

Detroit River International Wildlife Refuge Bunkhouse Environmental Assessment

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Draft Environmental Assessment for Bunkhouse at Detroit River International Wildlife Refuge, MI

Date: September 16, 2022

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

Proposed Action

The U.S. Fish and Wildlife Service (Service) is proposing to construct, operate, and maintain an eight-bed bunkhouse on the Humbug Marsh Unit of the Detroit River International Wildlife Refuge (DRIWR) to help implement the Urban Wildlife Conservation Plan. One of the refuge's goals is to build career pathways and mentoring opportunities for youth in the Detroit area to engage and learn about fish and wildlife conservation. Housing and transportation are major barriers to accomplish this goal. The bunkhouse along with adequate parking will provide a crucial lodging option for short-term staff in the implementation of the DRIWR vision.

A proposed action may evolve during the NEPA process as the agency refines its proposal and gathers feedback from the public, Tribes, partners, and other agencies. Therefore, the final proposed action may be different from the original. The proposed action will be finalized at the conclusion of the public comment period for the Environmental Assessment.

Background

National Wildlife Refuges are guided by the mission and goals of the National Wildlife Refuge System, the purposes of an individual refuge, U.S. Fish & Wildlife Service policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, Refuge Recreation Act of 1962, and selected portions of the Code of Federal Regulations and Fish and Wildlife Service Manual.

The DRIWR was established by an Act of Congress which became Public Law 107-91 on December 21, 2001. Section 4 of the Act states the following purposes for the new International Wildlife Refuge:

- To protect the remaining high-quality fish and wildlife habitats of the Detroit River before they are lost to further development and to restore and enhance degraded wildlife habitats associated with the Detroit River;
- To assist in international efforts to conserve, enhance, and restore the native aquatic and terrestrial community characteristics of the Detroit River (including associated fish, wildlife, and plant species) both in the United States and Canada; and

- To facilitate partnerships among the United States Fish and Wildlife Service, Canadian national and provincial authorities, State and local governments, local communities in the United States and in Canada, conservation organizations, and other non-Federal entities to promote public awareness of the resources of the Detroit River.

Upon establishment in 2001, all lands within the former Wyandotte National Wildlife Refuge were incorporated into DRIWR. The Wyandotte National Wildlife Refuge was established by an Act of Congress known as Public Law 87-119, 75 Stat. 243, 87th Congress, H.R. 1182, dated August 3, 1961: ... “to be maintained as a refuge and breeding place for migratory birds and other wildlife...” Mud Island was added to Wyandotte NWR in January 2001 using the authority to accept donations of real property contained in the Fish and Wildlife Act of 1956 (16 U.S.C. 742f). The islands and shoals of the former Wyandotte NWR retain their original legislative purposes, as well as gaining new ones from the 2001 legislation.

Located along the Detroit River and western Lake Erie in Wayne and Monroe Counties in southeast Michigan, DRIWR is the first International Wildlife Refuge in the Refuge system. The DRIWR consists of 19 Refuge units, some of which contain parcels of land under cooperative management agreements with private landowners. Together, they total approximately 6,202 acres between the Rouge River at the northernmost extreme and North Maumee Bay at the Michigan-Ohio border, which is 48 miles. The habitats within these Refuge units protect unique freshwater coastal habitats and contribute to the collective conservation lands in the region. These riverine and shoreline habitats not only have unique species and ecosystem processes, but also host a large migration volume for many species of fish, birds, and insects. DRIWR is within a 45-minute drive of nearly seven million people in the Detroit Metropolitan Area, the Windsor/Essex County region of Ontario, and the Toledo (Ohio) Metropolitan Area.

Through the refuge’s Comprehensive Conservation Plan (CCP) process completed in 2005, all six priority wildlife dependent recreational uses, including hunting, fishing, wildlife observation and photography, and environmental education and interpretation, were found to be compatible. Current refuge visitation is over 120,000 annually. Prior to the COVID-19 pandemic, the Refuge participated in numerous annual offsite events and programs that we anticipate will start up again in the future, including:

- Pointe Mouillee Waterfowl Festival (8,000-10,000);
- Hawkfest at Lake Erie Metropark (5,000-7,000);
- Detroit River Days at the Detroit RiverWalk (over 1,000,000); and
- World Wetlands Day at Gibraltar Carlson High School (2,000).

