrated to this trail and the multi-purpose building. Therefore, the disturbance is generally temporary and localized. Motorized vehicles would be limited to designated roads and parking lots. Maintenance of visitor service facilities is also required, and the frequency of

specific actions would range from routine (trail mowing) to snow removal. Disturbance associated with these maintenance activities is expected to be temporary (once or twice a month) and localized (around the buildings and the one trail).

Building and infrastructure development would permanently remove about 8 acres of previously disturbed area with the remaining 6 acres being restored and maintained as oak savanna. Any impacts to this area beyond the 8-acre site of disturbance should be temporary.

The Farmersburg warehouse would be excessed, and the areas associated with the building footprint restored.

## **Threatened and Endangered Species, and Other Special Status Species**

### **Affected Environment**

#### ***Description of Affected Environment for the Affected Resource***

Records indicate five federally listed or other special status species occur on the District: endangered northern long-eared (*Myotis septentrionalis*) bats, Higgins eye pearly mussel (*Lampsilis higginsii*), rusty patched bumble bee (*Bombus affinis*), Eastern Prairie fringed orchid (*Platanthera leucophaea*) as well as two candidate species tri-colored bat (*Perimyotis subflavus*) and monarch butterfly (*Danaus plexippus*).

Higgins eye pearly mussel are found within refuge counties; however, these species utilize large river and large stream habitats so will not be found on the project site and not further discussed.

Northern long-eared bats (NLEB) are tree-roosting bats that may utilize bottomland and upland forests within the refuge for roosting and rearing of young, as well as foraging. Foraging habitat for these species is primarily forests, woodlands, and the edges of forests and woodlands, while other habitats such as pastures and open water are used much less frequently (80 FR 17974). NLEB spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents.

Tri-colored bats are a small insectivorous bat that is distinguished by its unique tri-colored fur and often appears yellowish to nearly orange. The once common species is wide ranging across the eastern and central United States and portions of southern Canada, Mexico and Central America. During the winter, tri-colored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tri-colored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, tri-colored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees but may also be found in pine trees and occasionally human structures. While all counties in the refuge are within the range of the tri-colored bat, refuge lands have not been surveyed for bat species, so there are no known hibernaculum sites.

The rusty patched bumblebee was listed as endangered on March 21, 2017. Rusty patched bumblebees once occupied grasslands and tallgrass prairies of the Upper Midwest and Northeast, but most grasslands and prairies have been lost, degraded, or fragmented by conversion to other uses. Bumblebees need areas that provide nectar and pollen from flowers, nesting sites (underground and abandoned rodent cavities or clumps of grasses), and overwintering sites for hibernating queens (undisturbed soil). Bumble bees gather pollen and nectar from a variety of flowering plants. The rusty patched emerges early in spring and is one of the last species to go into hibernation. It needs a constant supply and diversity of flowers blooming throughout the colony's long life, April through September. Rusty patched bumble bees have been listed in all five refuge counties (Allamakee, Clayton, Dubuque, Jackson, and Winneshiek) and high potential zones occur in Clayton and Winneshiek counties on refuge property.

Monarch butterfly are widespread on the refuge and use a variety of habitats, but are probably most common in terrestrial habitats, particularly terrestrial habitats where their larval host plant, milkweed (*Asclepias* spp.) are found (Thogmartin et al. 2017). The primary drivers affecting the health of the two North American migratory populations are changes in breeding, migratory, and overwintering habitat, due to conversion of grasslands to agriculture, urban development, widespread use of herbicides, logging/thinning at overwintering sites in Mexico, unsuitable management of overwintering groves in California, and drought. Other drivers include continued exposure to insecticides, and effects of climate change.

Two historic colonies of Iowa Pleistocene snails occupy the middle algific talus slope and the moderate cliff of the Howard Creek Unit. Live snails were documented on the moderate cliff in 2013 and 2015. These locations are not near the Farmersburg warehouse on Howard Creek.

#### ***Description of Environmental Trends and Planned Actions***

Recently, native bee surveys have been conducted at various locations within the refuge and the federally endangered rusty patched bumble bee has been found at locations in the Winona and McGregor Districts. One record of rusty patched bumble bee has been confirmed at a refuge prairie restoration site in Clayton County on the Howard Creek Unit of the Driftless Area NWR. The refuge has not conducted monarch butterfly surveys, and therefore does not know much about their current population on the refuge or into the future. Generally, monarchs should benefit from the installation of native forage plants in the landscaping, as well as the oak savanna restoration.

While all counties in the refuge are within the range of the Northern long-eared and tri-colored bat, refuge lands have not been fully surveyed for bat species, so there are no known hibernaculum sites. As part of a larger refuge wide project, one acoustic bat detector was deployed in the bottomland forest near New Albin IA from March-November 2022. Full spectrum data was processed in Kaleidoscope Pro into nightly subdirectories. Based on nights where the software was confident in each species presence (maximum likelihood estimator

value was greater than 0.05), big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), little brown bat (*Myotis lucifugus*), northern long-eared bat (*Myotis septentrionalis*), evening bat (*Nycticeius humeralis*), and tricolored bat (*Perimyotis subflavus*) were all present. The river's bottomland forest habitat appears to be a stronghold for little brown bats due to the sheer number of passes detected per night (over 1000 passes per night in some instances). Other at-risk species, tricolored bats and northern long-eared bats are also likely to be present, though in low (tricolored) or extremely low numbers (northern long-eared bat). Due to the low numbers and difficulty in identification of northern long-eared bat calls, further manual vetting of calls by professionals could help verify the presence of this species. Though the upland habitat at Luster Heights is different from the bottomland forest in this analysis, it is in relatively close proximity to the river and all of these species could be present but in a different species activity composition.

### **Impacts on Affected Resource**

#### **Alternative A**

Under this alternative, only habitat restoration on Luster Heights unit would be conducted. There would be no removal of trees. Species establishment would be as described in the vegetation and wildlife sections of this EA. Threatened and endangered species, particularly the rusty patch bumble bee and monarch butterflies would benefit from site restoration as native vegetation would provide additional nectar sources. There are no wetlands suitable for mussel habitat on the site so Higgins eyes mussels are not present and as such, there would be no effect on them. The Farmersburg warehouse would not be removed.

#### **Alternative B**

An Endangered Species Act Intra-Section 7 Biological consultation for the proposed action was completed on April 12, 2023 and resulted in concurrence as described below.

The Higgins eye pearly mussel are found within refuge counties; however, these species utilize large river and large stream habitats so will not be found on the project site so there will no effect to them.

