

# Magnolia Hollow Conservation Area

## Ten-Year Area Management Plan FY 2017-2026



*Lesia M. Allen*  
Forestry Division Chief

*7-27-16*  
Date

## Magnolia Hollow Conservation Area Management Plan Approval Page

### PLANNING TEAM

Mike Keeley, Resource Forester

Bruce Henry, Natural History Biologist

Ryan Dirnberger, Wildlife Management Biologist

Mike Reed, Fisheries Management Biologist

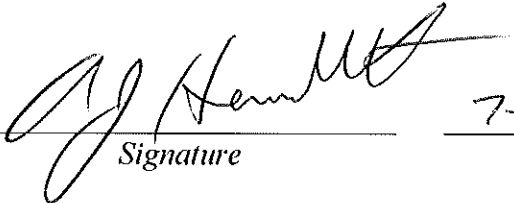
Bridget Jackson, Conservation Education Consultant

Rob Sulkowski, Conservation Agent

Kyle Lorenz, Private Land Conservationist

### SOUTHEAST REGION

RCT Chair

  
\_\_\_\_\_  
Signature

7-18-16  
Date

### FORESTRY DIVISION

Forestry Management Chief

  
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Signature

7/27/16  
Date

## OVERVIEW

- **Official Area Name:** Magnolia Hollow Conservation Area, # 8508
- **Year of Initial Acquisition:** 1985
- **Acreage:** 1,751 acres
- **County:** Ste. Genevieve
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**
  - A. Strategic Direction**

Manage for wildlife and forest resources with emphasis on forest species and compatibility with outdoor recreational opportunities.
  - B. Desired Future Condition**

The desired future condition of Magnolia Hollow Conservation Area (CA) is healthy forest, woodland, open land, and riparian ecosystems that provide a variety of public use opportunities.
  - C. Federal Aid Statement**

N/A

## GENERAL INFORMATION AND CONDITIONS

### I. Special Considerations

- A. Priority Areas:** Brickley Hills Terrestrial Conservation Opportunity Area, Frenchman Creek Aquatic Conservation Opportunity Area, Stoples Hollow Aquatic Conservation Opportunity Area, Priority Forest Landscape
- B. Natural Areas:** Brickley Hills Natural Area

Parts of the 221 acre Brickley Hills Natural Area were recognized as early as 1975 as having significant forest natural communities. The current natural area conserves high-quality old second-growth forest and woodland communities that support a diverse ground flora along with populations of characteristic songbirds, amphibians and reptiles.

### II. Important Natural Features and Resources

- A. Species of Conservation Concern:** Species of conservation concern are not known from this site, but are found in the surrounding area. Area managers should consult annually with the natural history biologist.
- B. Caves:** None
- C. Springs:** Yes, records kept with Missouri Department of Conservation (Department) natural history biologist.

**D. Other:** Magnolia Hollow CA contains, Mesic limestone/dolomite forest, dry-mesic limestone/dolomite forest, dry-mesic chert forest, dry-mesic chert woodland, dry limestone/dolomite woodland, dry limestone/dolomite cliff, limestone/dolomite talus, mesic bottomland forest, and riverfront forest natural communities.

**III. Existing Infrastructure**

- Four parking lots, Americans with Disabilities Act (ADA) accessible
- Hiking trails (one 0.3-mile ADA accessible trail, one 1.1-mile trail)
- Campground with picnic tables, grills and fire rings
- Static archery range
- Skeet shooting range (ADA accessible)
- Viewing platform (ADA Accessible) with picnic table
- Five-acre lake

**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:** Burlington Northern Railroad “Right-of-Way” and Joseph Mahue ingress and egress to private land inholding.
- D. Cultural Resources Findings:** No known cultural resources.
- E. Endangered Species:** None observed.
- F. Boundary Issues:** None

**MANAGEMENT CONSIDERATIONS**

**V. Terrestrial Resource Management Considerations**

Magnolia Hollow CA contains approximately 1,671 acres of forests and woodlands. Management of these areas is focused on maintaining resilient natural communities that provide for diverse wildlife.

