Draft Compatibility Determination for Forest Management, Harris 515 Conservation Easement,

Tallahatchie National Wildlife Refuge

Refuge Use Category

Agriculture, Aquaculture, and Silviculture

Refuge Use Type(s)

Tree harvesting (commercial)

Refuge

Tallahatchie NWR (Harris 515 Conservation Easement)

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

Conservation Easements - "for conservation purposes" (Consolidated Farm and Rural Development Act 7 U.S.C. 2002)

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (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?

Tree harvesting (commercial) is being proposed to allow the cutting and removing of trees by various techniques, such as selective cutting or clear cutting, for sale or commercial use as wood, paper, chips, or other fiber products, or firewood.

Is the use a priority public use?

No

Where would the use be conducted?

Commercial tree harvesting would be allowed on the Harris 515 Conservation

Easement (CE) in Webster and Choctaw counties, MS, which is administered by the Northern Mississippi Refuges Complex (Complex; Figure 1). The Harris 515 CE totals 515 acres, of which approximately 122 acres is loblolly pine (Figure 2). For management purposes, the pine has been delineated into two stands, the first being 46 acres on an upland site and the other 76 acres in the floodplain of the Big Black River. The property also has multiple loblolly pine – mixed hardwood stands.

The floodplain pine stand was last cut in the early 1990s, with a combination of thinning, clearcut, and seed tree harvesting. Some portions of the stand were not harvested. The pine in this stand has a heavy component of sawtimber, with a small portion in chip-n-saw and pine pulpwood. Some of the sawtimber exceeds the maximum diameter that local sawmills can accept. Overall stand health is rated as average with some natural mortality due to stand age and tree density.

The upland pine stand was clearcut in the 1980s and regenerated in loblolly pine. A first thinning was completed in 2005 and no other management has occurred since. This stand has a higher component of pine sawtimber and pine chip-n-saw with a smaller portion classified as pine pulpwood. Stem quality of the sawtimber is rated as above average, however stand health is below average due to tree density and stand age.

The remaining forested acres are located in the floodplain with a mix of pine and hardwoods, including low quality, pre-merchantable and hardwood pulpwood. These sites provide more value as wildlife habitat and would not be included in the harvest.

When would the use be conducted?

Commercial tree harvesting would be specific to the size of the stand being harvested, site-specific conditions (i.e., wet conditions that might restrict operations), and market conditions (i.e., mill quotas, contractor availability). Woodcutting would not be allowed during periods when the activity would cause damage to wetland habitats or disturb trust species (including federally listed bat species).

How would the use be conducted?

Commercial tree harvesting would be conducted with the issuance of a Special Use Permit, addressing any concerns specific to the conservation easement. A variety of equipment including chainsaws, feller-bunchers, log skidders, dozers, or excavators would be required to cut and prepare logs for transport. Active harvest operations may include felling trees, skidding them to a loading dock, processing the trees (cutting to length, delimbing, debarking, etc.), loading logs or wood chips on trucks, and hauling wood products offsite. Access may be by automobile and trailer, pick-up truck, farm tractor, semi-tractor or larger traditional logging equipment. Best Management Practices as defined by the Mississippi Forestry Commission would be implemented to preserve water quality (MFC 2008). The harvested acres would be replanted with site-appropriate native hardwood species using current site prep and

planting recommendations. Planting could be completed by machine or hand-planting crews depending on site conditions. The site may require preparation prior to planting. Site preparation techniques would be approved through the Special Use Permit and might include chemical or mechanical techniques.

Why is this use being proposed or reevaluated?