The 405.16-acre Humbug Marsh Unit is a major part of the conservation crescent of the lower Detroit River - including Humbug mainland, Humbug Island, Calf Island, Gibraltar Bay and Sugar Island - and a hotspot of biodiversity in an urban landscape. Sitting south of the refuge Gateway, Humbug Marsh is mostly forested with some areas that were clear-cut in December 1998. In 2004, the property was purchased by the refuge after a group of local supporters stopped development that would have forever changed the face of the river and surrounding lands. The parcel represents the last mile of undeveloped shoreline along the U.S. mainland of the Detroit River and contains important habitat for many rare fish and wildlife species. Humbug Marsh was designated as Michigan's first Wetland of International Importance in 2010 by the Ramsar Convention on Wetlands.

Humbug Marsh includes wet mesic flatwoods habitat, which is underlain by poorly drained stiff clay that can hold water for prolonged periods. Shagbark hickory, oak, ash, and elm trees dominate the landscape in a

mosaicked fashion across the unit with rough-leaved dogwood and goldenrod species present in early successional habitats. The coastal wetland is dominated by bulrushes, native and naturalized grasses, cattail and invasive Phragmites. An ever-changing habitat that is dependent on Great Lake water levels, Humbug Marsh is a major repository of species and preservation of ecosystem processes.

Public facilities, including a visitor center, bookstore/giftshop, trails, wildlife observation decks, an environmental education shelter, and others, substantially increase visitation and helps the refuge achieve the goal of teaching the next generation of conservationists in this nearly seven-million-person urban area.

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.

As one of the nation's 14 priority urban refuges, DRIWR models the 'Standards of Excellence' of the Urban Wildlife Conservation Program in its work by tearing down barriers that prohibit people from enjoying outdoor recreation; assisting the communities with their conservation goals; and opening our arms to all people, both internal and external of the Service, to see and join this work in action. DRIWR will help to teach the next generation of conservation leaders through proper stewardship, restoration, and management of refuge habitats, and hands-on learning about nature, cultures, communities, and the important diversity of the world.

With the addition of a new bunkhouse, the refuge will be able to provide a crucial lodging option for short-term staff in the implementation of the DRIWR vision. Interns, detailees, job swap participants, visiting researchers, and more will engage in conservation career paths and learn about implementing urban ideals throughout the Service. A bunkhouse will primarily provide lodging for two groups of people:

- Short term staff from throughout the FWS and close partner (e.g., Friends) organizations would stay for one to three months at a time. These detailees, interns, and job-swaps have experienced difficulties finding viable lodging options that are furnished, inexpensive, and don't require a six+ month lease.
- Youth recruits from neighboring communities who require adequate, affordable housing within the commuting area AND close to public transportation.

Quality, affordable, and available lodging is disproportionately more difficult to find for low income and/or communities of color. The lack of available lodging serves as a barrier to recruiting local, diverse candidates who are interested in supporting Detroit River's efforts to connect people with nature. Providing lodging will give these youth enhanced opportunities to work with FWS and our partners. Bunkhouse housing could also provide youth with their first experience in bunkhouse/communal living, while still residing in a familiar (urban/suburban) environment, thereby instilling lessons, and preparing them for additional opportunities to broaden their experiences on more rural or wilderness refuges and field stations.

The Proposed Action includes construction aimed at fulfilling these needs while reducing long-term costs and safety concerns with minimal disturbance to the environment. While we recognize the need for a new bunkhouse, we also recognize the need to minimize long-term costs as well as habitat disturbances associated with the development of a new, permanent bunkhouse.

A suitable site for the building was defined as one that has safe, accessible access for short-term staff, youth interns, and permanent staff; occurs in an already disturbed site; and minimizes visual or physical intrusions to other parts of the DRIWR.

Alternatives

Alternative A – Bunkhouse in west central portion of Humbug Marsh – [preferred alternative]

Alternatives for construction and site location of the bunkhouse were developed based on internal meetings with engineers, facility managers, and refuge staff. Under the Preferred Action Alternative (PAA), the proposed project at the DRIWR includes the construction of a 2,352 square foot bunkhouse. This will include the extension of nearby water, sewer, and electric utilities bored underground to minimize disturbance, paving a single lane access road to accommodate two-way traffic, and construction of a hard-surfaced parking area. The proposed bunkhouse construction would include a one-story building using a standard bunkhouse design already utilized at several other stations in the region. Standard designs provide for four bedrooms that will accommodate up to eight residents, two Architectural Barriers Act-standard bathrooms, kitchen facilities, laundry, a common area, and office area. The building will meet all required safety codes for bunkhouses and dormitories.

The DRIWR bunkhouse is an integral component for implementing the DRIWR Urban Conservation vision. The Urban Conservation Program is a Director priority program. Without station housing, reaching our long-term goal related to career exposure and training will not be possible. This site is in DRIWR's Humbug Marsh Unit and is adjacent to Jefferson Road (Appendix B). The proposed project area is located close to existing utility infrastructure and is an already a disturbed site. The site was filled by the previous owners (McClouth Steel) over 50 years ago. Additionally, the previous owners used this location to park semi-trailers and other equipment. Most recently this site has been used as a materials storage area by the refuge for stone, clay, topsoil, and other material stockpiles.