Construction activities will occur in the 7.8 acres of Luster Heights that previously held prison buildings and occur during daylight hours. The proposed construction site has little native habitat and has been mostly cleared. Some trees will need to be cleared near the proposed entrance road. The refuge will require these be removed from October 1 through March 31 so there should be no effect to NLEB or tri-colored bats as they do not use trees for roosting during this time of year.

Rusty patched bumble bees are likely present in the county, Luster Heights and the surrounding state forest area do not offer the preferred bumblebee habitat. There are little to no native flowers to serve as foraging sources and no nearby or adjacent prairie or grassland habitat so

impacts to rusty patched bumblebees are not expected and the proposed alternative may affect, but is not likely to affect, rusty patched bumblebees.

Monarch butterfly have been observed as widespread on the refuge and use a variety of habitats but are probably most common in terrestrial habitats where their larval host plant, milkweed (*Asclepias* spp.) is found (Thogmartin et al. 2017). Similar to the RPBB, little habitat attractive to monarchs is present on-site. The impacts of the proposed actions would likely be of relatively short duration and may affect, but are not likely to affect, monarchs.

Eastern prairie fringed orchid is found in moist, undisturbed, deep-soiled and/or calcareous prairies (Christiansen and Müller 1999, WIDNR 2022). This habitat does not exist on the Luster Height unit and therefore should be no effect to the orchid.

Whooping cranes are only occasionally observed using the refuge (less than annually in areas in the floodplain) and it is highly unlikely a whooping crane would utilize the former sewage treatment ponds on site since they are in upland areas, additionally there are no other wetlands that would attract them to this location. Accordingly, the proposed action is not likely to affect whooping cranes.

If the preferred alternative is selected, construction of the new facility will take several years. Excessing the old shop and auxiliary warehouse (i.e., Farmersburg) will not take place until staff move into the new facility. Threatened and endangered species consultation will take place at that time to account for any changes in species listed and project specific impacts.

## **Geology and Soils**

### **Affected Environment**

#### ***Description of Affected Environment for the Affected Resource***

Much of the Upper Mississippi River Basin is covered by loess, a silty soil deposited by postglacial winds. These soils form a mantle over half the Upper Mississippi and Illinois subbasins and serve as a major source of silt to the Upper Mississippi River System (Nielsen et al., 1984). Alluvial soils (clay, silt, sand and gravel) are up to 150 feet deep (Pool 10). Soils within the pools vary from silty clay to sand. Sand terraces occur at slightly higher elevations on the edge of the floodplain of the river and consist of glacial outwash deposited during periods of higher average flow. Multiple soil packages representing the Boone, Fayette, Lacrescent, Paint creek, and Village series were mapped in the project area by the Natural Resources Conservation Service. Bedrock and/or residuum is typically shallow and influences soil development especially on side slopes (NRCS 2016; Vobora 1998; Web Soil Survey 2019).

#### ***Description of Environmental Trends and Planned Actions***

There are no planned actions to manipulate geology/soils outside what is proposed in the alternatives. Surface modification is extensive across the eastern two-thirds of the survey area with the construction of sewage treatment ponds, facilities, ballfield, and a complex of buildings. Setting on a sloping and extensively modified western bluff of the Mississippi River,



the survey area's western section is marked by prominent knoll with an elevation of 1000 ft. with lower elevations closer to the bluff edges at 940 ft. and 880 ft. where it clips the upper reaches of a ravine formed on the valley wall.

### **Impacts on Affected Resource**

#### **Alternative A**

The site would remain as described in the affected environment and there would be no effect under this alternative to the geology and soils on the sites.

#### **Alternative B**

Construction of the multi-purpose building, shop and supporting infrastructure would occur in already previously disturbed soils and the remaining project area would be restored and/or enhanced (Fig. 3). Construction would not impact the prominent knoll. Most of the more significant soil disturbance would be under the newly constructed facilities in previously disturbed areas.

Farmersburg warehouse would be removed along with surround gravel. Soil disturbance would be minimal.

An erosion and sediment control plan for both sites will be completed, including scheduling of temporary and permanent measures and construction. Erosion control measures will be implemented in accordance with "Best Management Practices" and methods prescribed by federal, state, and local agencies' regulations.

### **Visitor Use and Experience**

#### **Affected Environment**

##### ***Description of Affected Environment for the Affected Resource***

The purpose of the Upper Mississippi River National Wildlife and Fish Refuge visitor services program is to foster understanding and instill appreciation of the fish, wildlife, and plants and their conservation by providing the public with safe, high quality, appropriate, and compatible wildlife-dependent recreational and educational programs, and activities. In 1997, Congress passed the National Wildlife Refuge Improvement Act (Improvement Act) which clearly states, that on National Wildlife Refuges, wildlife comes first. The Improvement Act also identified six priority wildlife-dependent public use activities that are compatible with the mission of the National Wildlife Refuge System. These uses include hunting, fishing, wildlife observation, photography, environmental education, and interpretation. Although they are not specifically wildlife-dependent priority uses of the Refuge System, an estimated 1.8 million visitors use the Refuge annually for recreational boating, camping, picnicking, swimming, social gatherings, and other beach-related uses. A visitor to the McGregor District can hike, paddle, boat, fish, hunt,

and partake in various other forms of outdoor recreation (for more information see <https://www.fws.gov/refuge/upper-mississippi-river/visit-us>).

The preferred alternative proposes only one new trail and one new amenity, an amphitheater. The trail will connect the multi-purpose building to the Yellow River State Forest Luster Heights unit parking lot which also serves as the trailhead for the forest. The amphitheater will be constructed when funding allows. It will be connected to the multipurpose building by a short trail. The best view on the new site will be the back patio of the building. The building was designed to take advantage of this view and should encourage people to utilize it rather than the bluffs edge.

The McGregor shop, old office and Farmersburg warehouse are not open to public access. The current office in Prairie Du Chien is open to the public but difficult to find and few people visit.

### ***Description of Environmental Trends and Planned Actions***

Visitor use on the refuge has been relatively stable the past several years with a significant increase during the Covid-19 pandemic. Following the pandemic, use has declined slightly but with a growing population and more interest in outdoor recreation, we expect visitation to have a slow steady increase over the next several years. The Yellow River State Forest users will likely continue to use the Luster Heights unit and may visit the new multi-purpose building, especially when it is first built and/or to use the restroom facilities. Visitors to Effigy Mound, located 2.7 miles to the south of Luster Heights tract may also visit the new facility.