Commercial tree harvesting is being proposed to improve wildlife habitat on the Harris 515 Conservation Easement. The lands are privately owned and managed to conserve environmental quality for wildlife. The CE language specified that the US Fish and Wildlife Service has regulatory authority on all vegetation within the easement boundary. In some cases, forest management is desirable to convert off-site woody species to a more suitable cover type. On this property it would also address concerns of an aging pine stand that is seeing a decline in forest health due to stem density. The Harris 515 CE would harvest loblolly pines and replant hardwoods, which are a more suitable forest type for the property's specific site characteristics and the purpose of the easement. FSA easements are assigned to the nearest refuge and managed based on habitat type and size, as is specified in the North Mississippi Refuges Complex Comprehensive Conservation Plan (CCP; USFWS 2005). The CCP and Environmental Assessment included an analysis of forest management for all lands within the Complex. The draft Forest Habitat Management Plan for the North Mississippi Refuges Complex (USFWS 2004) proposed that FSA properties managed as conservation easements would be subject to forest entry and identified the Harris 515 CE as a priority for inventory and forest management.

Availability of Resources

To comply with the Refuge Recreation Act (Public Law 87-714), the Project Leader must determine whether sufficient resources—financial, staffing, facilities, or other infrastructure—are available to support the proposed use without materially interfering with the refuge purpose(s) or the mission of the National Wildlife Refuge System. This determination should be informed by a review of current capacity and, where applicable, the refuge's Comprehensive Conservation Plan (CCP).

Assessment of current resources and capacity

The resources required to support this use is minimal on behalf of the refuge staff. Issuance of a special use permit and a site visit prior to forestry operations would require one staff approximately 8 hours to accommodate this use at an estimated cost of $496. This action is a one-time event so would not have recurring costs. Contracting and oversight of a qualified logger would be the responsibility of the landowner and their registered forester.

Impacts of changes to resources and capacity

The availability of resources is subject to change and the level of use provided may vary based on current staffing, partner support, funding, or infrastructure conditions. Costs may increase over time, in relation to changes in the costs for equipment, maintaining facilities, etc. A substantial increase to the number of requests may also create the need for additional resources to administer the use. The Project Leader would use sound professional judgment in evaluating whether the refuge or its partners can develop, operate, and maintain the use in a compatible manner.

For other refuge uses, if resource conditions shift such that the refuge can no longer sustain the use in a compatible manner, the Project Leader may modify or suspend the use pursuant to 50 CFR 25.21 (or 50 CFR 36.42 for Alaska). The public would be notified of any changes to refuge uses, including temporary modification or suspension, re-evaluation of compatibility and/or discontinuing of refuge uses.

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 use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This CD 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." Air quality, floodplains, wilderness, visitor use and experience, cultural resources, refuge management and operations, and socioeconomics would not be more than negligibly impacted by the action and have been dismissed from further analyses.

Commercial harvesting of timber on the Harris 515 CE is anticipated to have a positive impact on wildlife by ultimately converting homogenous mature pine plantation to a hardwood forest. The early successional habitat created through the harvest of pines and establishment of a hardwood stand would increase habitat diversity, providing valuable food and cover resources for a variety of wildlife. This area would provide seeds, soft mast, and scrubby structure. In the long-term this managed forest would transition to providing hard mast, cavity trees, and connectivity with other forested habitats (LMVJV 2007). Species benefited would initially include generalists and those associated with scrub-shrub habitats but over time this would transition to species associated with mature hardwood forest (LMVJV 2011). This directly addresses refuge goals 1 and 4 and objectives 1-7 Forest Birds and 4-2 Forest Management (USFWS 2005).

Short-term impacts

Wildlife species would be disturbed during tree harvest activities through the use of heavy equipment, human presence, and alteration of the forest structure; however,

this is expected to be a short-term impact. Species potentially impacted include forest-dwelling birds, mammals, and herpetofauna. Once the mature pine stand is removed and hardwoods are established, wildlife would benefit from increased forage and cover in the initial years of the hardwood stand. Following tree planting activities, wildlife associated with early successional and/or scrub shrub habitats would be positively impacted by the newly created habitat (LMVJV 2007). Primary benefits to wildlife would include an increase in the diversity of cover, production of soft mast and seeds, and availability of browse for mammals and birds, and diversity and abundance of flower plants for pollinators.