We will need to remove a very minor amount (< .1 acre) of existing trees and shrubs some of which are non-native and invasive. In addition, the proposed development site will not have a negative visual effect on DRIWR visitors. There is an existing access road, dirt parking lot, and trail to Humbug Marsh. The site was selected to minimize costs and loss of wildlife habitat.

No changes in refuge regulations would be associated with this project. Some trails and activities might be temporarily closed during the construction process but would be reopened after construction. Habitat impacts from construction will be very limited because the site is highly degraded and has little to no wildlife value.

Alternative B – Continue Current management – [no action alternative]:

Under the no action alternative, a new bunkhouse would not be constructed. There is no government housing currently available for short-term workers at the DRIWR, and staff would attempt to identify off-site housing for short term staff and youth interns. The refuge Visitor Center is surrounded by industrial factories. Single-family large and small homes or small apartment-style buildings may be available in neighborhoods nearby, but

the market is highly variable, and any facility would need to be significantly retrofitted for FWS safety standards, requiring a substantial amount of funding.

In addition, the lease market does not have suitable leased spaces necessary for the temporary workforce, such as a bunkhouse would provide. Because residents in the DRIWR bunkhouse will be rotating in and out, it is incredibly difficult to find short-term, furnished housing for a group of people, especially considering the bunkhouse residents would all be coming and going over different time periods. Short-term home rental services, such as AirBnB, are limited and are not in quantities necessary, building safety standards cannot be assured, nor are they in areas deemed desirable for staff safety or within easy access to refuge Visitor Center. DRIWR has previously turned down potential applicants for internships due to the limited short-term housing stock.

Staff would continue to implement our Urban Wildlife Conservation Program and maintain the refuge resources and provide limited wildlife-dependent recreational opportunities. The DRIWR would not be able to initiate our career pathways program given housing and transportation limitations.

Alternative(s) Considered, But Dismissed from Further Consideration

Three locations were identified as possible sites with the location on the west central portion of Humbug Marsh identified as most suitable. Of the three sites considered, this site is already the most disturbed, the least desirable for wildlife or wildlife habitat, and would require the least amount of tree and shrub removal and overall site prep. Also, this site is expected to provide the closest access to the John D. Dingell Jr. Visitor Center (< 1 mile) where individuals residing at the bunkhouse will likely be stationed during the duration of their term. It is anticipated that many people staying at the bunkhouse may not have a vehicle and this location provides easy walking and biking access due to its proximity to the Downriver Linked Greenways trail located out the front door.

Two other alternatives were considered but dismissed from further consideration based on the distance from the Visitor Center and the anticipation of transportation challenges with bunkhouse residents. The first discarded alternative involved constructing a new Bunkhouse at Grosse Ile, an island community across the Trenton Channel from the Visitor Center. This alternative was dismissed since it would require bunkhouse occupants to travel across the Grosse Ile free bridge (4.8 miles one way) which has seen multiple year-long closures due to safety issue with the bridge. The only other bridge is the “pay bridge” which is another 7.5 miles (total 12.3 miles) of travel and costs \$3 - \$4 to cross each way. This site would also require extensive grubbing of vegetation and considerably more site prep. This site is considerably more valuable to wildlife than the preferred alternative.

The second discarded alternative was even further away (12 miles) from the Visitor Center at the Brancheau Unit of DRIWR. As is, this site was too small and would require relocating a refuge shed, grubbing non-native pine trees, and potential shoreline restoration due to its location on Swan Creek/Lake Erie. The addition of recent safety concerns, as well as the distance to the Visitor Center disqualified it from consideration.

One final alternative considered was to build a smaller bunkhouse at the desired location to potentially reduce the footprint. However, after further analysis of implementation of the Urban Wildlife Conservation Program, it was decided providing for up to eight short-term staff were necessary to meet programmatic goals. Additionally, a smaller bunkhouse did not alter the bunkhouse footprint significantly.

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.

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 Area
- Air Quality
- Water Quality
- Floodplain

As such, these resources are not further analyzed in this Environmental Assessment.

Natural Resources

Terrestrial Wildlife and Aquatic Species

Affected Environment

Description of Affected Environment for the Affected Resource

The DRIWR supports a wide variety of wildlife species, including game and nongame species, reptiles, amphibians, wetland plants, and freshwater mussel species which are important contributors to the overall biodiversity on the refuge. Songbirds and raptors breed at the refuge, whereas shorebirds, wading birds, and waterfowl primarily utilize the refuge as wintering and migratory habitat. The site selected for the preferred alternative is a degraded area but receives use by resident and migratory songbirds as well as resident wildlife due to some trees and shrubs.

