

Oak Ridge Conservation Area

Fifteen-Year Area Management Plan FY 2018-2032



Joia B. Allen
Forestry Division Chief

3-28-18
Date

Oak Ridge Conservation Area Management Plan Approval Page

PLANNING TEAM

Kevin Brunke, Wildlife Management Biologist

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Kara McSpadden, Private Land Conservationist

Michael Darnell, Design and Development

SOUTHEAST REGION

RCT Chair


Signature

2-9-2018
Date

FORESTRY DIVISION

Forest Management Chief


Signature

3/26/18
Date

OVERVIEW

- **Official Area Name:** Oak Ridge Conservation Area, #8211
- **Year of Initial Acquisition:** 1982
- **Acreage:** 243 acres
- **County:** Stoddard
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**
 - A. Strategic Direction**

The area is to be managed to protect and enhance the natural resources while providing public recreation to the extent compatible with those resources.
 - B. Desired Future Condition**

The desired future condition of Oak Ridge Conservation Area (CA) is a diverse community of early successional forest and bottomland hardwood forest.
 - C. Federal Aid Statement:**

N/A

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
 - A. Priority Areas:** None
 - B. Natural Areas:** None

- II. Important Natural Features and Resources**
 - A. Species of Conservation Concern:** Species of conservation concern are known from this area. Area managers should consult the Natural Heritage Database annually and review all management activities with the natural history biologist.
 - B. Caves:** None
 - C. Springs:** None

- III. Existing Infrastructure**
 - Two parking lots
 - Graveled field roads, 0.5 miles
 - One primitive camping area

- IV. Area Restrictions or Limitations**
 - A. Deed Restrictions or Ownership Considerations:** None
 - B. Federal Interest Conditions/Restrictions:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational

- activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** Missouri's Drainage District 12 maintains a 120-foot right of way along both sides of the center line of Cypress Lateral. Missouri Pacific Railroad owns a right of way through the area.
 - D. Cultural Resources Findings:** No known cultural resources.
 - E. Endangered Species:** None observed.
 - F. Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Oak Ridge CA is one of the last remaining tracts of bottomland hardwood forest in the Dudley area.
- 2) The topography is generally flat with the difference between the highest and lowest elevation being 14 feet. The lower elevations are seasonally flooded during late fall through early spring. Some of the forested habitat is wetter than it was historically because of impounded water caused by spoil from Cypress Lateral and from surrounding ditches on adjacent land, particularly in the southeastern portion of the area.
- 3) Before the Missouri Department of Conservation (the Department) purchased this tract, the tract had been heavily harvested, burned and grazed; the area contained approximately 45 acres of open field. After the Department purchased the property, the old fence was removed along with any remnants of old outbuildings and debris from when this was an active farm. The open portions of the area were initially reforested in 1988. The majority of these plantings were successful, but there are still small pockets of old fields.
- 4) The southwestern part of the area is isolated from the rest of the forest and hard to access because the Missouri Pacific Railroad crosses the area from east to west and the Cypress Lateral crosses the area from north to south.

Management Objective 1: Manage bottomland hardwood forest as habitat for a species mix characteristic of the natural communities.

Strategy 1: Follow the Southeast Region forest inventory schedule and inventory each compartment on a 15- to 20-year re-entry. (Forestry)

Strategy 2: From inventory data, develop and implement forest management actions (harvest and forest thinning) as budget and time constraints allow.

(Forestry)

Strategy 3: Tree harvesting will be used to create forest habitat conditions suitable for wetland forest wildlife species. A long term goal is to have 35%-50% of forested acres meet the desired stand structure outlined in Table 2 (Figure 7) of *Restoration, Management and Monitoring of Forest Resources in the Mississippi Alluvial Valley: Recommendations for Enhancing Wildlife Habitat* (Lower Mississippi Valley Joint Venture Forest Resource Conservation Working Group, 2007). (Forestry)

Strategy 4: Consult with wildlife biologists for habitat management recommendations. (Forestry, Wildlife)

Management Objective 2: Control or reduce invasive species.