**Challenges and Opportunities:**

- 1) Manage forest and woodland communities.
- 2) Monitor and manage as needed the natural area’s natural communities.
- 3) Maintain the open lands on Magnolia Hollow CA in early vegetative successional stages for improved wildlife habitat.

**Management Objective 1:** Manage for sustainable and healthy forest and woodland communities with emphasis on wildlife habitat and improved timber quality for future harvests.

**Strategy 1:** Continue to implement the forest inventory schedule for the area. Inventory will be used to guide future management decisions. (Forestry)

**Strategy 2:** Use uneven-aged, even-aged, forest stand improvement, and prescribed fire management practices to maintain and regenerate forest and woodland communities where appropriate. (Forestry)

**Strategy 2:** Monitor forests and woodlands for invasive vegetation, diseases and insects. Suppress any infestations that may develop by using mechanical and chemical control methods. (Forestry, Wildlife)

**Management Objective 2:** Maintain and enhance 221-acre natural area.

**Strategy 1:** Monitor the area for invasive species. Suppress any infestation that may develop using appropriate methods. (Wildlife, Forestry)

**Strategy 2:** Implement a prescribed fire regime in the woodland natural community to maintain the natural area to promote the unique and diverse natural communities and their associated plants and animals. Prescribed fire will also be used, to a lesser intensity and frequency in the forest sites to help slow succession to more shade tolerant species. (Forestry, Wildlife)

**Strategy 3:** Survey the natural area for Missouri species of conservation concern (Wildlife)

**Strategy 4:** Utilize non-commercial thinning of understory sugar maple and eastern red cedar on appropriate sites as needed to promote oak regeneration and a more diverse ground flora. (Forestry)

**Strategy 5:** Investigate the expansion of the natural area to include a larger portion of Magnolia Hollow CA. (Forestry, Wildlife)

**Management Objective 3:** In open fields, provide early successional habitat.

**Strategy 1:** Prescribe burn warm season grass and old fields with varying size and timing to provide a diversity of plant responses. (Forestry)

**Management Objective 4:** Create and enhance shrubby/edge cover to enhance wildlife habitat.

**Strategy 1:** Use mechanical (e.g. chain saw and tree shear) to disturb overgrown shrub groups, fence rows and brushy draws. (Forestry)

**Management Objective 5:** Manage designated open land fields with perennial and annual crops.

**Strategy 1:** In food plot acres, plant a variety of grain and green browse crops to supplement native food sources for wildlife. (Forestry)

## **VI. Aquatic Resources Management Considerations**

### **Challenges and Opportunities:**

- 1) Manage fish populations in lake for quality angling.
- 2) Manage aquatic and/shoreline vegetation at the lake for quality fish habitat and angler access.
- 3) Maintain area ponds incapable of supporting quality fisheries as habitat for amphibians, reptiles and other wildlife.

**Management Objective 1:** Manage fish populations in lake.

**Strategy 1:** Maintain fish populations through area regulations. (Fisheries, Protection)

**Strategy 2:** Supplement natural recruitment and/or provide additional species by stocking, when necessary. (Fisheries)

**Management Objective 2:** Manage aquatic and shoreline vegetation.

**Strategy 1:** Use chemical, biological and/or mechanical methods to control aquatic and/or shoreline vegetation. (Fisheries)

**Strategy 2:** Establish desirable aquatic vegetation in lake. (Fisheries)

**Management Objective 3:** Manage ponds incapable of supporting quality fisheries as habitat for amphibians, reptiles and other wildlife.

**Strategy 1:** Maintain wildlife ponds by allowing shoreline and aquatic vegetation to develop. Fell trees into water when available for reptile use. (Wildlife, Forestry)

## **VII. Public Use Management Considerations**

### **Challenges and Opportunities:**

- 1) Provide for public hunting and viewing opportunities.
- 2) Maintain and encourage educational and interpretive opportunities.
- 3) Maintain hiking trail for user access.
- 4) Build relationships with neighboring landowners.