Description of Environmental Trends and Planned Actions

Many invasive plant species occur within the refuge, of which Phragmites (*Phragmites australis australis*), common buckthorn (*Rhamnus cathartica*) and reed canary grass (*Phalaris arundinacea*) currently have the largest impact on native vegetation and habitat quality within the project area. Several management techniques have been used to reduce encroachment of undesirable plant species, including herbicide, mowing, burning, water level manipulation, plowing, and biological controls. Up to the present, refuge staff have approached management of invasive species selectively where there are multiple benefits. Treatment has been almost exclusively reserved for areas where biodiversity, public use, and overall landscape character simultaneously will be conserved.

Impacts on Affected Resource

Alternative A

Impacts are expected to be minimal under this alternative as the footprint of the building would be in a formerly disturbed area with a vegetative buffer between it and Humbug Marsh. Noise and air pollution, as well as habitat disturbance from construction activities are anticipated to cause temporary displacement of migratory birds and/or bat species. These effects are expected to be small in scope and magnitude and are thus not believed to adversely affect impacted species. In addition, timing restrictions for tree felling and construction activities would be utilized to reduce potential negative impacts to federally listed bats and breeding migratory water birds. Since similar habitat is abundant on DRIWR more generally, impact to wildlife is expected to be minimal and short lived, as wildlife are expected to return over much of project area upon completion of construction activities.

Alternative B

Minor impacts are expected under this alternative. No additional construction is required, so no noise or air pollution would occur, nor would habitat disturbance from construction activities. The site may be managed in the future for invasive species when population levels exceed our threshold for action. However, this site would not be a high priority for management due to its degraded status. Without station housing, reaching the long-term Urban Conservation vision would not be possible.

Threatened and Endangered Species and Other Special Status Species

Affected Environment

Description of Affected Environment for the Affected Resource

Recent surveys for the federally endangered northern riffleshell (*Epioblasma torulosa rangiana*) in the adjacent habitats of the Detroit River have shown no evidence of this species since 2005. The federally endangered Indiana bat (*Myotis sodalis*) and federally threatened northern long-eared bat (*Myotis septentrionalis*) may use the project area and adjacent areas for foraging and summer roosting habitat but have not been identified in this area. The federally threatened eastern prairie fringed orchid (*Platanthera leucophaea*) is known to occur locally only at Pointe Mouillee State Game Area (SGA) at this time. The federally threatened eastern massasauga (*Sistrurus catenatus*) has the potential to be on the refuge but is not currently known to be present. The closest identification of massasauga was a single, unconfirmed instance at Pointe Mouillee SGA. This project is not in close proximity to any known resting, foraging, or breeding habitat for federally threatened rufa red knot (*Calidris canutus rufa*) or federally endangered piping plover (*Charadrius melodus*). The candidate species monarch butterfly is likely to use the project area due to suitable adjacent habitat.

Description of Environmental Trends and Planned Actions

Many invasive plant species occur within the Humbug Marsh and may have the largest impact on listed species within the project area. Several management techniques have been used to reduce encroachment of undesirable plant species, including herbicide, mowing, burning, water level manipulation, plowing, and biological controls (USFWS 2005). Up to the present, refuge staff have approached management of invasive species selectively where there are multiple benefits. Treatment has been almost exclusively reserved for areas where biodiversity, public use, and overall landscape character simultaneously will be conserved.

Impacts on Affected Resource

Alternative A

Under Alternative A, there would be no effect on the federally endangered mussel species due to their likely extirpation from the refuge. Construction activities are not likely to adversely affect other threatened and endangered species, however, to minimize potential impacts timing restrictions for tree felling and construction activities would be utilized to reduce potential negative impacts to federally listed bats and migratory water birds. The construction area would be surveyed prior to disturbance activities to ensure absence of eastern prairie fringed orchid. To mitigate for potential impacts to the monarch butterfly, habitat would be removed prior to the active season and native plants would be used in the new landscaping to provide a nectar source.

Alternative B

Under Alternative B, there will be no construction and no restoration; therefore, there would be no effect to federally listed species, proposed species, candidate species, or designated or proposed critical habitat. The site may be managed in the future for invasive species when population levels exceed our threshold for action. However, this site would not be a high priority for management due to its degraded status.