Strategy 1: Discourage or eliminate populations of invasive species that threaten the integrity of natural communities and Missouri species of conservation concern. (Forestry, Wildlife)

Strategy 2: Periodically survey for new populations of invasive species. (Forestry, Wildlife)

Management Objective 3: Provide suitable habitat for native biota in forested stands.

Strategy 1: Implement forest management practices to enhance small mammal habitat. (Forestry)

Strategy 2: Enhance reptile and amphibian habitat through the use of forest management activities that includes leaving abundant coarse woody debris in the bottomland forest. (Forestry)

Strategy 3: Utilize forest management strategies to provide a diverse forest structure for migratory and forest interior bird species. These activities should provide vertical and horizontal structure, along with diversity in canopy structure. (Forestry)

Strategy 4: Monitor for Missouri species of conservation concern and other wildlife, with special emphasis on those that have been found in the vicinity. (Forestry, Wildlife, Fisheries, Protection, Private Lands)

Strategy 5: Periodically request management recommendations from natural history biologist for Missouri species of conservation concern if present. (Forestry, Wildlife)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Aquatic features on Oak Ridge CA are limited. Cypress Lateral is the primary aquatic feature and is a conduit for water transfer. Portions of the lower elevations are seasonally flooded from precipitation or flood events.

Management Objective 1: Maintain efforts to improve water quality and prevent soil erosion from management activities.

Strategy 1: Implement best management practices according to the *Missouri Watershed Protection Practice Recommended Practices for Missouri Forests: 2014 Management Guidelines for Maintaining Forested Watersheds to Protect Streams* (Missouri Department of Conservation, 2014). (Forestry)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) The primary uses of Oak Ridge CA are small game hunting, wildlife viewing and deer hunting. The area is occasionally used for waterfowl hunting when conditions coincide with seasons.

Management Objective 1: Provide high-quality public hunting and viewing opportunities.

Strategy 1: Conduct management activities that will provide habitat for a diversity of species. (Forestry)

Strategy 2: Manage public access to offer quality outdoor experiences. (Forestry, Protection)

Management Objective 2: Maintain the area's boundary system.

Strategy 1: Maintain posted boundary and area signs, as required by Department policy along the surveyed boundary. (Forestry)

Management Objective 3: Observe statewide hunting, fishing, and public use regulations for Department areas.

Strategy 1: Enforce area regulations. (Protection)

Strategy 2: Continue to issue special use permits to individuals, as needed and appropriate for the area. (Forestry)

Management Objective 4: Facilitate a good working relationship with neighboring landowners.

Strategy 1: Work with neighbors to minimize any boundary, trespass, or any other issues affecting Oak Ridge CA. (Forestry)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) The current level of infrastructure at Oak Ridge CA is adequate. Explore opportunities for improvements to existing infrastructure that could enhance public use and reduce maintenance time and expense over the long term.
- 2) Consider land acquisition, when available.

Management Objective 1: Maintain area management infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with the Department guidelines and at currently identified maintenance level. (Forestry)

Management Objective 2: Maintain or improve existing infrastructure to maximize its remaining functionality.

Strategy 1: Perform routine maintenance on infrastructure. (Forestry, Design and Development)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

MANAGEMENT TIMETABLE

All strategies for this management plan are considered ongoing.

APPENDICES

Area Background:

Oak Ridge Conservation Area (CA) is located on the Dudley Ridge in Stoddard County. Oak Ridge CA was purchased in December 1981 from the estate of Susie Hall of Dudley, Missouri.

The purpose of the area is to manage and conserve bottomland hardwood forest habitat and provide compatible outdoor recreational opportunities. During the 1960s and 1970s, much of the land on and around Oak Ridge CA was cleared, drained, and graded for crop farming, resulting in the decline of both resident and migratory wildlife.

Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Forests	237.5		96
Old Fields	3.5		2
Open Water	1		1
Infrastructure	1		1
Total	243		100
Cypress Ditch Frontage		2,600	

Public Input Summary:

The draft Oak Ridge Conservation Area Management Plan was available for a public comment period July 1–31, 2017. The Missouri Department of Conservation received comments from one respondent (Appendix A). The Oak Ridge Conservation Area Planning Team carefully reviewed and considered these ideas as they finalized this document. A brief summary of public input themes, including how they were incorporated or why they were not, can be found below. Rather than respond to each individual comment, comments are grouped into general themes and are addressed collectively.

Department responses to themes and issues identified through the Oak Ridge Conservation Area Management Plan public comment period.

Suggests leaving this area alone, no additional parking lots or roads.

There are no plans to add any additional infrastructure (parking lots and gravel roads) at Oak Ridge CA. We feel that the current level of infrastructure is adequate for the primary uses of the area.

References:

Lower Mississippi Valley Joint Venture Forest Resource Conservation Working Group. (2007). *Restoration, management and monitoring of forest resources in the Mississippi Alluvial Valley: Recommendations for enhancing wildlife habitat*. Wilson, R., Ribbeck, K, King, S., & Twedt, D. (Eds.). Vicksburg, MS: LSU Printing Services.

Missouri Department of Conservation. (2014). *Missouri watershed protection practice recommended practices for Missouri forests: 2014 management guidelines for maintaining forested watersheds to protect streams*. Jefferson City, MO: Conservation Commission of the State of Missouri.

Maps:

Figure 1: Area Map

Figure 2: Easement Map

Figure 3: Land Cover Map

Figure 4: Table 2 from *Restoration, Management and Monitoring of Forest Resources in the Mississippi Alluvial Valley: Recommendations for Enhancing Wildlife Habitat*

Additional Appendices:

Appendix A: Oak Ridge Conservation Area Management Plan Public Comments

Figure 1: Area Map

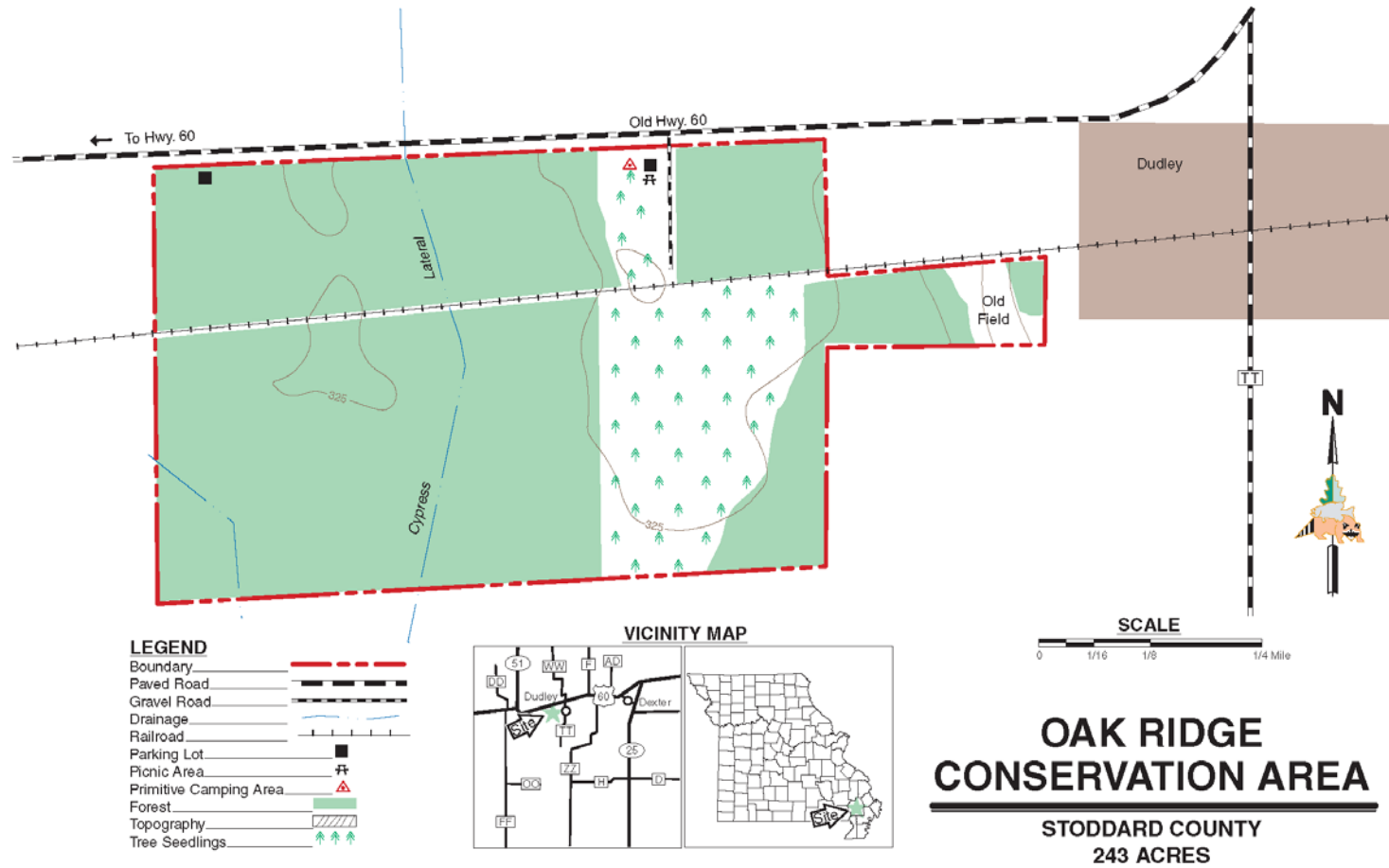


Figure 2: Easement Map

Oak Ridge Conservation Area

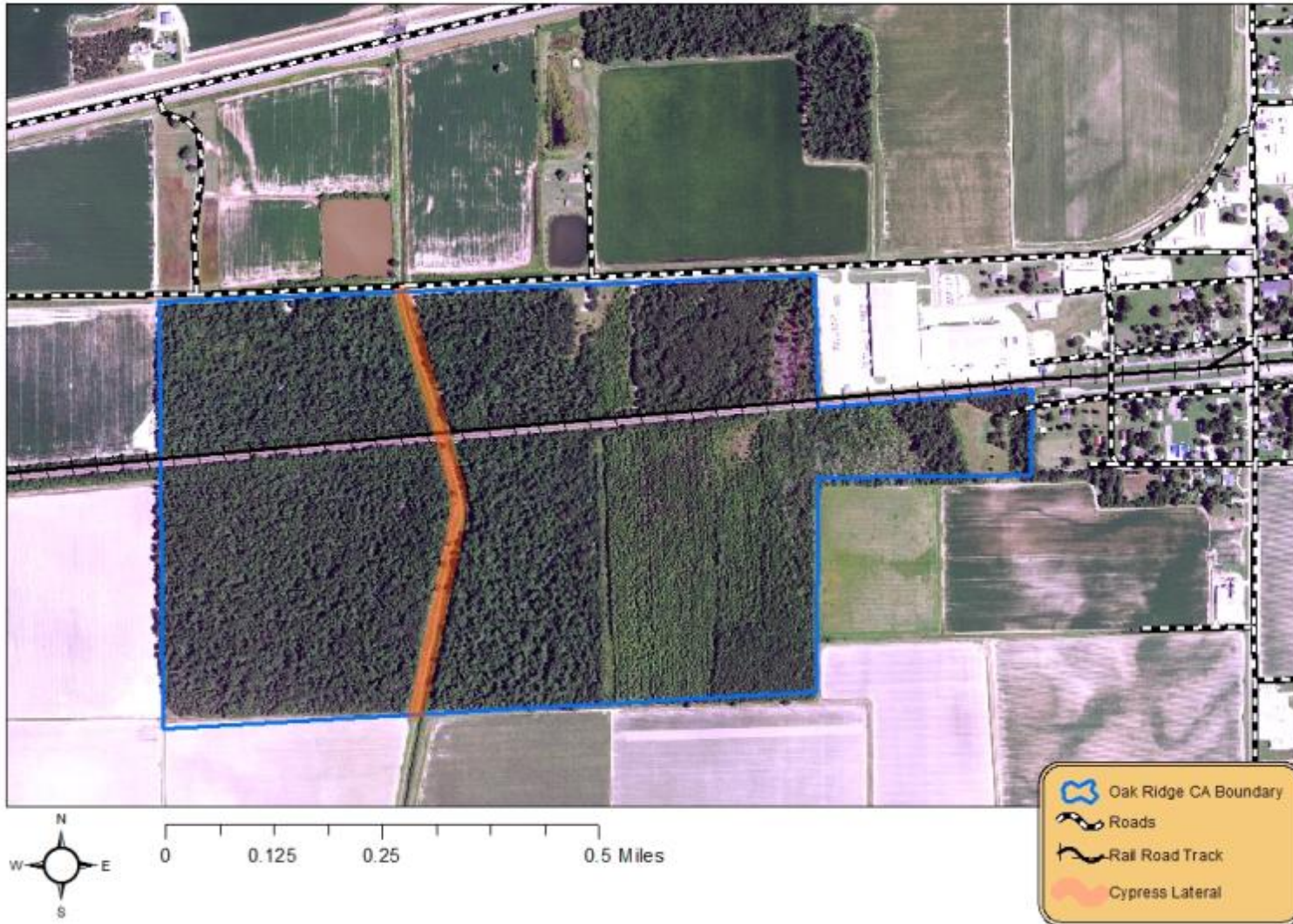


Figure 3: Land Cover Map

Oak Ridge Conservation Area

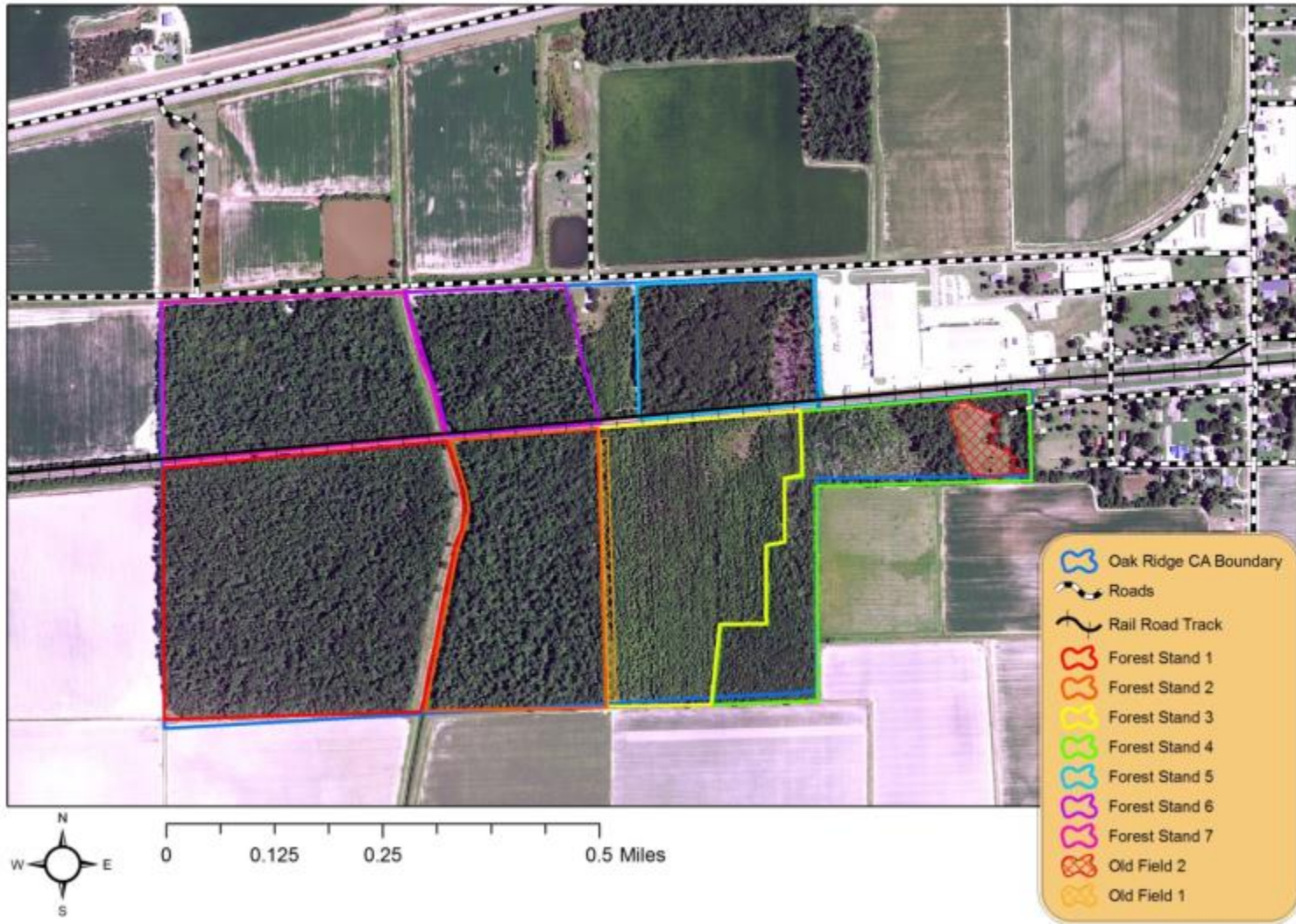


Figure 4: Table 2 from *Restoration, Management and Monitoring of Forest Resources in the Mississippi Alluvial Valley: Recommendations for Enhancing Wildlife Habitat*

Table 2. Desired stand conditions for bottomland hardwood forests within the Mississippi Alluvial Valley.

Forest variables ¹	Desired stand structure	Conditions that may warrant management
Primary Management Factors		
Overstory canopy cover	60 – 70 %	>80%
Midstory cover	25 – 40 %	<20% or >50%