### **Impacts on Affected Resource**

#### **Alternative A**

Under this alternative there are expected to be minor negative impacts on wildlife-dependent recreation. With no construction there would be no exhibits, displays, trails or classroom spaces available to orient the public to the refuge. Visitors wishing to speak with staff would have to visit the current office located in a commercial area with no direct connection to refuge lands. Refuge visitation to the Luster Heights and/or the existing office would not be expected to change.

Refuge visitation may show a slight increase with restoration on the Luster Heights unit with no facility development. Access to the unit would not be developed, beyond the existing gravel parking lot that is predominantly utilized by Yellow River State Forest users. Visitors may access the site for river views and/or to pick apples. Public recreation would be consistent with existing public use opportunities on the refuge (<https://www.fws.gov/refuge/upper-mississippi-river>). However, without full development of facilities, the goal of increasing public awareness of the Refuge and its significance by expanding opportunities for outreach and interpretive resources and providing better access to the public would not be met.

## **Alternative B**

The Service does not anticipate any negative impacts on wildlife-dependent recreation under this alternative. As far as routine visitor use of the refuge this site is not currently utilized by visitors, as it has no trails or facilities. Opportunities for recreation do exist on the surrounding Luster Heights State Forest unit. The state forest estimates visitation to the Luster Heights unit to be approximately 5,000 visitors a year, but actual visitation data is not collected (Blair, B, personal communication, November 5, 2021). Some of these visitors will likely stop by the multi-purpose building via either vehicle or by using the trail that will connect the state forest trailhead parking lot to the multi-purpose building.

The multi-purpose building will be open during typical business hours Monday through Friday so visitation to the site is expected to increase slightly with the development of facilities on the Luster Heights Unit. In addition, partners might use the building for environmental education, but the McGregor staff does not currently include a visitor services position to offer environmental education programming. The site does not support any fishing opportunities.

The surrounding state forest is open to hunting. Under this alternative, the Luster Heights tract will be closed to hunting for safety reasons. The parcel is only 26 acres and will have buildings and public use infrastructure not conducive to conducting hunting in a safe manner. Visitors will be allowed to access the site from dawn to dusk seven days a week and may take advantage of the view from the patio to observe wildlife.

The impacts to wildlife and habitat will be minimal as use will occur on the proposed infrastructure, i.e., one connecting trail and parking lots. In addition, once established the oak savanna restoration will not be enticing for hiking as it will be tall grass with scattered trees.

Construction may temporarily impact the state forest trailhead parking lot and thereby the Yellow River state forest users. Efforts will be made to keep the parking lot open during construction and/or temporarily relocate it in order to mitigate any access disruptions.

Positive long-term impacts on wildlife dependent recreation are anticipated under this alternative. The proposed exhibits, displays, and classroom spaces allow for an opportunity to provide quality environmental education and interpretation which will foster the visitor connection to the resource. In addition, the location has stunning views of the Mississippi River and surrounding bluffs which allow for quality wildlife viewing and photography opportunities.

## **Cultural Resources**

### **Affected Environment**

#### ***Description of Affected Environment for the Affected Resource***

The bluff tops and river valley in the McGregor District vicinity are rich with historic and pre-historic cultural resources. A summary of the cultural resources and historic preservation that

has occurred in the Mississippi River in association with the refuge is incorporated by reference and found in the environmental impact statement for the Comprehensive Conservation Plan in pages 104-106. In summary, archeological records show evidence of human use along the Mississippi River from about 12,000 years before present to today. The history of how the land was used during this time period is summarized and includes a beginning in small family-groups of hunters-gatherers roaming widely in search of mega-fauna and other resources to the use of the land today with connections to historical events between to topics such as exploration, military activities, the fur trade, lead and zinc mining, lumbering, steamboats, bridges, railroads (USFWS 2006).

The scope of the area evaluated for this affected resource is specific to the site location and not the broader geographic cultural landscape, in an effort to avoid misinterpreting the ethnographic and historical context without added stakeholder and public input. Late historic and modern aerial photographs reveal no visible buildings within the project area prior to the early 1970s when a large building is seen east of the prominent rise covered, at that time, mostly by trees. This building is associated with Luster Heights facility and the 1971 image also has a small sewage treatment pond that remained extant into at least the mid-1980s. By 1994, this earlier pond was replaced by a complex of four ponds covering the bluff summit east of the buildings and a ballfield complex in the northwest corner of the survey area appears on the image from the mid-1980s. The 1994 image also shows surface disturbance associated with the building complex and environs to the south-southeast of the upland knoll. By the late 2000s, the two north western most ponds were combined into a single facility.

In 2006, the refuge's Comprehensive Conservation Plan identified a need for a new office facility for the McGregor District (Goal 6 Administration and Operations, Objective 6.1 Office and Shop Facilities. Notice and preparation of the CCP/EIS went out to 35 tribes (pg. 353, USFWS 2006).

The Luster Heights parcel first underwent review by the Service's Region's National Historic Preservation officer when the Luster Heights parcel was proposed for acquisition. An archeology survey was undertaken in March-early April 2022 by Bear Creek Archeology, Inc. A total of 48 tests sites were conducted with two tests on the upland knoll yielding prehistoric flaking debris. Four tests placed around each of the two positives produced no additional cultural material. The investigation resulted in a determination, in consultation with the Iowa State Historic Preservation Officer, that the site was not eligible for the National Register of Historic Places.

#### ***Description of Environmental Trends and Planned Actions***

No evidence for prehistoric mounds or human burials was found during the investigation of the Luster parcel, and much of the area has been previously heavily disturbed. Mound sites are reported elsewhere on the Mississippi River bluff in settings not dissimilar to that covered by

the current investigation. For example, the Sny Magill Unit of Effigy Mounds National Monument is located on the river floodplain beneath the proposed construction site. The Sny Magill Unit is of exceptional cultural significance due to the presence of hundreds of native American burial mounds.

Effigy Mounds National Monument is located just across the river from the current McGregor District office and is managed by the National Park Service. The park and the refuge routinely partner to achieve their missions. Effigy staff hold bi-annual tribal consultation coordinating meetings in which staff present upcoming projects and invite the tribes to provide input and/or consult. Refuge staff have participated in these meetings and presented updates on the Luster Heights proposed alternative throughout the development of the draft site plans. Staff attended meetings and presented updates on project planning in December 2021, May 2022 and May 2023. In addition, a formal letter and this environmental assessment has been provided to Refuge tribal partners inviting them to provide comments on the proposed construction of new facilities at Luster Heights tract when the public comment period commences. Any comments, concerns, suggestions, or other feedback will be included if substantive response is required.