Habitat and Vegetation (including vegetation of special management concern)

Affected Environment

Description of Affected Environment for the Affected Resource

Humbug Marsh is largely forested, although a significant portion of the site was cut in 1998 in preparation for a then-planned development. It is dominated by rough-leaved dogwood (*Cornus drummondii*) and prickly ash (*Zanthoxylum americanum*). The site is poorly drained (clay and silty clay), which causes water to pond in spring and fall, but low moisture availability in summer. These conditions support a wet-mesic flatwoods natural community, which contains the state-special concern Shumard's oak (*Quercus shumardii*), other oak species (*Quercus* spp.), shagbark hickory (*Carya ovata*), American elm (*Ulmus americana*), silver maple (*Acer saccharinum*), and black walnut (*Juglans nigra*). High deer browse has eliminated regeneration of many native trees and has altered the trajectory of the plant communities. Two coastal wetlands (one north of the Handler Drain and one south) are dominated by bulrushes (*Scirpus* spp., *Schoenoplectus* spp., and *Bolboschenus* spp.), blue-joint, sedges, reed canary grass, Phragmites, and cattail (*Typha* spp.). The composition of emergent wetland vegetation along the shoreline fluctuates with Great Lakes water levels. Marsh birds are found sparingly because of the small size of the appropriate habitat, but the unit receives high use by a wide range of migrant passerines and raptors, and waterfowl around the island. Phragmites management has occurred in some years since 2007 with invasive shrub and tree removal beginning in 2011.

Description of Environmental Trends and Planned Actions

Climate change will have major influences on the refuge. Like the rest of western North America, the Great Lakes region is already experiencing changes in temperature and precipitation. Under more extreme climate change scenarios, the average annual temperature could increase by as much as 8° F by the end of this century. The Intergovernmental Panel on Climate Change (IPCC) also projects those areas throughout North America will experience more severe and longer heat waves and increased impacts from air pollution (Intergovernmental Panel on Climate Change 2007). The total amount of annual precipitation is not projected to change significantly, but the area could see increases in winter and spring precipitation, while summer precipitation could decrease by 50 percent. These impacts in turn will affect vegetation and habitat.

Impacts on Affected Resource

Alternative A

The new bunkhouse site is in an already disturbed area. The primary vegetation in this area is a variety of tree species including oaks, hickory, sycamore, ash, persimmon, and others. There is also a large infestation of bush honeysuckle and *Sericea lespedeza* in the site as well. The new bunkhouse site would be developed in a way to leave as much of the native vegetation as possible, with the added benefit of removing some of the non-native or weedy vegetation and replacing it with native and pollinator friendly vegetation through habitat restoration.

Alternative B

Under this alternative there would be no additional construction or development so there would be no impacts on habitat. Habitat quality for this site is considered low due to its history of disturbance and would not be a high priority for management due to its degraded status.

Visitor Use and Experience

Affected Environment

Description of Affected Environment for the Affected Resource

The DRIWR provides a wide variety of wildlife-dependent recreation opportunities, including hunting, fishing, wildlife observation, wildlife photography, and environmental education. Averaging over 120,000 visitors across all refuge units annually, the DRIWR serves as a vital resource for the urban communities nearby.

Description of Environmental Trends and Planned Actions

Visitor use on the refuge has been variable the past several years since the refuge's Visitor Center is new and about two years old. The Visitor Center opened in February 2020 before the COVID-19 lockdown and has opened and closed multiple times over the first two years. Visitation is expected to increase over the next several years as the large urban community within 20 miles begins accessing the refuge more.

Impacts on Affected Resource

Alternative A

The DRIWR Bunkhouse is an integral component for implementing the DRIWR Urban Conservation vision. Without station housing, reaching the long-term goal related to career exposure and training would not be possible. There are no anticipated negative impacts on wildlife-dependent recreation under this alternative. Given timing restrictions for construction outside of peak visitor timeframes, construction is not expected to cause any disturbance to visitor use. As far as routine visitor uses of the refuge, this site is not utilized by visitors very much at all. Over time, a bunkhouse would contain an additional 8 short-term staff that would facilitate outreach and education to local communities and presumably increase overall visitation to the refuge.

Alternative B

Expected impacts on wildlife-dependent recreation would be a minor negative. The current economic role that the DRIWR plays in the local economy would continue, and there would be no immediate changes expected regarding current fishing and wildlife viewing opportunities. However, there would be no construction of a new bunkhouse and staff would need to identify off-site housing for short term staff and youth interns, if any exist. DRIWR has previously turned down potential applicants for internships due to the limited short term housing stock.

Cultural Resources and Subsistence

Affected Environment

Description of Affected Environment for the Affected Resource

The Michigan Office of the State Archaeologist (MOSA) Inventory Files for the Refuge Gateway site and Humbug Marsh indicates there are no recorded archaeological sites. Eleven sites south of the Refuge Gateway, including Humbug Marsh, required Phase 2 archaeological investigations out of 17 prehistoric and three historic sites after an initial Phase 1 investigation in 1999. None of the eleven sites qualified for listing in the National Register of Historic Places.