Basal area	60 – 70 ft ² / acre with ≥25% in older age classes ²	>90ft ² / acre or ≥60% in older age classes
Tree stocking	60 – 70 %	<50% or >90%
Secondary Management Factors		
Dominant trees ³	>2 / acre	<1 / acre
Understory cover	25 – 40%	<20%
Regeneration ⁴	30 – 40% of area	<20% of area
Coarse woody debris (>10 inch diameter)	≥200 ft ³ / acres	<100ft ³ / acre
Small cavities (<10 inch diameter)	>4 visible holes / acre or >4 “snag” stems ≥4 inch dbh or ≥2 stems >20 inch dbh	<2 visible holes / acre or <2 snags ≥4 inch dbh or <1 stem ≥20 inch dbh
Den trees/large cavities ⁵ (>10 inch diameter)	1 visible hole / 10 acres or ≥2 stems ≥26 inch dbh (≥8 ft ² BA ≥26 inch dbh)	0 visible holes / 10 acres or <1 stem ≥26 inch dbh (<4 ft ² BA ≥ 26 inch dbh)
Standing dead and/or stressed trees ⁵	>6 stems / acre ≥10 inch dbh or ≥2 stems ≥20 inch dbh (>4 ft ² BA ≥ 10 inch dbh)	<4 stems ≥10 inch dbh / acre or <1 stem ≥20 inch dbh (<2 ft ² BA ≥ 10 inch dbh)

Appendix A: Oak Ridge Conservation Area Management Plan Public Comments

Received during public comment period (July 1–31, 2017):

How about do nothing. Do not waste taxpayer money to go in and destroy a nature area with useless, parking lots and chat roads. Everything the MDC touches its worst than before yall started. Yall never improve anything just degrade it for everyone else and spend millions doing it. This goes for every conservation project ive personally been to. Again Leave things alone! stop tryin to justify your job buy spending money and ruing our outdoors