The area around the sewage treatment ponds was surveyed for cultural resources by Bear Creek Archaeology, Inc. (Bear Creek) in 1990. No cultural resources were found. Bear Creek returned in the Spring of 2022 and conducted pedestrian survey and shovel testing covering the entire parcel other than the extant fenced sewage treatment ponds (assumed heavily disturbed areas and previously surveyed). No evidence of earthen mounds or other cultural features were noted. One sparse lithic scatter, consisting of two broken flakes in the disturbed old plow zone, were found in an upland natural knoll on the west side of the property. This precontact site has been deemed by the Service and the State Historic Preservation Office as not being eligible for listing on the National Register of Historic Places, and nonetheless no construction is proposed in this area.

If the preferred alternative is selected, construction of the facility will take several years. Excessing the old shop and auxiliary warehouse (i.e., Farmersburg) will not take place until staff move into the new facility. For the Farmersburg warehouse, cultural resource impact evaluation and consultation will take place at that time prior to implementation.

### **Impacts on Affected Resource**

#### **Alternative A**

Under this alternative there would likely be no impacts to cultural resources. The proposed action would be tree and native seed planting which would mostly occur in the plow zone and in previously disturbed sites where no cultural resources were located.

## **Alternative B**

No impacts or adverse effects to cultural resources are expected to occur under this alternative. If, during construction, evidence for mounds and/or human remains are found, construction would halt immediately, and the Regional Historic Preservation Officer would be contacted. The proposed action also includes site restoration by planting native trees and prairie seed. This activity would be within the plow zone and in previously disturbed and surveyed sites where cultural resources were not located.

## **Refuge Management and Operations**

### **Land Use on the Refuge**

#### **Affected Environment**

##### ***Description of Affected Environment for the Affected Resource***

Luster Heights is located in Allamakee County. Allamakee County falls within a geographic area referred to as the Driftless Area. The Driftless Area is comprised of steep forested edges, river carved valleys, karst geology and spring-fed, cold-water trout streams. The Allamakee County Comprehensive Plan (2021) breaks the land use down into the following categories: forest and woodland (37%), agricultural and developed areas (54%), open water (5%) and developed (4%; Allamakee County, 2021). The land use immediately surrounding Luster Heights is protected lands, i.e., the Yellow River State Forest. Access to the Luster Heights is on Luster Heights Rd via either state highway 76 or X52. Both of these highways are two lane, 55 mile per hour highways with no turning lanes onto Luster Heights Rd.

##### ***Description of Environmental Trends and Planned Actions***

We do not anticipate any major land use changes on the Luster Heights Tract of the Refuge or surrounding areas. Agriculture, silviculture and forested habitat are the predominate land uses in the area and it is anticipated that will remain consistent into the future.

#### **Impacts on Affected Resource**

##### **Alternative A**

Under Alternative A, there would likely be some improvements to land use on the site, as restoration would occur (See Vegetation and Habitat).

##### **Alternative B**

Overall positive impacts to land use are anticipated under this alternative. A new multipurpose facility will be constructed providing a more direct connection to the resource for visitors than the current leased office space provides. Restoration will occur on the undeveloped portions of the site as well improved amenities, i.e., small parking lot improvement, that will also likely be used by Yellow River State Forest users.

The office will be open Monday through Friday during normal business hours and visitation. Visitation to the site is expected to increase slightly but not significantly. Luster Heights road is

a gravel road approximately 1.5 miles from the highway. Most of the users are likely local users that current utilize the surrounding state forest so we do not expect visitation to surpass what the current road infrastructure can support. The Service did meet with Allamakee County and Iowa DOT about public road improvements and possible funding sources, but interest and concern were minimal.

## **Administration**

### **Affected Environment**

#### ***Description of Affected Environment for the Affected Resource***

When fully staffed, the McGregor District and DANWR staff consist of six permanent employees, including the refuge manager, deputy refuge manager, wildlife biologist, maintenance worker, law enforcement officer and administrative assistant.

#### ***Description of Environmental Trends and Planned Actions***

The McGregor District staffing chart identifies several new positions to meet new or expanded responsibilities. However, the new multi-purpose building was designed to house the current positions on the organization chart. The Patrol Captain, which supervises the McGregor law enforcement officer as well as the other officers in the Upper Mississippi River Patrol Zone, will be stationed at McGregor in the future. Seasonal staff varies from year to year with the use of volunteer, seasonal employees, and the Youth Conservation Corps Crew. The refuge will be eventually looking to support RV volunteers and/or house seasonal staff in the small single occupancy temporary dwellings and/or RV pads proposed on site. Access to the housing area will be through the shop yard. Residents should typically not exceed from 1 to 4 people, and they would utilize the site similar to the visiting public.

### **Impacts on Affected Resource**

#### **Alternative A**

Estimated cost to implement this alternative would be focused on habitat restoration. The station would not have the funds to restore the sewage treatment ponds and would spend time and resources competing for grants and/or additional Service funds. Construction of headquarters/visitor and maintenance facilities would not occur, resulting in lost opportunities. Some of the lost opportunities are specific to the Luster Heights Tract; others are broader in scope and impact. Lost opportunities could include:

- Providing adequate space for additional staff, volunteers, and equipment.
- Developing a visitor contact station that is used by the public and serves to increase awareness of the significance of the Refuge.
- Establishing opportunities for compatible wildlife-dependent recreation (wildlife observation, photography, and interpretation). Use of the tract for these pursuits would

add another opportunity for the public to experience the outdoors, and when combined with other Refuge, school, and non-profit organization efforts, will help promote conservation awareness and appreciation.

Staff would still have to travel to the auxiliary warehouses and use the McGregor shop resulting in a loss of time, increased maintenance and fuel costs and ultimately less resource work. The McGregor shop is an older facility that will take additional financial resources to maintain. Finally, the safety issues of the McGregor shop (lack of turning lanes, cramped workspace, no lift, rocks falling) would still exist.

### **Alternative B**

The new multi-purpose building proposed under this alternative will support 6 to 12 full time and/or seasonal staff. Visitation use is expected to increase above the current office location allowing staff an opportunity to educate the public about the benefits of a national wildlife refuge. The multi-purpose room will provide an opportunity to host partner meetings and/or school groups that can then walk out the door and appreciate the patio view and adjacent trail system, thereby direct connecting people to the outdoors.

Estimated costs to implement this alternative are estimated around \$10,620,000. In addition, this will require approximately 15% of the staff's time for monitoring of the impacts and overseeing and implementing the proposed action and completing all environmental law and policy requirements. While this would temporarily impact the administration of the District, it would not be significant because it will be short term (24 to 30 months) and staff should still be able to carry out other priority actions such as habitat restoration and management.