**Management Objective 1:** Provide public hunting and viewing opportunities.

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

**Management Objective 2:** Improve educational and interpretive opportunities on Magnolia Hollow CA.

**Strategy 1:** Communicate recreational opportunities to the public. (Forestry)

**Strategy 2:** Communicate the uniqueness of the area to teachers, students, scout groups and other youth groups to facilitate as a possible destination for ecology classes, school programs and workshops. (Outreach and Education, Forestry)

**Management Objective 3:** Maintain hiking trail for user access.

**Strategy 1:** Keep hiking trail clear of brush and downed trees. (Forestry)

**Strategy 2:** Keep trail properly marked to improve the ability of users to navigate the trail. (Forestry)

**Strategy 3;** Monitor hiking trail for possible soil erosion issues and implement best management practices to prevent erosion. (Forestry)

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

**Strategy 1:** Work with neighbors to minimize any boundary, trespass, invasive species or other issues affecting Magnolia Hollow CA or private property. (Forestry)

## VIII. Administrative Considerations

### **Challenges and Opportunities:**

- 1) Maintain area infrastructure at current levels.
- 2) Consider acquisition of land.

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

**Strategy 1:** Maintain area infrastructure in accordance with Missouri Department of Conservation guidelines. (Forestry)

### **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.





## APPENDICES

### Area Background:

Magnolia Hollow Conservation Area is in Ste. Genevieve County, 10 miles north of Ste. Genevieve along the Mississippi River.

This rugged 1,751-acre area is bordered by Establishment Creek and Schmidt's Island, along the Mississippi River. It was purchased entirely with Missouri Department of Conservation funds in three separate purchases.

After the final purchase the service roads and parking lots were established to help management and public access. Much of the main service road was the historic white sands county road that has been abandon. This road gets inundated with flood waters from the Mississippi River. In 1994, a shotgun and archery range was opened. The area was determined to be unsafe for a rifle range. In 1997, a primitive campground was established. There are several sites with picnic tables and grills. In 2004, an ADA accessible trail and viewing platform was established for observing the Mississippi River and Establishment Creek bottoms. In 2013, a five acre lake and new parking lot were completed. In 2015, the county road to access the area was changed from White Sands Road to Magnolia Hollow Drive.

The forests at Magnolia Hollow CA are diverse, ranging from bottomland forests to woodlands with small cedar glades. In general, there are different oak dominated community types that are succeeding to sugar maple on the good forest soils and eastern red cedar on the poor woodland soils. The management since the Department has taken ownership has tried to slow these successional trends and maintain the more diverse oak community types.

In the open fields, the Department has converted the traditional agricultural fields dominated by fescue to more native warm season grass and early successional old field communities. Food plots were established where the soil and topography allowed.

### Current Land and Water Types:

Land/Water Type	Acres	% of Area
Forest	1,252	71
Woodland	419	24
Field	75	4
Lake	5	1
<b>Total</b>	<b>1,751</b>	<b>100</b>

**Public Input Summary:**

The draft Magnolia Hollow Conservation Area Management Plan was available for a public comment period March 1–31, 2016. The Missouri Department of Conservation received comments from five respondents (Appendix A). The Magnolia Hollow 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 Magnolia Hollow Conservation Area public comment period

**Suggests building a fishing lake.**

Past public input brought to staff’s attention the desire for an additional fishing lake. A new 5-acre fishing lake was built in 2013. The new fishing lake was stocked and is currently open to fishing.

**Suggests adding a boat access to Establishment Creek or the Mississippi River.**

It has been determined not feasible to build a ramp on the stream due to the steep topography along the stream corridor. There are other opportunities to access the Mississippi River at St. Mary Access in Sainte Genevieve county.

**Suggests using area access roads as a multi-use trail system for hiking, biking, and horseback riding. Offers to assist with trail maintenance and planning.**

Area soils would be less than ideal for horse trails. Other horseback riding opportunities in the vicinity include the John J. Audubon Trail (U.S. Forest Service) and Pike Run Trail (St. Francois State Park).