Vegetation would be impacted directly through the removal of pine sawtimber, chip-n-saw and pulpwood and indirectly from the operation of logging equipment on the logging site. Vegetation would also be impacted by the creation of loading decks to stage and load logs for transport off-site. There is also the potential to spread or introduce non-native, invasive plants to the site. Water quality could temporarily be impacted by the removal of forest cover. Soil compaction from the operation of logging and hauling equipment on site could occur. Movement of soils off site through erosion could also occur with the removal of the canopy and operation of heavy equipment on the site. For these reasons, Best Management Practices prescribed by the Mississippi Forestry Commission would be followed to minimize these potentially negative impacts (MFC 2008).

Long-term impacts

Vegetation would be significantly impacted by the proposed use. Commercial tree harvest would remove the loblolly pine stands on the property. A forest management plan prepared by a registered forester would guide the establishment of a hardwood stand on the site using native, site-appropriate species. This would provide long-term benefits to local wildlife by providing hard mast and cover resources for a variety of wildlife species. Reforesting the site could also help protect water quality in the long term by stabilizing soils, thereby preventing erosion and siltation in local waterways (LMVJV 2007). Shifts in species assemblages would be expected to reflect the transition from a closed canopy monoculture stand of loblolly pine to a heterogenous young hardwood stand. With more sunlight reaching the forest floor following harvest, the plant community would transition from shade tolerant species like Chinese privet (*Ligustrum sinense*), elms (*Ulmus spp.*), blueberries (*Vaccinium spp.*), and maples (*Acer spp.*) to less shade tolerant, pioneer species including brambles (*Rubus spp.*), grasses, and light seeded trees such as black willow (*Salix nigra*), sweetgum (*Liquidambar styraciflua*), and sycamore (*Platanus occidentalis*; Baker and Langdon 1990, LMVJV 2007, LMVJV 2011).

Wildlife species expected to occur in mature pine stands include late-successional associated bird species such as wood thrush, red eyed vireo, pine warbler, and Kentucky warbler (Legrand et al. 2007). Many bird species have been shown to decline as stands transition to late seral stage, closed canopy conditions, including

Carolina wren, hooded warbler, wood thrush, northern cardinal, common yellowthroat, eastern towhee, white-eyed vireo, and yellow breasted chat (Hestir and Cain 1999). Avian species expected to occur in an early successional hardwood planting include early successional and scrub-shrub associates such as yellow-breasted chat, eastern towhee, dickcissel, red-winged blackbird, and eastern meadowlark (Twedt et al. 2002). As the hardwood stand matures the species assemblage would gradually shift towards mid- and late-successional associated species, although the stand size does limit its value for forest interior breeding birds (LMVJV 2007). In addition to a shift in use by breeding birds, the habitat would be improved for many resident species like white-tailed deer, wild turkey, rabbits, and herpetofauna which would benefit from increased structural and species diversity of the plant community (LMVJV 2011).

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 14 days from June 8, 2026 to June 22, 2026. The public will be made aware of this comment opportunity through the Tallahatchie National Wildlife Refuge website. A hard copy of this document will be posted at the North Mississippi Refuges Complex Headquarters at 2776 Sunset Drive, Grenada, MS 38901. It will be made available electronically on the refuge website (www.fws.gov/refuge/tallahatchie). Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final determination.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Mississippi's Best Management Practices for Forestry would be followed as per Special Use Permit language (MFC 2008).
2. A cultural resources review may be required to be compliant with the National Historic Preservation Act and / or Archaeological Resources Protection Act. If any unintended discoveries of cultural or historic artifacts result from this action, activities would be halted immediately pending a thorough consultation with the Regional Archeologist.
3. A Special Use Permit must be issued for this use that specifies dates of implementation, timing and other specifics required to determine the implementation would adhere to refuge guidelines.
4. An Intra-Service Biological Evaluation would be completed in compliance with Section 7 of the Endangered Species Act prior to these activities occurring. Harvest timing may be altered to mitigate impacts to federally listed species.

