

Draft Compatibility Determination

Cross Bayou Bridge Replacement by State adjacent to D'Arbonne NWR

Refuge Use Category

Rights-of-way and Rights to Access

Refuge Use Type(s)

Rights-of-way and Rights to Access

Refuge

D'Arbonne National Wildlife Refuge (NWR or refuge)

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

“...shall be administered by him [Secretary of the Interior] directly or in accordance with cooperative agreements... and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon,...” 16 U.S.C § 664 (Fish and Wildlife Coordination Act).

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System, 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 (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

No

What is the use?

The U.S. Fish and Wildlife Service (Service) is proposing to grant Louisiana Department of Transportation and Development (LADOTD) a permit for rights-of-way (ROW) (including an expansion of an existing ROW) and rights to access the ROW expansion for the purposes of replacing the current bridge on State Highway 143 and

for future maintenance of the replacement bridge. The related use is rights to access (environmental, hazard, and safety monitoring).

Is the use a priority public use?

No

Where will the use be conducted?

The site is located on State Highway 143 (32.605243, -92.160235) in Section 28, Township 18 North, Range 3 East in Ouachita Parish, Louisiana adjacent to D'Arbonne National Wildlife Refuge (NWR). LADOTD is proposing to replace a bridge and approaches over Cross Bayou to meet current safety and design standards on the existing alignment. The proposed new concrete bridge and approaches would occur within the existing and proposed ROWs of Hwy 143. To meet current standards, the bridge approaches and embankment would need widening into areas of the refuge that are not currently LADOT rights-of-way. The proposed expansion of ROW would consist of 0.48 acres (0.24 acres of each end of the bridge).

State Highway 143 is the only public road providing public recreation ingress and egress to the eastern section of the refuge, including the Complex headquarters office, bunkhouse and maintenance shop. The portion of refuge property required for the expanded ROW is mowed grass and a handful of trees.

When will the use be conducted?

The permit for ROW and rights to access a ROW expansion would be valid for fifty years from its date of issue. The proposed bridge replacement project is anticipated to require an estimated duration of 60 working days or up to 3 months, and work would occur only during daylight hours.

How will the use be conducted?

Under a permit granted by the Service, the LADOTD would expand their existing ROW and access the ROW expansion to replace a structurally deficient (substandard) bridge to maintain the new structure and ROW expansion.

The proposed construction activities include excavation in Cross Bayou and placement of flexible revetment to combat scour, the expansion of embankment to meet current design criteria, placement of drainage pipe, and the dressing and reseeding of the sideslope. LADOTD would replace the existing bridge on the current alignment, requiring approximately 0.48 acres of right-of-way to be permanently incorporated into the transportation facility. LADOTD would be required to follow Forestry Best Management Practices for Louisiana (<https://www.ldaf.state.la.us/wp-content/uploads/2014/BMP.pdf>) including, but not limited to, erosion control,

stream flow assurance, revegetating site, and slope stabilization. The contractor would be required to adhere to the provisions established by the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, concerning erosion control as well as other federal, state, and local permits that may be required. A diversion bridge would be temporarily built on private land that would maintain traffic on State Highway 143 during construction, preserving access to the refuge.

After construction, vegetation would be restored with non-invasive grasses to provide soil stabilization. LADOTD would be responsible for restoration of vegetation and stabilization of soils according to Forestry Best Management Practices for Louisiana. These include but are not limited to: stabilizing soils around the bridge with natural materials or grass and rip-rap, minimizing sediment production, using erosion control fencing, and re-vegetating site after construction. Stream flow would not be impeded and water quality should not be affected.

The permit for ROW (expansion), and rights to access would provide LADOTD 0.48 acres. During the permit term for the ROW and rights to access, an additional Special Use Permit would not be needed for the Cross Bayou bridge replacement project or its future maintenance within the ROW expansion area.

Why is this use being proposed or reevaluated?

