

DRAFT

Dr. Frederick Marshall

Conservation Area

Ten-Year Area Management Plan

FY 2017-2026



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OVERVIEW

- **Official Area Name:** Dr. Frederick Marshall Conservation Area, #200006
- **Year of Initial Acquisition:** 1999
- **Acreage:** 169 acres
- **County:** Platte
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

Manage for wildlife and aquatic resources while providing compatible public recreational opportunities.
 - B. Desired Future Condition**

The desired future conditions of the Dr. Frederick Marshall Conservation Area (CA) are healthy forest, aquatic, grassland, and old field communities that include a diversity of habitat complexes.
 - 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:** None observed.
 - B. Caves:** None
 - C. Springs:** None

- III. Existing Infrastructure**
 - Two parking lots
 - Two fishless ponds, 0.2 acres total

- IV. Area Restrictions or Limitations**
 - A. Deed Restrictions or Ownership Considerations:** None
 - B. Federal Interest:** 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:** Fitch Trust ingress/egress easement
- D. **Cultural Resources Findings:** No known cultural resources.
- E. **Endangered Species:** None observed.
- F. **Boundary Issues:** Maintaining accurate and identifiable boundary markers is a priority for this property.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Invasive plants are a threat. Sericea lespedeza, Johnson grass, and tall fescue are well established. Populations of shrub honeysuckle, Japanese honeysuckle, garlic mustard, and autumn olive have been located on or very close to the area. These species will pose a problem in the future.
- 2) There are opportunities for the Missouri Department of Conservation (the Department) to maintain and enhance forest health and wildlife habitat through sustainable forest management practices.
- 3) A diversity of open field vegetation provides food and cover for various wildlife species, including bobwhite quail, white-tailed deer, turkey, rabbits, and song birds. Dr. Frederick Marshall CA has many open fields that were planted to native grasses, forbs, and converted to other early successional vegetation types. The forbs disappeared from the open fields with time, making them less desirable for wildlife. The fields require management to increase plant diversity and promote forb growth. Managers can maximize quality habitat by managing for a mix of shrubs, forbs, and grasses. Management of these early successional fields provides brood-rearing areas for ground nesting birds, increased forage for white-tailed deer, and habitat for rabbits and other wildlife.

Management Objective 1: Manage forest, woodland, and savanna areas to improve overall natural community health while improving habitat for wildlife.

Strategy 1: Utilize sustainable forest management practices to promote healthy forest, woodland, and savanna communities. Practices could include, but are not limited to, timber harvesting, forest thinning, tree planting, seeding, and prescribed burning. (Wildlife, Forestry)

Strategy 2: Monitor and suppress invasive species. (Wildlife)

Strategy 3: Utilize Best Management Practices during timber harvest as described in the Department's manuals: *Missouri Watershed Protection Practice manual* (Missouri Department of Conservation, 2014) and the *Missouri Forest Management Guidelines Voluntary Recommendations for Well-Managed Forests* (Missouri Department of Conservation, 2014). (Forestry)

Management Objective 2: Provide food and cover for wildlife, and maintain open fields for a variety of wildlife species.

Strategy 1: Utilize Department staff to plant crops/food plots annually. Crop rotation will be used for soil health and a portion of these acres will be fallowed each year to increase early successional habitat acres for wildlife. Ensure farming practices are conducted to minimize the potential for soil erosion. (Wildlife)

Strategy 2: Manage early successional old fields and existing stands of planted native grasses and forbs to maintain diverse vegetative habitats. Rotate management units to provide adequate habitat during management activities. (Wildlife)

Strategy 3: Monitor and suppress invasive species. (Wildlife)

VI. Aquatic Resource Management Considerations:

Challenges and Opportunities:

- 1) Riparian corridors have been widened along the stream resources, but opportunities exist to improve the quality and plant diversity of these corridors.
- 2) The Platte River is the main aquatic feature of the area.