Cultural resources are important parts of the Nation's heritage. The Service is committed to protecting valuable records of human interactions with each other and the landscape. Protection is accomplished in conjunction with the Service's mandate to protect fish, wildlife, and plant resources.

Description of Environmental Trends and Planned Actions

None.

Impacts on Affected Resource

We do not anticipate negative impacts to cultural resources considering the site has previously been filled over 50 years ago and has been used to park semi-trailers and other equipment. Most recently it has been used as a materials storage area by the refuge for stone, clay, topsoil, and other material stockpiles.

Alternative A

Under Alternative A, there would likely be No Adverse Effects to cultural resources, as the construction area is along existing roadways and within a previously disturbed area.

Alternative B

Under Alternative B, there would likely be no impacts to cultural resources, as no construction would occur.

Refuge Management and Operations

Land Use on the Refuge

Affected Environment

Description of Affected Environment for the Affected Resource

Humbug Marsh is divided into two major habitat types: wet meadows and forest. The wet meadow zones at Humbug Marsh are dominated by blue-joint grass, reed canary grass, *Carex* (*C. lacustris*, *C. vulpinodea*, etc.) and are generally void of many trees because of the extreme hydrologic range from wet spring conditions to summer drought. Rough-leaved dogwoods do establish in some areas. Invasive black alder (*Alnus glutinosa*) is common and actively controlled by refuge staff within the wet meadow zones.

Forest communities range widely in disturbance history and in invasive species establishment. Some communities on more drained sites are dominated by oak and hickory with associates of basswood, cherry, and walnut. The understory of Humbug Marsh is dominated by a mix of woodland grasses (e.g., *Leersia oryzoides*, *Glyceria striata*) and *Carex* (*C. blanda*, *C. cephalophora*, *C. molesta*, *C. pennsylvanica*, etc.) with *Polygonum*,

Ranunculus, *Impatiens*, etc. Humbug Marsh contains numerous canopy black walnuts that inhibit woody plant growth underneath them with the understory dominated by cool season grasses (e.g., orchard grass and panic grass) with associates of blue-eyed grass, ironweed, goldenrods, roses, raspberries, and wild bergamot.

Within the DRIWR, facilities are concentrated in two separate locations. A Visitor's Center is located just north of Humbug Marsh and a maintenance building is located just north of the proposed bunkhouse location. There are impoundments with dikes and water control structures on some units and public parking lots with kiosks. Most of the refuge is natural habitat.

Description of Environmental Trends and Planned Actions

We do not anticipate any major land use changes on the refuge or surrounding areas. No other developments are currently planned on the refuge. While the refuge has no control over surrounding land uses, the areas seem to be relatively stable as agriculture land, natural areas, or existing housing.

Impacts on Affected Resource

Alternative A

Overall, we do not anticipate any major land use changes on the refuge. In addition, we don't anticipate increased visitor use over or above what is expected because of the new bunkhouse.

Alternative B

Under Alternative B, there would likely be no impacts to land use, as no construction or restoration will occur.

Administration

Affected Environment

Description of Affected Environment for the Affected Resource

DRIWR staff consist of nine permanent employees and eight contract employees. All staff and contract employees' offices are in the refuge's Visitor's Center.

Description of Environmental Trends and Planned Actions

Refuge staffing will soon expand to include a Community Engagement Coordinator and three limited term GS-7 positions. These positions are anticipated over the next six months. Seasonal staff varies from year to year with the use of volunteers, biological technicians, and the Youth Conservation Corp crew.

Impacts on Affected Resource

Alternative A

Estimated costs to implement this alternative are estimated around \$1,100,000.00. In addition, this will require an approximate 5% of the DRIWR staff's time for monitoring of the impacts and overseeing and implementing the proposed action on the refuge. While this would impact the administration of the DRIWR, it would not be significant because the refuge would still be able to carry out its other priority actions and obligations in meeting the purpose of the DRIWR and the mission of the National Wildlife Refuge System, such as habitat restoration and management, environmental education programs, etc. There would be an additional cost to the refuge for maintenance and utilities.

Alternative B

Estimated costs to implement this alternative include costs already incurred for design, which total \$294,484. In addition, this will require an approximate 5% of the DRIWR's staff time for helping interns and other seasonal positions find temporary housing close to DRIWR.