LADOTD is proposing to replace a structurally deficient bridge built in 1952 for the purposes of safety along a public route of travel. Replacement would prevent permanent closure of State Highway 143 which provides the public a route that otherwise would be a 43-mile detour. Most of the project area is within the existing LADOTD ROW. However, a small portion of refuge property is within the project extent to allow for a more structurally sound bridge. The refuge property required for the proposed project and ROW expansion is comprising two sections that total 0.48 acres.

Availability of Resources

Resources involved in the administration and management of the proposed action include time refuge staff would need to inspect the site and meet with LADOTD during and after construction, including monitoring during the project, and one time costs to include preparation of Finding of Appropriateness and Compatibility Determination, correspondence with LADOTD and other Service Departments. Despite improving safety along a public access route, the use is not expected to increase visitation to the refuge. No offsetting revenues will occur.

Table 1. Costs to Administer and Manage ROW and rights to access D'Arbonne NWR at Cross Bayou Bridge.

Category and Itemization	One-time Cost	Recurring Annual Expenses
Develop signage and brochures	0	0
Staff time (Plan and develop policy documents)	\$1200	0
Maintenance	0	0
Total one-time expenses	\$1200	
Total recurring annual expenses	0	0
Total Expenses	\$1200	0

Anticipated Impacts of the Use

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

The effects and impacts of the proposed action to refuge resources, whether adverse or beneficial are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action. This Compatibility Determination 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”.

Anticipated general impacts associated with this project would include, but are not limited to, impacts from construction (e.g., staging of equipment, removal and movement of materials). Such impacts to the refuge include temporary and intermittent obstruction of public access to one refuge parking area.

The refuge’s management plans (Comprehensive Conservation Plan [USFWS 2006], Draft Comprehensive Conservation Plan and Environmental Assessment [USFWS 2006], Habitat Management Plan [2010]) have been reviewed for potential impacts to refuge resources from the proposed use and no conflicts or adverse impacts are anticipated. LADOTD completed a consultation with the Service’s Louisiana Ecological Services Field Office for potential impacts to threatened and endangered species (LADOTD 2024) and was issued a Not Likely to Adversely Affect (NLAA) for the project. Section 106 cultural clearance was obtained by the Regional Archaeologist (2/28/24); information relating to those consultations is addressed below.

Impacts to the refuge purpose and the Refuges System mission are expected to be generally positive. Improving the safety of the bridge will allow for greater visitor satisfaction and a more positive impression of the refuge by improving safety along a public route of travel and access to the refuge. Refuge visitors and staff would continue to have access to the headquarters office, Holland's Bluff boat ramp, maintenance shop and eight parking lots accessing the eastern side of the refuge. If the bridge was not replaced, permanent closure would cause the public to re-route on a 43-mile detour for commuting to work, school, church and refuge visitation. Also refuge staff would be impacted commuting to the office and maintenance shop for work and for refuge management activities. No negative impacts to the refuge purpose or the Refuge System mission are anticipated.

Short-term impacts

Short-term impacts could include temporary disturbance and/or displacement of wildlife during construction, trampling of on-site vegetation, temporary increase in noise, and decreased quality of visitor experience. Because the bridge would be replaced on the existing alignment, no long-term or cumulative effects are expected to wildlife, vegetation or visitors.

Disturbance to wildlife, especially birds has been shown to cause animals to alter their habitat usage patterns and amount of time spent foraging (Pease et al. 2005, St. James et al. 2013, Shirkey et al. 2020). These disturbances would occur on less than one acre or approximately less than 0.003% of the total acreage of the refuge and would be temporary. Within a relatively short period of time, wildlife displaced during construction would resume full use of the area or move to adjacent similar habitats (Berger 2010).