Co-locating the headquarters/visitor facility, shop, and equipment storage building on one site should result in more efficient day-to-day management activities as well as reduce future overall maintenance and operations costs. Constructing the shop and equipment storage buildings to be properly sized will enable the Service to eliminate/excess auxiliary facilities including the warehouse at Farmersburg, old shop and office and the Genoa warehouse, leading to additional management efficiencies and a reduced administrative footprint. Along with reducing the administrative footprint, buildings will be newly constructed utilizing more green materials and technology. For example, some electric power consumption of the multipurpose building will be offset by a 35kW roof mounted photovoltaic system and the site and building will include other "green" infrastructure to help meet energy efficiency objectives.

Staff would spend less time commuting between the auxiliary warehouses and McGregor shop and more time on mission critical work such as habitat management and restoration, biological surveys and educating the public.

This alternative fulfills the Service's mandate under the NWRS Administration Act. The Service has determined that the Luster Heights Tract is compatible with the purposes of the McGregor



District of the Upper Mississippi River National Wildlife and Fish Refuge and the mission of the NWRS.

## **Socioeconomics**

### **Local and Regional Economies**

#### **Affected Environment**

##### ***Description of Affected Environment for the Affected Resource***

The current office is located in Prairie Du Chien, Wisconsin in Crawford County. The new multi-purpose building and shop will be located south of Harper's Ferry, Iowa in Allamakee County. Allamakee County had a population of 2,207 in 2021 with a median age of 51.8 an increase from 40.6 in 2010. The median income for Allamakee County (\$57,795/year) is below the average for the United States (\$69,021/year; (<https://headwaterseconomics.org/tools/usfws-indicators/>)).

Agriculture and tourism are two of the most notable industries in McGregor and Prairie Du Chien (Allamakee County 2021).

The Upper Mississippi River is a popular destination for visitors to McGregor. The Refuge receives about 3.7 million annual visits for the six-priority wildlife-dependent public uses as well as other recreational uses such as camping, recreational boating, picnicking, swimming, and other uses not dependent on the presence of fish and wildlife. Anglers, hunters, boaters, and wildlife observers utilize this tremendous resource and contribute to the local economy. The financial impact of the Mississippi River and Refuge is substantial. The Upper Mississippi River System annually contributes an estimated \$1 billion in recreational benefits to the region. Refuge visitation generates nearly \$90 million per year in economic output. Further, visitation to the Refuge plus visits to adjacent counties generates \$255 million (U.S. Fish and Wildlife Service 2006). The USFWS Banking on Nature Report shows that the McGregor District of the Upper Mississippi River National Wildlife and Fish Refuge receives an estimated 411,800 visits, which generate \$15,882,000 in economic output including \$4,342,400 in employment income and 181 jobs (Caudill 2019).

##### ***Description of Environmental Trends and Planned Actions***

Economics of the area is driven by agriculture, ecotourism and outdoor recreation. The economic drivers are expected to remain steady into the future. However, the population of Allamakee County is expected to decline by 3% (Allamakee County 2021).

#### **Impacts on Affected Resource**

##### **Alternative A**

Under this alternative, the current economic role the Refuge plays in the local economy would continue as described in the Chapter 3 of the Upper Mississippi River National Wildlife and Fish

Refuge Final Environmental Impact Statement and Comprehensive Conservation Plan (2006). There will be no immediate changes expected regarding fishing and wildlife viewing opportunities.

### **Alternative B**

Developing facilities on the Luster Heights Tract is expected to draw visitors to observe and photograph wildlife, enjoy exhibits and interact with staff. It is also expected that the public visiting the Luster Heights unit of the Yellow River State Forest will visit the facility and amenities. After facilities are developed, this site is also expected to receive use by local school groups, partner meetings and others for organized events. The increase will likely result in a small increase, although negligible, in expenditures in the local communities as the public visits local restaurants, gas stations and/or purchases equipment for outdoor recreations.

## **Environmental Justice**

### **Affected Environment**

#### ***Description of Affected Environment for the Affected Resource***

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

The current McGregor District office is located in Prairie Du Chien, Wisconsin in Crawford County. Crawford County has the following demographics according to the 2020 Census data:

- Median Household Income: \$54,526
- Percentage of Population that are considered minorities: 3.39%
- Persons in Poverty: 11.9%

The proposed multi-purpose building is proposed to be located in Allamakee County, Iowa. Allamakee County, Iowa has the following demographics according to the 2020 Census data:

- Median Household Income: \$59,461
- Percentage of Population that are considered minorities: 4.3%
- Persons in Poverty: 9.9%

The state averages for the same demographics according to the 2020 Census data are:

- Median Household Income: \$65,429 (IA); \$67,080 (WI)
- Percentage of Population that are considered minorities: 15.64% (IA); 19.85% (WI)
- Persons in Poverty: 6.99% (IA); 6.63% (WI)

### ***Description of Environmental Trends and Planned Actions***

Demographics of Crawford County, Wisconsin and Allamakee County, Iowa tend to be stable or slightly decreasing, and we do not foresee that changing in the future.

### **Impacts on Affected Resource**

This environmental assessment has not identified any adverse or beneficial effects for either alternative unique to minority or low-income populations in the affected area. Neither alternative will disproportionately place any adverse environmental, economic, social, nor health impacts on minority or low-income populations. Minority or low-income communities will not be disproportionately affected by any impacts from this proposed action.

### **Alternative A**

Under this alternative, vehicle traffic would remain the same. Visiting public would not have consistently accessible facilities and would have limited interaction with the staff if we maintain the leased office space and do not construct improved facilities.

### **Alternative B**

Under this alternative, there will be more accessible facilities which could increase the benefits regarding environmental justice by facilitating potentially increased outreach activities and more interaction with the visiting public by staff.

## **Cumulative Impacts**

Cumulative impacts are defined as the incremental, additional effects to the environment that result from implementing any of the alternatives under consideration. The cumulative impact analysis must consider this incremental impact of the proposed action, and any alternative actions, in addition to the impact of past, present, and reasonably foreseeable actions regardless of the jurisdiction of their origin.

The proposed alternative will develop 7.8 acres of this 26-acre tract into the multi-purpose building, shop and supporting infrastructure (parking lots and roads). The proposed building site previously held several large buildings and parking lots so there is no significant change in land use. After full development, approximately 6 acres of the tract will be restored to oak savanna and all landscaping will be with native plants, particularly benefiting pollinators. The site will be managed by staff to restore native habitat, remove invasive species and will be protected in perpetuity. Therefore, the additional cumulative effects to the environment are positive and will benefit the resource into the future.