Socioeconomics

Local and regional economies

Affected Environment

Description of Affected Environment for the Affected Resource

The regional population is nearly 7 million, so the economic landscape is complex and varies geographically. The site is in Trenton, Michigan. Wayne County and the City of Gibraltar and Grosse Ile Township are immediately adjacent. The median household income in 2020 are as follows: Trenton (\$69,710); City of Gibraltar (\$74,919); Wyandotte (\$54,419); City of Monroe (\$53,068); and City of Ecorse (\$34,278). The City of Detroit is 25 miles from the site with an estimated 5-year median income of \$32,498. The median income for the United States is \$64,994. Based on these most recent census data, there are no disproportionately minority or low-income populations in the immediate project vicinity, however, the Cities of Ecorse and River Rouge have 20.7% and 37.6% families in poverty. Those communities are about 10 miles north of the DRIWR.

The residents of the City of Trenton are 94.6% non-Hispanic white, 1.6% African American, 0.0% Native American, 0.8% Asian, and 4.0% Hispanic or Latino. The United States contains 70.4 non-Hispanic white, 12.6% African American, 0.8% Native American, and 5.6% Asian.

Description of Environmental Trends and Planned Actions

There is a high demand for access to refuge land for compatible recreational uses. Fishing League Worldwide Outdoors, one of the largest tournament fishing organizations in the world, has traditionally scheduled major bass and walleye tournaments offering up to \$1.5 million in prize money. In addition, the Professional Walleye Trail has offered Walleye Tour events on the Detroit River. These tournament events are economically important to local businesses. The Downriver Walleye Federation annually hosts numerous tournaments in the Detroit River and Lake Erie. Many local businesses specialize in bait, tackle, and boat merchandise and charter fishing and hunting companies are available throughout the year. Waterfowl hunting is heavy on nearby state land and at the mouth of the Detroit River and Lake Erie.

Wildlife viewing, especially birdwatching, has become increasingly important in drawing visitors to the area's public lands. The refuge is recognized as one of the best sites in North America to watch raptor migration. Passerine and waterbird migration is heavy during spring and fall, drawing birders into the region to see migration fallouts, hawk kettles, and specific species such as rough-legged hawk, Swainson's hawk, and golden eagle.

Impacts on Affected Resource

Alternative A

Quality, affordable, and available lodging is disproportionately more difficult to find for low income and/or communities of color. The lack of available of lodging and transportation options in close proximity to DRIWR serves as a barrier to recruiting local, diverse candidates to help us implement the Urban Wildlife Conservation

plan. A bunkhouse would provide a crucial lodging option for short term staff to help implement the Urban Wildlife Conservation vision while also providing jobs. Interns, detailees, job swap participants, visiting researchers, would engage in conservation career paths and learn about implementing urban ideals throughout the Service. Providing lodging would give these youth enhanced opportunities to work with FWS and partners. Bunkhouse housing could also provide youth with their first experience in bunkhouse/communal living, while still residing in a familiar (urban/suburban) environment; thereby instilling lessons and preparing them for additional opportunities to broaden their experiences on more rural or wilderness refuges and field stations.

Construction would only limit recreational activities for short time periods in a small area and would have minimal impact on the local economy.

Alternative B

Under this alternative, the current socioeconomic role the DRIWR plays in the local economy would continue. The refuge's ability to implement the Urban Wildlife Conservation plan would be reduced and alternative solutions for affordable housing and transportation would need to be determined.

Cumulative Impact Analysis:

Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." (40 CFR 1508.7.)

Alternative A

There are no neighboring properties adjacent to the preferred site except for the refuge's maintenance shop. This action would add a structure to the maintenance area. However, no long-term cumulative impacts would occur to cultural resources or to any wildlife species due to activities associated with this alternative or similar action by the Service or other agencies. Overall, construction under Alternative A would not result in any significant loss of existing habitat. The proposed project area is located close to existing utility infrastructure and is a disturbed site. The site was filled by the previous owners (McClouth Steel) over 50 years ago. Additionally, the previous owners used this location to park semi-trailers and other equipment. Most recently this site has been used as a materials storage area by the refuge for stone, clay, topsoil, and other material stockpiles.

Alternative B

No long-term cumulative impacts would occur to cultural resources or to any wildlife species due to activities associated with this alternative or similar action by the Service or other agencies. However, DRIWR's ability to implement an important component to their Urban Wildlife Conservation plan would be compromised.

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.

DRIWR is in Wayne County, Michigan. Wayne County has the following demographics in 2019 according to DATAUSA:

Median Household Income: \$50,753

Percentage of Population that are considered minorities: 22.3%

Median Age: 37.6 years old

Description of Environmental Trends and Planned Actions

Demographics of Wayne County tend to be stable, and we do not foresee significant changes in the future.