After construction, vegetation would be restored with non-invasive grasses to provide soil stabilization. LADOTD would be responsible for restoration of vegetation and stabilization of soils according to Forestry Best Management Practices for Louisiana (<https://www.ldaf.state.la.us/wp-content/uploads/2014/04/BMP.pdf>). These include but are not limited to, stabilizing soils around the bridge with natural materials or grass and rip-rap, minimizing sediment production, using erosion control fencing, and re-vegetating site after construction. The contractor would be required to adhere to the provisions established by the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, concerning erosion control as well as other federal, state, and local permits that may be required. Stream flow would not be impeded and water quality should not be affected.

Suitable summer habitat (e.g., hollow trees with a diameter at breast height > 4 in. with exfoliating bark) for the federally listed endangered northern long-eared bat

occurs within the action area; however, this bat species has not been detected on the refuge. Before removal of trees and bridge, a biological survey would be conducted to ensure no maternity colonies of bats are present. Tree removal would only occur from July 1 through October 1 when bats are not hibernating and juvenile bats can fly. LADOTD completed consultation with the Service's Louisiana Ecological Services Field Office as required by the Endangered Species Act of 1973. The existing bridge is not suitable as a roosting structure for the long-eared bat and long-term impacts from the proposed project or use (ROW and rights to access) are not anticipated to this species or its habitat (LADOTD 2024). No other threatened or endangered species are known to occur within the action area of the bridge replacement project.

Temporary increases in noise levels would occur periodically throughout the duration of the proposed construction activities. Construction equipment is expected to cause increases in normal background noise levels of the project area. Although temporary increases in noise levels are expected to result from the proposed project, no long-term impacts to ambient sound quality are expected because the horizontal and vertical alignment of the road would not be changed. Wildlife in the area may be temporarily displaced to nearby habitats due to noise during construction but would return to the area once activities are complete (Beal 2007).

Visitor experience to the refuge should not be affected because LADOTD would build a temporary bridge on adjacent private land to maintain traffic flow.

Long-term impacts

Long-term negative impacts should not occur. Because the bridge is being replaced in the same alignment, after construction ends, impacts would be concluded. Long-term benefits are anticipated to be improvement to safety along a public travel route that provides access to the refuge for both visitor and refuge staff.

Cultural Resources

In compliance with Section 106 (36 CFR 800) of the National Historic Preservation Act of 1966 and the Archaeological Resources Protection Act of 1979, the State Historic Preservation Office of the Louisiana Office of Cultural Development issued a cultural compliance for the ROW expansion and related bridge project on October 13, 2022, stating "No known historic properties will be affected by this undertaking. Therefore, our office has no objection other implantation of this project. This effect determination could change should new information come to our attention." Also cultural clearance was given by the Regional Archaeologist on 2/28/24. Alabama-Coushatta, the Caddo, the Choctaw Nation, the Coushatta, the Jena Band of Choctaws, the Mississippi Band of Choctaws, the Quapaw, and the Tunica-Biloxi tribes were sent letters on 4/9/24.

As referenced above, no significant beneficial or adverse long-term or cumulative impacts are associated with the proposed action on D'Arbonne NWR.

Public Review and Comment

The draft compatibility determination will be made available for public review and comment from April 18 through May 2, 2024. A hard copy of this document will be posted at D'Arbonne National Wildlife Refuge Headquarters at 11372 Hwy 143, Farmerville, LA 71241. It will also be made available electronically on the refuge website <https://www.fws.gov/refuge/darbonne>.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

The Service would work with LADOTD to ensure that this ROW expansion is established, operated, and maintained in accordance with 50 CFR 29.21 (Rights-of-Way General Regulations) as well as refuge purposes. LADOTD would adhere to the terms of the permit for ROW and rights to access once issued. To ensure compatibility with the mission of the Refuge System and goals and objectives of D'Arbonne NWR, and to avoid or minimize adverse impacts as described above, the use would occur under the following stipulations:

1. Except where specifically authorized by a Special Use Permit, all regulations governing activities on D'Arbonne NWR apply.
2. LADOTD would be required to follow Forestry Best Management Practices for Louisiana (<https://www.ldaf.state.la.us/wp-content/uploads/2014/BMP.pdf>) including, but not limited to, erosion control, stream flow assurance, revegetating site, and slope stabilization. The contractor would be required to adhere to the provisions established by the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, concerning erosion control as well as other federal, state, and local permits that may be required.
3. LADOTD would be responsible for job safety while operating on the refuge.
4. Should previously unrecorded cultural resources or human remains be discovered on Service land, activities would be halted immediately at that location.