The proposed alternative is not expected to result in cumulative impacts to wildlife or habitat resulting from wildlife dependent recreation. Although development of the site will add another opportunity for the public to experience the outdoors, it is not expected to be a significant increase in use into the future. Current users of the surrounding Luster Heights Unit of the Yellow River State Forest will likely visit the new facility, but they are already on the

landscape in the same area. In addition, other opportunities that attract more visitors already exist in the nearby area. For example, Effigy Mounds National Monument is 2.7 miles to the south and the Driftless Area Education Visitor Center in Lansing, Iowa is 20 miles to the north. The proposed multi-purpose building will only attract a small percentage of these visitors.

Significant additional site development is not proposed under either alternative so further, additional effects to soils and/or cultural resources are not expected.

Luster Heights was formerly in public ownership with the state of Iowa before FWS purchased the tract. It remains in public ownership now as part of a national wildlife refuge and is will be open to the public free of charge. This will provide amenities that can be used by the general public free of charge. The site improvements will provide accessibility for those with mobility impairments. Although open to the public, the new proposed building is not expected to be more of an attraction than the existing nearby nature/visitor centers. Therefore, the construction of the multi-purpose building and shop should not have any cumulative impacts on the surrounding land use, socioeconomics and/or create any environmental justice inequalities.

Implementation of the proposed alternative will change the workload of the staff. Currently, staff expend time maintaining older facilities (Farmersburg, McGregor shop), traveling between facilities to store and/or retrieve equipment. The current office is leased space, so staff do not have to expend time maintaining the building. Staff will be responsible for the management and maintenance of the new facilities. This will require learning new technology, additional time and financial resources. However, staff will also no longer be spending time traveling between storage facilities, maintaining older facilities (i.e., McGregor shop) and will have equipment and fuel in one location, saving significant time and finances. Therefore, we expect no cumulative impacts on the staffs' ability to administer the cite, and/or implications to their ability to manage and operate the District.

## **Monitoring**

The District currently conducts multiple monitoring efforts to evaluate environmental changes. These surveys include rusty patch bumble bee surveys, songbird surveys, spongy moth bat survey, invasive species mapping and acoustic bat monitoring. Currently the refuge has completed a Habitat and Monitoring Plan and is in the process of finalizing an Inventory and Monitoring Plan.

The District also avoids conflicts related to biological resources by adopting the "wildlife first" principle explicitly stated in the Improvement Act through the monitoring of species population trends via direct observation of populations, consultation with State and U.S. Fish & Wildlife Service species specialists, and review of current species survey information and research. These ongoing monitoring efforts will be used to identify any impacts arising from the Proposed Action.

Staff will visit the construction site regularly and assure construction best management practices are being followed, including installation of silt fencing, staying within identified construction footprints and proper cleaning of equipment to avoid invasive species contamination,

For safety, the FWS Luster Heights Tract will be closed to public access during construction. This will cause minimal impact because no current trails and/or amenities exist on the site. However, the trailhead for the Yellow River State Forest Luster Heights unit trail system is on the FWS Luster Heights tract and many trails come near the site. FWS staff will coordinate project management closely with the Yellow River State Forest manager to assure proper notifications are made to the state forest users so trail connections can be temporarily re-routed and or marked appropriately during construction. Finally, FWS staff and/or state forest staff will notify the Yellow River State Forest friends group with regards to construction activities to assure folks are aware of the construction taking place.

## **Summary of Analysis**

The purpose of this EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

### **Alternative A – [Continue in Leased Space - No Action Alternative]**

As described above, the No Action Alternative would have minor to slight improvement for wildlife, threatened and endangered species or other special status species as habitat would be restored over time as resources allow. Restoration would result in a net increase in habitat on the District. Habitat restoration of the highly degraded sites could be costly and likely met with minimal success. Visitors would not get the benefit of use and administration of the proposed facilities but would get to recreate on the restored area and participate. No impacts are expected for cultural resources, land use, local and regional economies, or environmental justice. The District's carbon footprint is also expected to remain the same, resulting in no impacts in terms of climate change. This alternative does not fully meet the purposes and needs of the U.S. Fish & Wildlife Service as described, as it does not meet the needs described in Section. C.

### **Alternative B – [Luster Heights - Proposed Action Alternative]**

As described above, the Proposed Action Alternative would have temporary minor impacts to wildlife, threatened and endangered species or other special status species. The site is currently significantly disturbed, and construction activities will take place within eight acres of highly disturbed area within the larger parcel. The remaining areas of the site would be restored to oak savanna. Outside of direct impacts to the 8 acres, construction impacts are expected to be minimal and short-lived, and restoration will result in a net increase in habitat

on the District. No impacts are expected for cultural resources or environmental justice, and minor positive impacts to land use, visitor use, administration and local and regional economies are anticipated. The District's carbon footprint is also expected to decrease as facilities, travel will be reduced, and new technology (i.e., solar panels, green building materials) will be utilized, resulting in minor positive impacts.

The proposed project area is located close to existing utility infrastructure, is far enough from the maintenance shop to ensure visitor safety and meets the requirements for a suitable site. It is safe and accessible; is on an already disturbed site with an adjacent trail system present; the site would enable the facilitation of administrative and management activities; it provides access to natural areas and supports opportunities to interpret those habitats and their management and facilitates environmental education activities. In addition, the proposed development site is not proximal to critical wildlife habitat areas and will not have a negative visual effect on visitors that the current leased site provides.

This alternative helps meet the purpose and needs of the U.S. Fish & Wildlife Service as described above, because it would provide additional wildlife-dependent recreation opportunities, increases safety of refuge staff and visitors, increases efficiency and decreases administration costs. The U.S. Fish & Wildlife Service has determined that the proposed action is compatible with the purposes of the Upper Mississippi River National Wildlife and Fish Refuge and the mission of the National Wildlife Refuge System.