Management Objective 1: Protect and enhance stream corridors to improve water quality, promote stable stream banks, provide flood abatement, and increase habitat diversity.

Strategy 1: Evaluate stream buffer widths and conditions and provide recommendations to the area manager. Additional evaluations should be repeated every five years to account for changes in land management and area boundaries. (Fisheries)

Strategy 2: Maintain and/or establish 100-foot or wider vegetated buffers (pursuant to Department guidelines [Missouri Department of Conservation, 2009]) on both sides of permanent and intermittent streams by 2017. A diversity of suitable trees and shrub species will be used if buffers need to be enhanced. (Fisheries, Forestry, Wildlife)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Management options exist for a diversity of habitats and wildlife species to provide opportunities for hunting, fishing, trapping, and wildlife viewing within a short drive from a major metropolitan area.
- 2) Opportunities exist for school and civic group use fishing, hunting, and wildlife viewing through the special use permitting guidelines.

- 3) Opportunities exist to build relationships with neighboring landowners.

Management Objective 1: Maintain a diversity of terrestrial and aquatic habitats to provide public users with quality hunting, fishing, trapping, and wildlife viewing opportunities.

Strategy 1: Implement management activities targeting improvement of terrestrial wildlife populations. Terrestrial habitat management activities should provide opportunities for hunting and viewing a variety of species, including deer, turkey, and small game species such as squirrel, rabbit, and quail. (Wildlife, Protection, Fisheries)

Strategy 2: Manage the area’s aquatic resources to provide access and opportunity to quality fishing experiences. Public access to the Platte River and area ponds should be maintained, evaluated, and improved as feasible. (Wildlife, Fisheries)

Strategy 3: Maintain adequate access to area habitats through existing network of parking lots, levies, and service roads. Take advantage of opportunities to improve access to area resources, when feasible to do so. (Wildlife, Design and Development).

Strategy 4: Continue to allow trapping on area, as appropriate, through the special use permitting guidelines. (Wildlife)

Management Objective 2: Promote a positive working relationship with neighboring landowners.

Strategy 1: Inspect and maintain boundaries on a regular cycle. (Wildlife)

Strategy 2: Respond to neighbors with request for shared fencing, boundary issues or trespass problems. (Wildlife)

Strategy 3: Respond to neighboring landowners with interest of habitat management on their private property. (Wildlife, Private Land Services)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain area infrastructure at current levels.
- 2) Prioritize acquisition of adjoining land due to close proximity to a large urban area and the area’s small acreage.

Management Objective 1: Maintain area infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with Department guidelines and at currently identified maintenance level. (Wildlife, 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, should be considered.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Aquatic Resource Management										
<i>Objective 1</i>										
Strategy 1					X					X

APPENDICES

Area Background:

The Dr. Frederick Marshall Conservation Area was acquired through a donation from Mrs. Cecilia Miller Fitch. The area is named in honor of the great-grandfather of Mrs. Fitch, Dr. Frederick Marshall. Dr. Marshall was a practicing physician, an entrepreneur, and a well-respected resident of the Platte City area from 1837 to 1861.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest	62		37
Open Land	36		21
Grassland	30		18
Savanna	24		14
Restoration Tree Planting	13		8
Old Field	4		2
Total	169		100
River Frontage-West bank		0.5	

References:

Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, Missouri: Missouri Department of Conservation.

Missouri Department of Conservation. (2014). *Missouri Forest Management Guidelines Voluntary Recommendations for Well-Managed Forests*. Jefferson City, Missouri: Conservation Commission of the State of Missouri.

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, Missouri: Conservation Commission of the State of Missouri.