**Suggests adding opportunities for rifle and pistol shooting at shooting range.**

Magnolia Hollow is a 1,751 acre area which is heavily used by the public for hunting, fishing, hiking and bird watching. Finding a suitable location on the area for a rifle/pistol range would remove a large portion from being used by the public for these other purposes. Since conservation areas are multi-use, it is important to ensure that we are providing opportunities on Magnolia Hollow for all these uses; constructing a rifle/pistol range isn’t feasible at this time.

**Supports bow hunting only at this area, or at least no antlerless permits.**

The goal of the Department’s deer program is to achieve and maintain deer populations at desired levels throughout Missouri. Regulations are annually assessed upon harvest data, surveys, public comments, and population simulations to achieve this desired level. Analyzing

these data annually will allow us to change methods if warranted, including whether antlerless permits should be used on this area to reach desired deer level.

**Suggests adding more parking areas for greater access to the middle and southern parts of the area.**

The more remote areas of this conservation area provide a different experience for users willing to walk for solitude. Staff have received positive feedback from the public in regards to this.

**Suggests acquiring additional property.**

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.

**Suggests keeping property lines well marked.**

We respect private property rights and will work to maintain boundaries to Department standards to minimize trespass and conflict with public use.

**Maps:**

Figure 1: Area Map

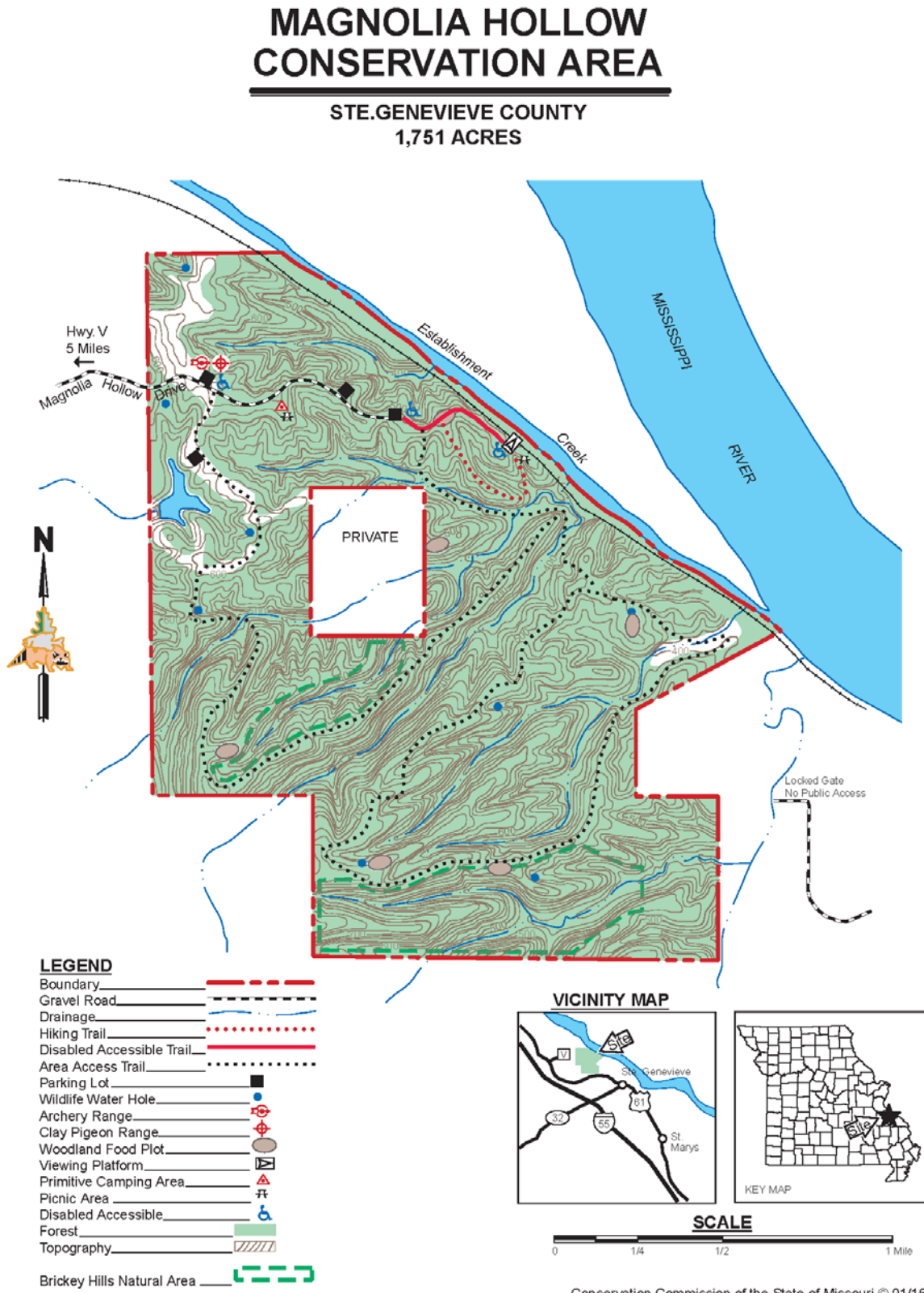
Figure 2: Aerial Map

Figure 3: Current Vegetation Map

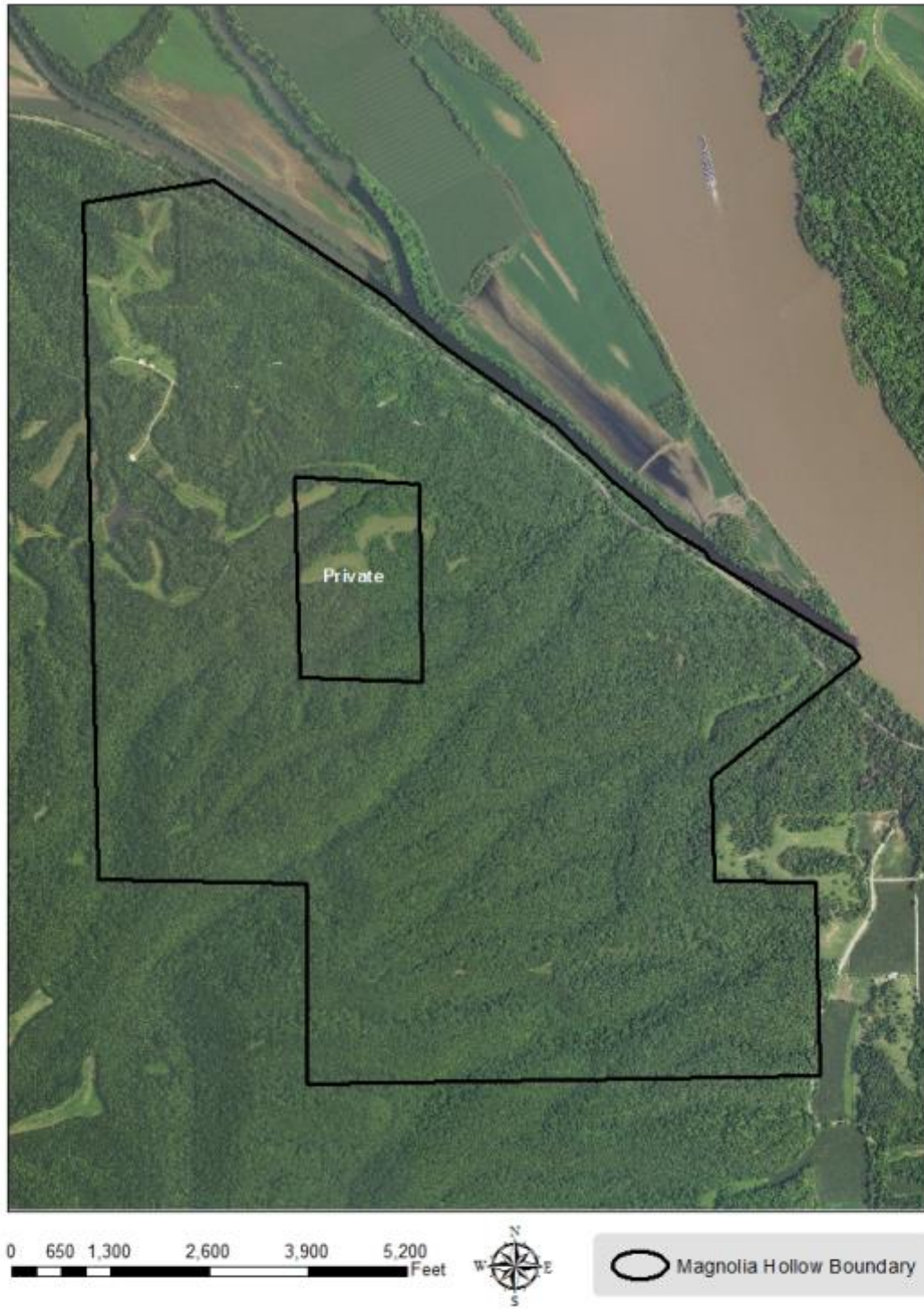
**Additional Appendices:**

Appendix A. Magnolia Hollow Conservation Area Management Plan Public Comments

Figure 1: Area Map

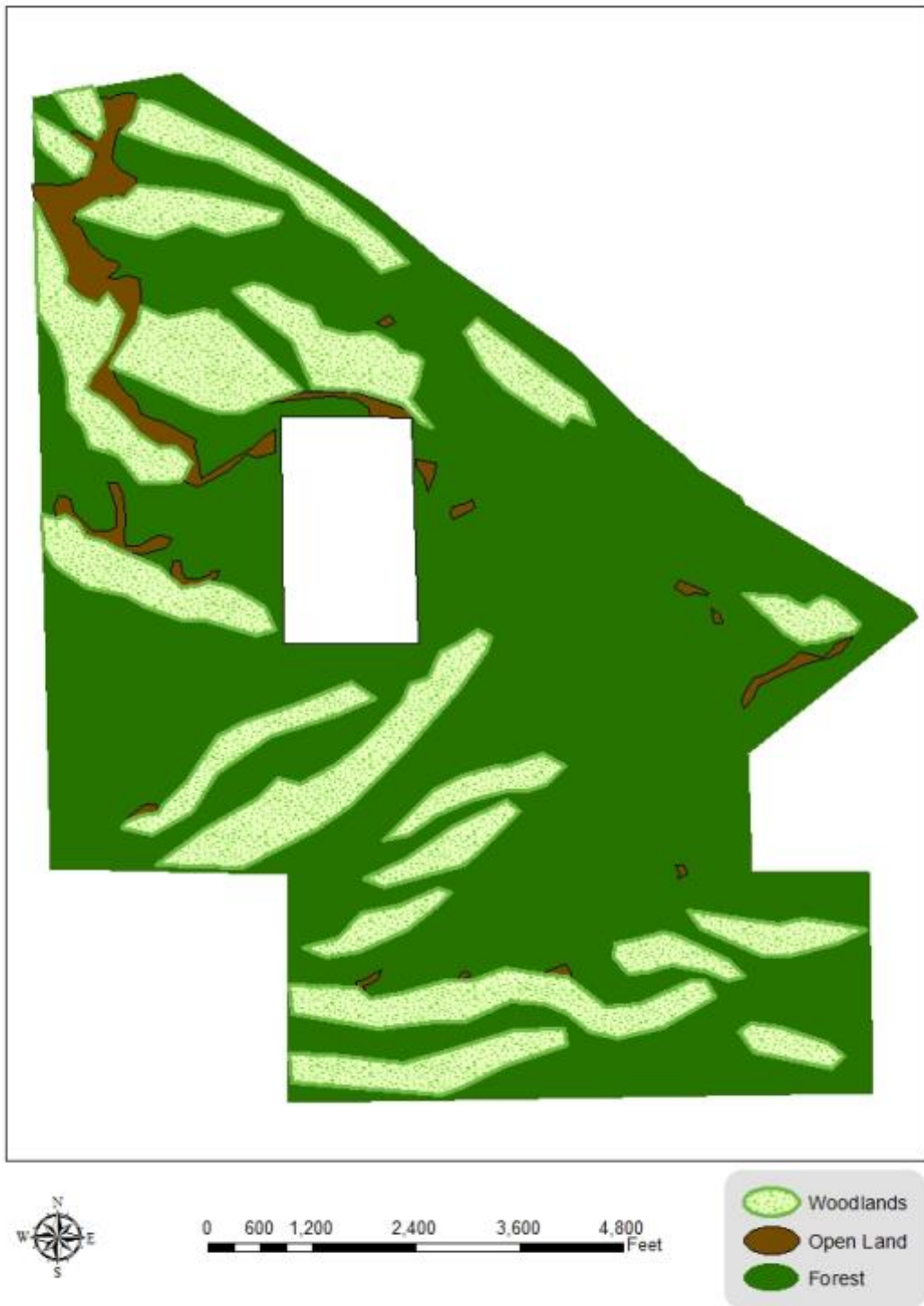


**Figure 2: Aerial Map**





**Figure 3: Current Vegetation Map**



**Appendix A. Magnolia Hollow Conservation Area Management Plan Public Comments**

Received during public comment period (March 1-31, 2016):

While the current Magnolia Hollow Conservation Area allows Shooting clay birds there is no opportunity for rifle and pistol shooting. There is nothing in this geographic area that has these opportunities. This would be a great addition to this site and provide for more usage of a under utilized resource. I can speak for a small group of us that would volunteer labor towards this effort. Thanks for this opportunity to comment.

I wish you could offer a boat access to Establishment creek and or the Mississippi River.