Justification

The stipulations outlined above would help ensure that the use is compatible at the Harris 515 Conservation Easement. Commercial tree harvest, 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 commercial tree harvest at the Harris 515 Conservation Easement, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the easement. Rather, appropriate and compatible commercial tree harvest would be the use through which conservation easements can be managed for enhanced wildlife habitat.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2036

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Figures

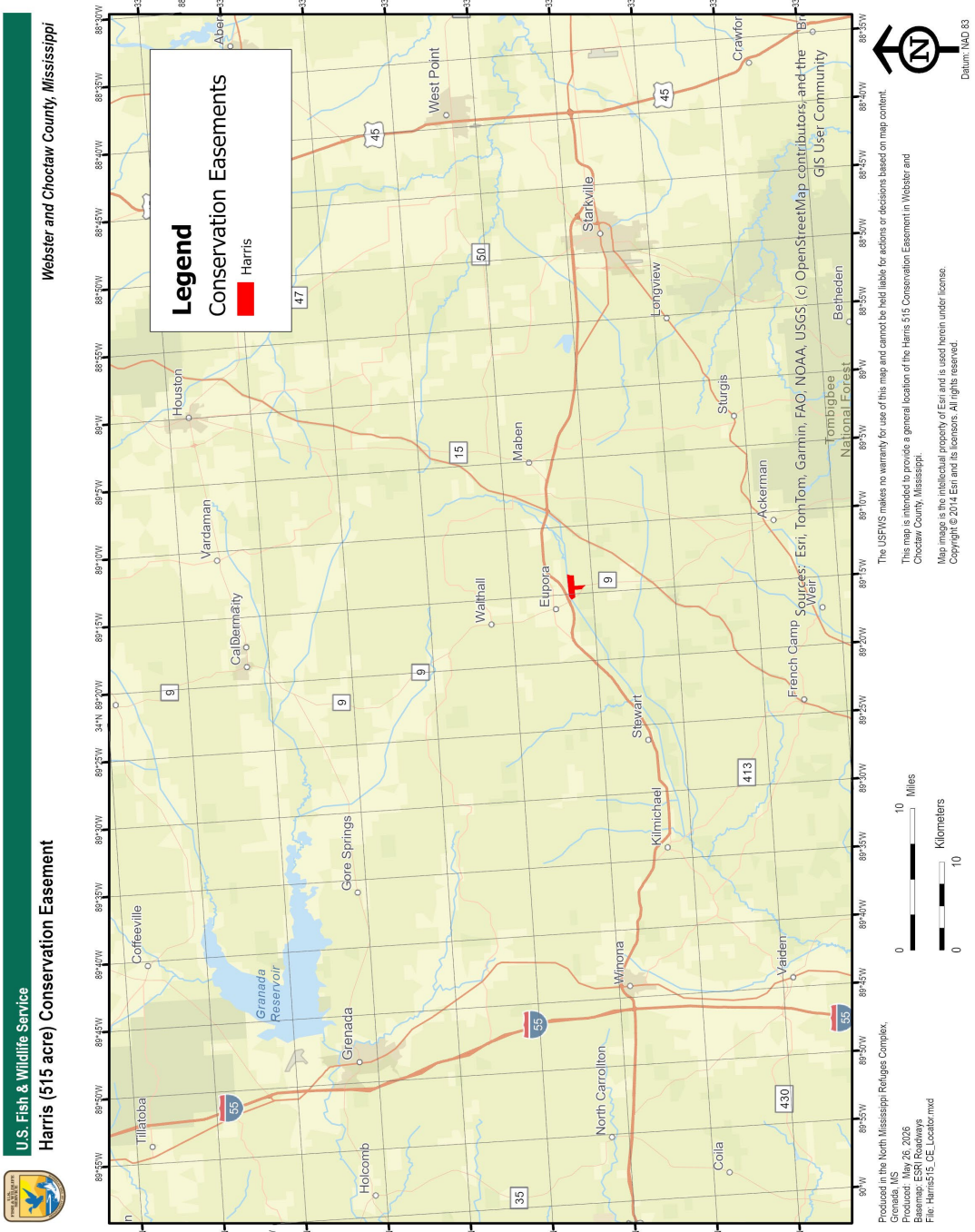

Figure 1. Harris 515 Conservation Easement location south of Eupora, Mississippi.