Maps:

Figure 1: Area Map

Figure 2: Aerial and Easement Map

Figure 3: Topographic Map

Figure 4: Current Vegetation Map

Figure 1: Area Map

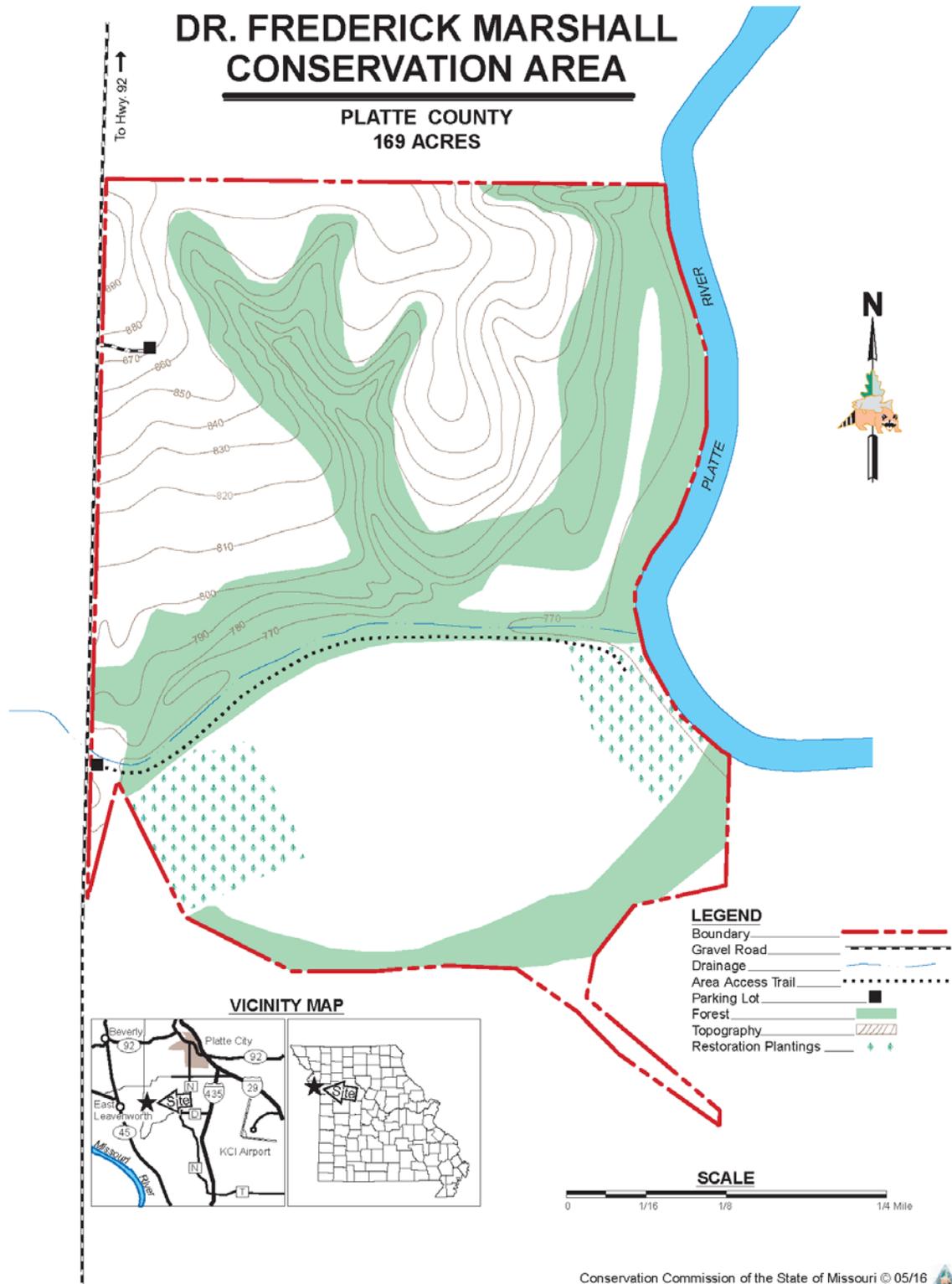


Figure 2: Aerial and Easement Map