## **List of Sources, Agencies and Persons Consulted**

James Nepstead (former) and Susan R. Snow (current), Superintendent, Effigy Mounds National Monument, 151 State Highway 76, Harper's Ferry, IA 52146

Friends of Yellow River State Forest, PO Box 171, Harpers Ferry IA 52146

Brian Ridenour, P.E. Allamakee County Engineer County Engineer's Office, 870 Fourth Street NW PO Box 493, Waukon, IA 52172

## **List of Preparers**

Kendra Pednault, District Manager, McGregor District of Upper Mississippi River National Wildlife and Fish Refuge

Kristin Rasmussen, Conservation Planner, Division of Natural Resources and Conservation Planning, U. S. Fish and Wildlife Service Midwest Region

Kimberly Schultz, Administrative Professional, McGregor District of Upper Mississippi River National Wildlife and Fish Refuge

William Reiter-Marolf, Refuge Biologist, McGregor District of Upper Mississippi River National Wildlife and Fish Refuge

## **State Coordination**

This project has been coordinated with the Yellow River State Forest as well as their friends group. Draft proposed site plans have been shared with the state forest to assure the proposed alternative will not negatively impact state forest operations and visitor use.

Staff have also met with Iowa DOT to discuss the Luster Heights Road and if improvements were desired. USFWS offered to assist the state with applying for a Federal Lands Access Program grant to improve Highways X52 and 76 with turning lanes onto Luster Heights Road as well as paving Luster Heights Road. The team decided to defer the decision until the site was constructed and the need for improvements could be better determined.

Yellow River State Forest Bruce Blair, Area Forester [Bruce.Blair@dnr.iowa.gov](mailto:Bruce.Blair@dnr.iowa.gov) 729 State Forest Rd Harpers Ferry, IA 52146

Heather Gibb, Ph. D., Interim Deputy Historic Preservation Officer, Iowa State Historic Preservation Office, 600 East Locust Street, Des Moines, Iowa 50319

Krista Billhorn, Iowa Department of Transportation District Transportation Planner, 428 43rd Street SW Mason City, IA 50402

Craig Markley, Director, Office of Systems Planning · Iowa Department of Transportation, 800 Lincoln Way, Ames, IA 50010

## **Tribal Consultation**

Tribes and tribal members are welcome to provide comment during the public comment period. A formal letter and this environmental assessment have been provided to Refuge tribal partners inviting them to provide comments on the proposed construction of new facilities at Luster Heights tract when the public comment period commences. Any comments, concerns, suggestions, or other feedback will be included if substantive response is required.

Tribes and intertribal agencies contacted include:

- Apache Tribe of Oklahoma – Leader
- Crow Creek Sioux Tribe – Leader, THPO, Natural Resources Department
- Fandreau Santee Sioux Tribe of South Dakota – Leader, THPO, Natural Resources Department
- Ho-Chunk Nation – Leader, THPO, Natural Resources Department
- Iowa Tribe of Kansas and Nebraska – Leader, THPO, Natural Resources Department
- Iowa Tribe of Oklahoma – Leader
- Lower Sioux Indian Community – Leader, THPO, Natural Resources Department

- Menominee Nation – Leader, THPO, Natural Resources Department
- Miami Tribe of Oklahoma – Leader, THPO
- Omaha Tribe of Nebraska – Leader, THPO, Natural Resources Department
- Otoe-Missouria Tribe of Indians – Leader, THPO
- Ponca Tribe of Nebraska – Leader, THPO, Natural Resources Department
- Prairie Island Indian Community – Leader, THPO, Natural Resources Department
- Sac and Fox Nation of Oklahoma – Leader, THPO
- Sac and Fox Nation of Missouri in Kansas and Nebraska – Leader, THPO, Natural Resources Department  
Sac and Fox of the Mississippi in Iowa – Leader, THPO, Natural Resources Department
- Santee Sioux Nation – Leader, THPO, Natural Resources Department
- Shakopee Mdewakanton Community of Minnesota – Leader, THPO, Natural Resources Department
- Sisseton Wahpeton Oyate – Leader, THPO, Natural Resources Department
- Spirit Lake Tribe, North Dakota – Leader, THPO, Natural Resources Department
- Standing Rock Sioux Tribe – Leader, THPO, Natural Resources Department
- Upper Sioux Indian Community of Minnesota – Leader, THPO, Natural Resources Department
- Winnebago Tribe of Nebraska – Leader, THPO, Natural Resources Department
- Yankton Sioux Tribe – Leader, THPO, Natural Resources Department

## Public Outreach

This draft Environmental Assessment will be available for public review and comment for 30 days from July 14 to August 30, 2023. Members of the public will be notified of the availability of the draft documents through a press release sent to state news media outlets and posted on the refuge website. The draft document will be made available at the refuge visitor centers or offices (McGregor District: 470 Cliff Haven Rd, Prairie du Chien, WI 53821) via email ([uppermississippiriver@fws.gov](mailto:uppermississippiriver@fws.gov)), and can be downloaded from the refuge website (<https://www.fws.gov/refuge/upper-mississippi-river>). For access to the document in an alternative format contact the refuge. Comments may be submitted in writing via email to the email address listed above or by mail to the refuge. Any comments, concerns, suggestions, or other feedback will be included if substantive response is required.

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## Appendix A

This Appendix lists all applicable statutes, regulations, and executive orders not otherwise addressed in this EA, as well as how the proposed action and EA analysis comply with each, and any additional compliance steps taken by FWS.

### Cultural Resources

The intent of each of the laws outlined in this section was met through conducting the appropriate consultations with the regional Fish and Wildlife Service archeologist, consultation with state SHPO, tribal consultation meetings and inviting tribes to consult and comment. The Luster Heights tract first underwent review by the Service's Region's National Historic Preservation officer when the Luster Heights parcel was proposed for acquisition. Consultation with Iowa SHPO concluded that the site is not eligible for the National Historic Registry.

Luster Heights was surveyed for cultural resources by Bear Creek Archaeology, Inc. (Bear Creek) in 1990. No cultural resources were found. Bear Creek returned in the Spring of 2022 and conducted pedestrian survey and shovel testing covering the entire parcel other than the extant fenced sewage treatment ponds (assumed heavily disturbed areas and previously surveyed). No evidence of earthen mounds or other cultural features were noted. One sparse lithic scatter, consisting of two broken flakes in the disturbed old plow zone, were found in an upland natural knoll on the west side of the property. This precontact site, 13AM648, has been deemed by the Service and the State Historic Preservation Office as not being eligible for listing on the National Register of Historic Places.

Effigy Mounds National Monument is located just across the river from the current McGregor District office. The park and the refuge routinely partner to achieve their missions. Effigy staff hold bi-annual tribal consultation coordinating meetings in which staff present upcoming projects and invite the tribes to provide input and/or consult. Refuge staff have participated in these meetings and presented updates on the Luster Heights proposed alternative throughout the development of the draft site plans. Staff attended meetings and presented updates on project planning in December 2021, May 2022 and May 2023. During these meetings, tribes were also invited to tour Luster Heights.