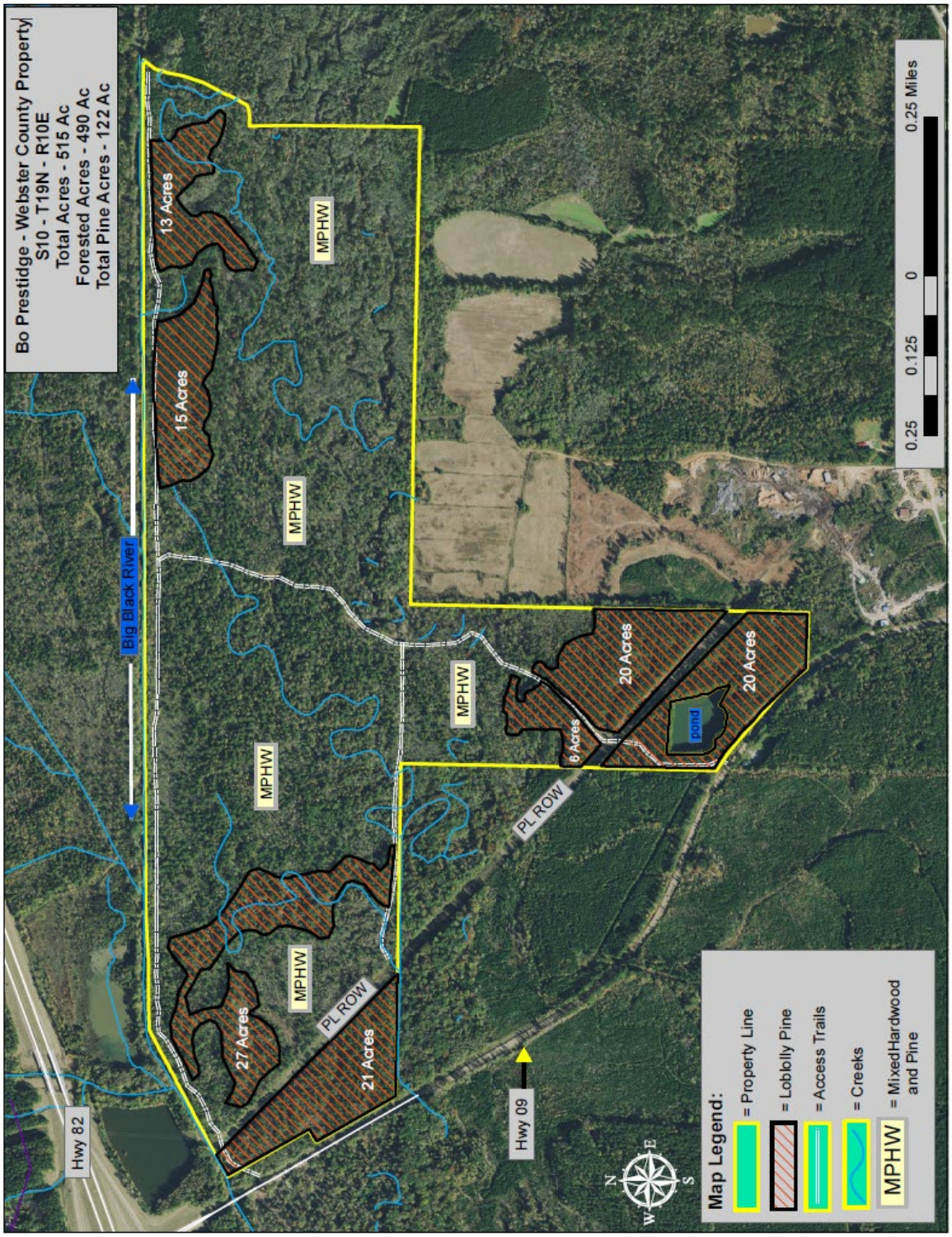

Figure 2. Forest management stands on the Harris 515 Conservation Easement, Webster and Choctaw counties Mississippi.