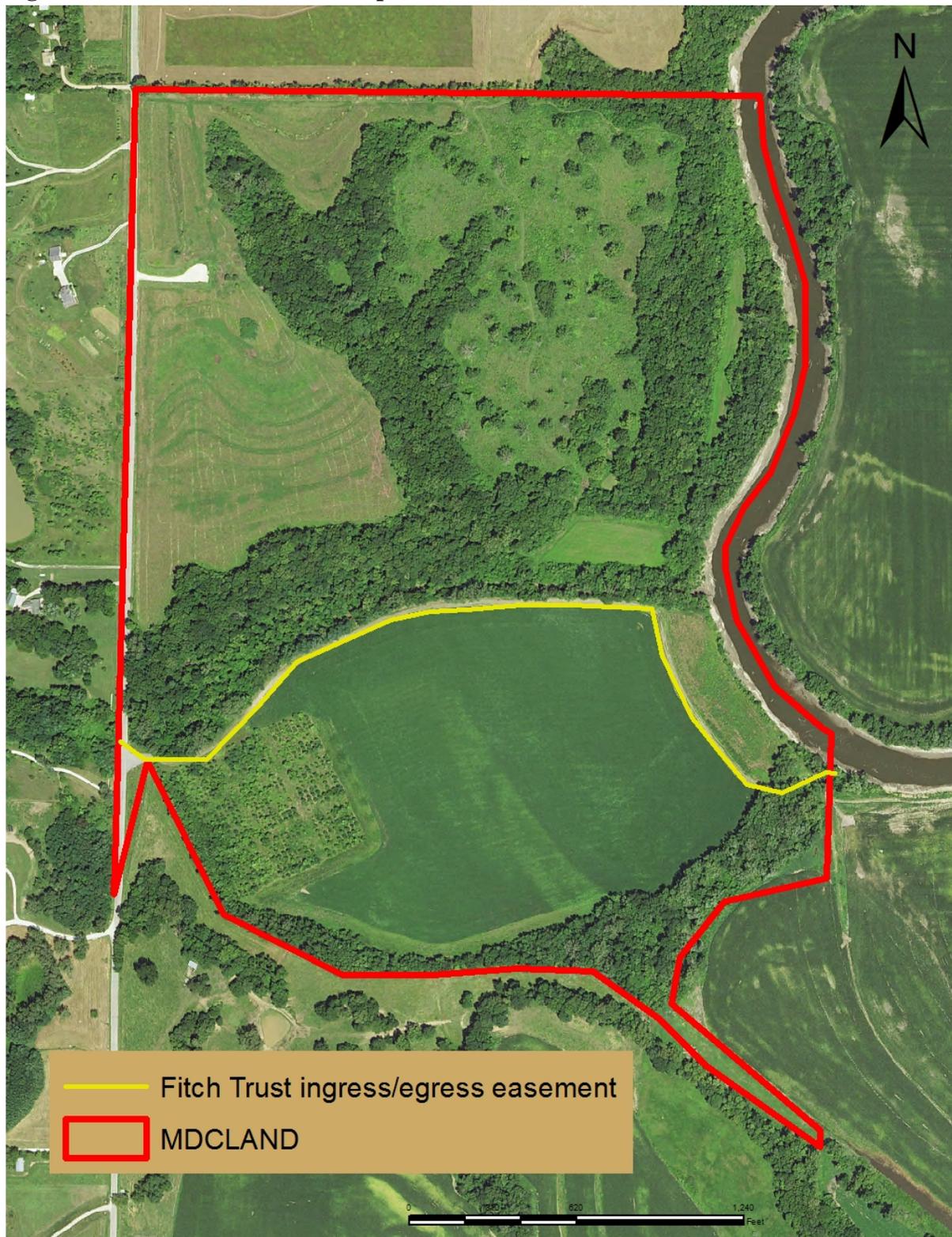


Figure 3: Topographic Map

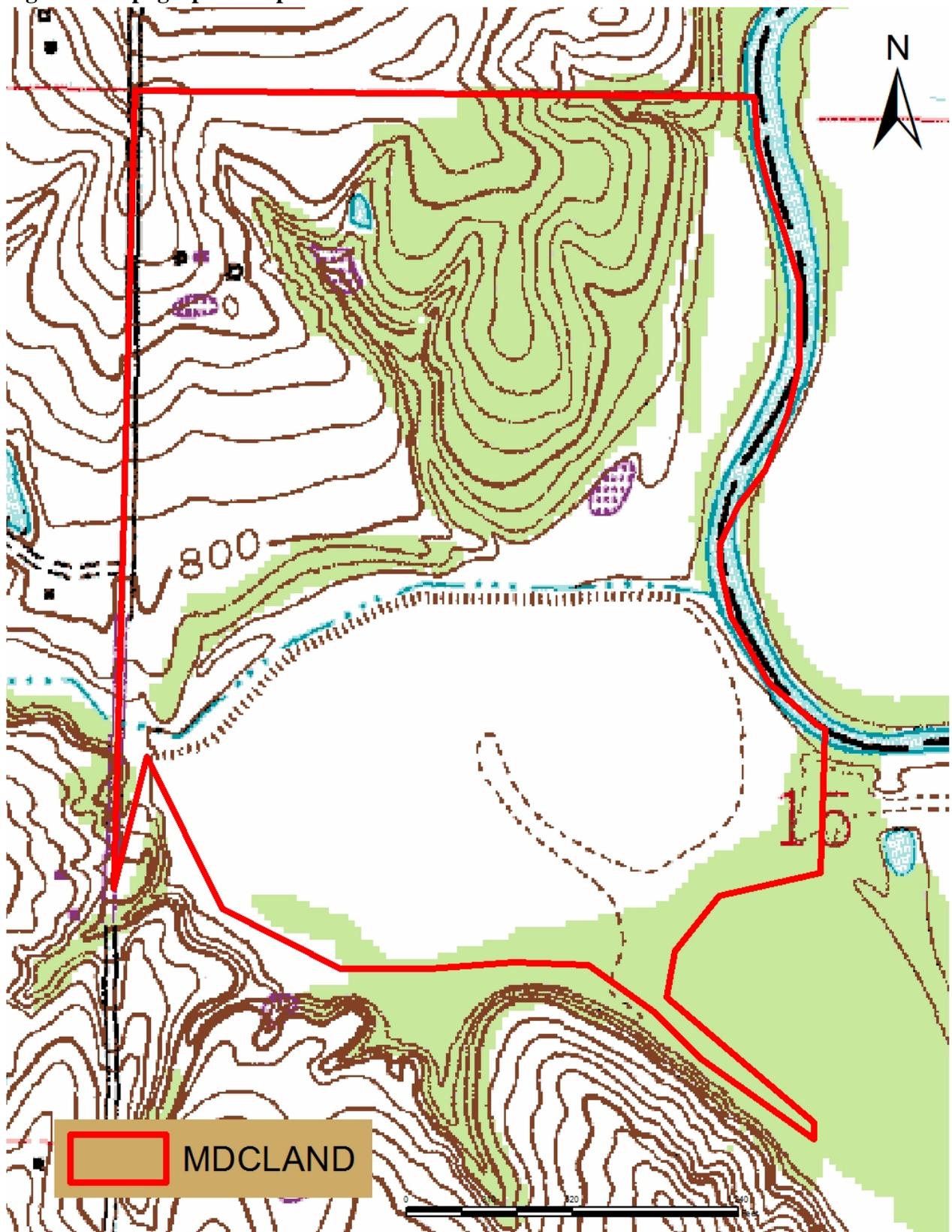