- a. Should human remains in an unmarked grave be encountered, LADOTD shall contact the Service's law enforcement personnel and the Sheriff's Office and State Historical Protection Office.
 - b. Should human remains be identified as Native American, consultation with the pertinent Native American tribe(s) will be initiated as per the Native American Graves Protection and repatriation Act of 1990.
5. The contractor would be required to adhere to the provisions established by the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, concerning erosion control as well as other federal, state, and local permits that may be required.
6. So long as it is used for the purpose(s) granted, the Permit for ROW and rights to access the ROW expansion is limited to a term of fifty years from its date of issue; prior to the end of that limited term, LADOTD must apply for a new or updated permit, unless an easement has been granted.

Justification

Rights-of-way, rights to access, and expansion on Refuge System property are not identified as a priority public use of the Refuge System under the Refuge System Administration Act of 1997. However, the establishment of ROWs is often determined to be a Compatible Use when decision criteria is addressed, and as described in Refuge Uses Policy (603 FW 1). The ROW expansion and rights to access for the purposes of bridge replacement and future maintenance would improve safety along a travel route used by the public to access wildlife dependent recreation (a priority public use) at the refuge.

The Service has fee title ownership and jurisdiction of the land affected, including the proposed ROW expansion. LADOTD is initiating the ROW expansion and associated bridge replacement to protect the health and safety of the public as well as refuge personnel. The proposed action complies with applicable laws and regulations; the project has concurrence from Ecological Services regarding endangered and threatened species, cultural resource compliance, and has satisfied pertinent refuge policy. Refuge policy 603 FW 2.11D specifically defines Compatibility Determinations concerning existing rights-of-way as:

“We will not make a compatibility determination and will deny any request for maintenance of an existing right-of-way that will affect a unit of the National Wildlife Refuge System, unless (1) the design adopts appropriate measures to avoid resource impacts and includes provisions to ensure no net loss of habitat quantity and quality; (2) restored or replacement areas identified in the design are afforded permanent protection as part of the national wildlife refuge or

wetland management district affected by the maintenance; and (3) all restoration work is completed by the applicant prior to any title transfer or recording of the easement, if applicable. Maintenance of an existing right-of-way includes minor expansion or minor realignment to meet safety standards. Examples of minor expansion or minor realignment include: expand the width of a road shoulder to reduce the angle of the slope; expand the area for viewing on-coming traffic at an intersection; and realign a curved section of a road to reduce the amount of curve in the road.”

Stipulations outlined above would help ensure that the proposed action is compatible at D’Arbonne NWR. Right-of-way expansion, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that the permit for ROW expansion and rights to access at D’Arbonne NWR, in accordance with the stipulations provided here, would not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purpose of the refuge. Rather, appropriate and compatible ROW expansion and the inter-related bridge replacement project would address a provision necessary to protect the health and safety of the public and these will be implemented without impairing existing or future wildlife-dependent recreational uses of the refuge. Access to wildlife-dependent recreation opportunities on the refuge would be enhanced by this action. The maintenance of through access on LA 143 directly supports the Public Use and Visitor Services Goal to provide quality wildlife-dependent recreational and educational opportunities for persons of all abilities to support the Refuge System, enjoy the outdoors in northern Louisiana and all its associated fish, wildlife, and plants, and apply ethical outdoor behavior in a safe and compatible manner. It concurrently supports the refuge administration goals of D’Arbonne NWR by preserving access for officials and users to the refuge.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2034

Literature Cited/References

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