More parking needs to be added so there is access to the middle and southern parts of the area. Acquire the 80 or so acre that is privately owned as of now and put a fishing lake in that area. Purchase the ground from \*\*\*\*\* to gain access to the southern part of the area.

Mr. Keeley. We own property along Magnolia Hollow. We have been very satisfied working with the conservation department as our neighbors. Please continue to keep the property lines well marked. this has helped to keep trespasser (theft & hunting) problem to a minimum. We promote bow hunting only at magnolia hollow. we have seen the "brown its down" rifle hunting style here in the past & with the elimination of the point restriction we don't want it back . at least keep it bucks only. Bow hunting requires hunting skills & knowing what you are shooting. We have managed our property thru timber improvement & increased our food plots but the deer numbers have stayed the same or decreased over the last 10-15 years. I have read your plan & agree with it. Thanks.

Any ideas or problems

First, thank you for the opportunity to comment on the Magnolia Hollow CA Draft Management Plan. Equestrian trail riders in Ste. Genevieve County are fortunate to be served by the John Audubon Trail on Mark Twain National Forest in the Southwest Corner of the county. That being said Magnolia Hollow CA offers a rather rare opportunity for multi-use trail users to enjoy the rugged terrain and splendid views found in the Mississippi River Breaks.

The area access trails on Magnolia Hollow CA could be opened to multi-use, providing two very nice loops for bikers, hikers, and equestrians. While Ste. Genevieve County is not identified as underserved with regard to public land equestrian trail opportunities, opening the trails to multi-use would assist CA management to achieve several of the Public Use Management Objectives dealing with wildlife viewing, educational , recreational and interpretive opportunities, and the uniqueness of the area. It would also help to facilitate a good relationship with some neighbors.

It is likely that steep grades, creek crossings and other obstacles might make it advisable to treat or reroute the existing access trails for multi-use. Show-Me Missouri Back Country Horsemen offers our services (availability of volunteers permitting) to assist the area manager to assess any trail safety or maintenance issues and develop plans to address them. We further offer to assist

the Area Manager to develop a partnership with local trail users to assist with maintaining multi-use trails and associated infrastructure.

Thank you again for the opportunity to comment, and SMMBCH encourages the planning committee to amend the Management Plan to include multi-use trail.