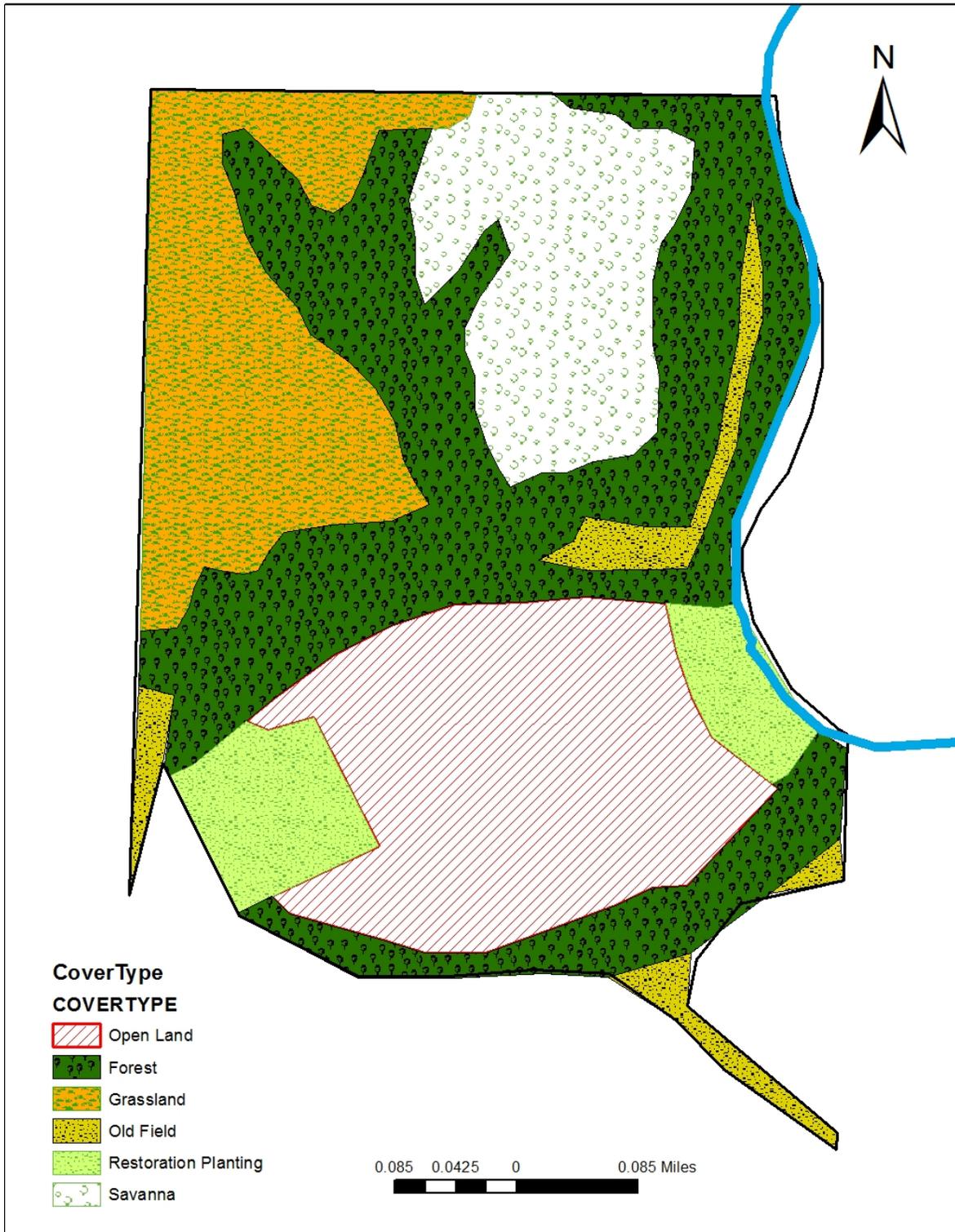


Figure 4: Current Vegetation Map



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