Impacts on Affected Resource

Alternative A

A bunkhouse would address a crucial lodging option for short term staff in the implementation of the DRIWR vision. This alternative would be considered a positive because it would provide affordable housing and transportation for under-represented youth to help us implement the Urban Wildlife Conservation plan. Providing lodging would provide these youth enhanced opportunities to work with FWS and partners. Bunkhouse housing could also provide youth with their first experience in bunkhouse/communal living, while still residing in a familiar (urban/suburban) environment; thereby instilling lessons and preparing them for additional opportunities to broaden their experiences on more rural or wilderness refuges and field stations.

Alternative B

Under this alternative, the refuge's ability to hire minority or low-income youth or seasonal staff would be greatly reduced. Additionally, the DRIWR's ability to implement the Urban Wildlife Conservation plan would be reduced and we'd have to find an alternative solution for affordable housing and transportation.

Mitigation Measures and Conditions

Mitigation measures include:

- The implementation of the Michigan Department of Natural Resources' best management practices for construction near streams and rivers.
- The minimizing of impacts through seasonal restrictions for tree felling and general construction.
- Rectifying impacts by repairing, rehabilitating, or restoring the affected environment, and off-setting impacts through the restoration of habitat surrounding the bunkhouse.

Monitoring

The DRIWR 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 can be used to identify any impacts arising from the Proposed Action.

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 – Proposed Action Alternative

As described above, the Proposed Action Alternative would have minor potential impacts to wildlife and aquatic species, threatened and endangered species or other special status species, and administration due to associated construction activities. These impacts are expected to be minimal and short-lived. No impacts are expected for cultural resources, floodplain, and land use. Positive impacts in terms of environmental justice, visitor use, and local and regional economies are anticipated. This alternative helps the DRIWR implement its Urban Wildlife Conservation Program vision. As one of the nation's 14 priority urban refuges, DRIWR's staff are trying to tear down barriers that prohibit people from enjoying outdoor recreation; assisting the communities with their conservation goals; and opening their arms to all people, both internal and external of the Service, to see and join this work in action. DRIWR will help to teach the next generation of conservation leaders through hands-on learning about nature, cultures, communities, and the important diversity of the world.

Alternative B – No Action Alternative

No impacts are expected for all the factors, except for environmental justices and socioeconomic. By not constructing a bunkhouse our ability to hire minority or low-income youth or seasonal staff would be greatly reduced. Additionally, the ability to implement the Urban Wildlife Conservation plan would be significantly reduced as staff work to find an alternative solution for affordable housing and transportation.

List of Sources, Agencies and Persons Consulted

Cathy Nigg, Refuge Supervisor, National Wildlife Refuge System, Region 3

Carl Millegan, Deputy Assistant Regional Director, National Wildlife Refuge System, Region 3

Sarah Quinn, Chief of Division of Natural Resources and Conservation Planning, Region 3

List of Preparers

Jody DeMeyere, Visitor Services Manager, DRIWR

Steve Dushane, Deputy Refuge Manager, DRIWR

Jessie Fletcher, Wildlife Biologist, DRIWR

Dan Kennedy, Project Leader, DRIWR

Public Outreach

The U.S. Fish & Wildlife Service will make the draft EA available for public review and comment for 15 days. An information release will be posted on the DRIWR website, circulated through an email distribution list of stakeholders, posted at area libraries, press releases, and shared with local civic institutions. A single, in office copy of the information will also be posted at the front desk of the John D. Dingell Jr. Visitor Center for review.

This copy will remain in the Visitor Center for review in the building. The distribution list includes local and regional media contacts, congressional staff, local and state government partners, federal and state agencies, non-profit organizations, and other partners and stakeholders.

Determination

- ☐ The U.S. Fish & Wildlife Service's action will not result in a significant impact on the quality of the human environment. See the attached **"Finding of No Significant Impact"**.
- ☐ The U.S. Fish & Wildlife Service's action **may significantly affect** the quality of the human environment and the U.S. Fish & Wildlife Service will prepare an Environmental Impact Statement.

Signatures

Submitted By:

Refuge Manager Signature:

Date:

Concurrence:

Project Leader Signature:

Date:

Concurrence:

Refuge Supervisor Signature:

Date:

Approved:

Appendix A

Applicable laws are being addressed that were not directly addressed in the text of this Environmental Assessment.

Cultural Resources

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

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

An archaeological survey is being conducted on the site of the proposed construction. Once that is completed, we will determine what mitigation is necessary for the project from a cultural resource's standpoint.

Fish and Wildlife

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

Once the proposed project is finalized a Section 7 consultation will be conducted with USFWS Ecological Services.

Appendix B

Project site map.