A summary of each law that was considered in consultations described above in addition to any additional information to meet legal requirements is summarized below.

[American Indian Religious Freedom Act, as amended, 42 U.S.C. 1996 - 1996a; 43 CFR Part 7](#)  
The American Indian Religious Freedom Act of 1978 (AIRFA) (42 U.S.C. § 1996.) protects the rights of Native Americans to exercise their traditional religions by ensuring access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites. Staff have participated in tribal consultation meetings with Effigy Mound National Monuments and invited participants to Luster Heights unit. The Luster Heights unit

does not have known sites for practicing tribal traditional religious ceremonies or rites as such the building and long-term use and maintenance of the building will not affect Native Americans ability to exercise their traditional religious rights.

#### Antiquities Act of 1906, 16 U.S.C. 431-433; 43 CFR Part 3

An Act for the Preservation of American Antiquities (Antiquities Act) was signed into law on June 8th, 1906. The Act was the first U.S. law to provide general legal protection of cultural and natural resources of historic or scientific interest on federal lands.

#### Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa-470mm; 18 CFR Part 1312; 32 CFR Part 229; 36 CFR Part 296; 43 CFR Part 7

The Act aims to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites on Federal and tribal lands. These resources are considered an irreplaceable part of the nation's heritage.

#### National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470-470x-6; 36 CFR Parts 60, 63, 78, 79, 800, 801, and 810

NHPA promoted the use of historic properties to meet the contemporary needs of society, by recognizing that increased knowledge and better administration of historic resources would improve the planning and execution of Federal undertakings and benefit economic growth and development nationwide.

#### Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001-3013; 43 CFR Part 10

The Native American Graves Protection and Repatriation Act of 1990, or NAGPRA, provides a process for federal agencies and museums that receive federal funds to repatriate or transfer from their collections certain Native American cultural items -- human remains, funerary objects, sacred objects and objects of cultural patrimony -- to lineal descendants, and to Indian tribes, Alaska Native Corporations, and Native Hawaiian organizations. The cultural resources on Luster Heights have been surveyed at least twice. This information has been shared within this EA and with tribes at three tribal consultation meetings. If any human remains or sacred objects were to be found onsite during construction work would stop immediately actions would be taken to remediate the impacts.

#### Executive Order 13007 – Indian Sacred Sites, 61 Fed. Reg. 26771 (1996)

To the extent practicable, permitted by law, and not clearly inconsistent with agency functions, accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners. They shall also avoid adversely affecting the physical integrity of the sacred sites. Where appropriate, agencies will maintain the confidentiality of sacred sites. As state above if any human remains or sacred objects were to be found onsite during construction work would stop immediately and actions would be taken to remediate the impacts.

## Fish and Wildlife

[Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. 668-668c, 50 CFR 22](#)

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs.

There are no known bald eagle nests on the site, and it is considered highly unlikely as the appropriate habitat is not available on the site. However, biologists will monitor the site and if a nest were to occur, then protection measures established in the Bald and Golden Eagle Protection Act would be followed.

[Endangered Species Act of 1973, as amended, 16 U.S.C. 1531-1544; 36 CFR Part 13; 50 CFR Parts 10, 17, 23, 81, 217, 222, 225, 402, 450](#)

The purpose of the ESA is to conserve federally endangered and threatened species and the ecosystems upon which they depend. Pursuant to Section 7 of the ESA, Federal agencies shall, in consultation with the Secretaries of the Interior or Commerce, ensure that any action that they authorize, fund, or carry out is not likely to jeopardize the continued existence of any federally endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat. Before initiating an action, the Federal agency, or its non-Federal permit applicant, must determine if any threatened, endangered, proposed, or candidate species, or designated critical habitat, may be present in the project area.

Impacts to threatened and endangered species that may occur on the refuge is described in detail on pages 21-24 of this environmental assessment. An ESA Section 7, Intra-Service Consultation analyzing the potential effects of the proposed project has been obtained as part of the review process. The language of potential effects on threatened and endangered species in this Environmental Assessment are the same determination of effects in the ESA Section 7 consultation. This analysis and Section 7 consultation meets requirements under the ESA. The Higgins eye, the northern long-eared bat, tri-colored bat, rusty patched bumble, monarch butterfly and the eastern prairie fringed orchid occur in proximity to the refuge. No federally listed species are known to occur on the Luster Heights tract. No critical habitat for listed species occurs on the refuges. However, rusty patched bumble bee and the monarch butterfly (candidate species) occur on the refuge. The proposed action will benefit both species monarch butterflies by restoring savannah habitat by reducing cool season grasses and providing native forbs, thereby increasing habitat for both species.

[Fish and Wildlife Act of 1956, 16 U.S.C. 742a-m](#)

The Fish and Wildlife Act of 1956 establishes a comprehensive national fish and wildlife policy and authorizes the Secretary of the Interior to take steps required for the development, management, advancement, conservation, and protection of fisheries resources and wildlife resources through research, acquisition of refuge lands, development of existing facilities, and other means. There are no additional compliance steps under this law for the proposed action.

Migratory Bird Treaty Act, as amended, 16 U.S.C. 703-712; 50 CFR Parts 10, 12, 20, and 21  
The MBTA protects all migratory birds and their eggs, nests, and feathers and prohibits the taking, killing, or possession of migratory birds.

The proposed action will benefit migratory birds by reducing cool season plant cover, which can harm migratory bird nesting and foraging habitat. Harm to migratory birds is not expected to occur as construction activities will be taking place in severely degraded and disturbed areas. will be mitigated by timing treatments to take place after bird breeding seasons.

Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds, 66 Fed. Reg. 3853 (2001)

This EO directs government agencies to support migratory bird conservation through habitat protection, analysis of migratory bird populations, and cooperation with conservation organizations, among other methods.

The proposed action will benefit migratory birds by reducing cool season plant cover, which can harm migratory bird nesting and foraging habitat. Harm to migratory birds is not expected to occur as construction activities will be taking place in severely degraded and disturbed areas. will be mitigated by timing treatments to take place after bird breeding seasons.

### Natural Resources

Clean Air Act, as amended, 42 U.S.C. 7401-7671q; 40 CFR Parts 23, 50, 51, 52, 58, 60, 61, 82, and 93; 48 CFR Part 23

The CAA regulates air emissions from stationary and mobile sources to protect human health and the environment. Any activities associated with the restoration projects that result in air emissions (such as heavy equipment operation) will comply with the CAA and any local air quality ordinances.