

Busiek State Forest and Wildlife Area

Ten-Year Area Management Plan

FY 2017-2026



Lisa B. Allen
Forestry Division Chief

4-19-17
Date

Busiek State Forest and Wildlife Area Management Plan Approval Page

PLANNING TEAM

Ashley Schnake, Urban Wildlife Biologist

Frances Main, Resource Forester

Jeff Harris, Conservation Agent

John Miller, Interpretive Center Manager

Dave Woods, Fisheries Management Biologist

Andy Humble, Private Land Conservationist


Rhonda Rimer, Natural History Biologist

Greg Collier, Outdoor Skills Specialist

Greg Cassell, Resource Forester

SOUTHWEST REGION

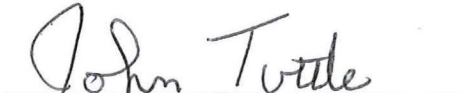
RCT Chair


Signature

3/29/17
Date

FORESTRY DIVISION

Forest Management Chief


Signature

4/19/17
Date

OVERVIEW

- **Official Area Name and Number:** Busiek State Forest and Wildlife Area, #8109
- **Year of Initial Acquisition:** 1981
- **Acreage:** 2,701 acres
- **County:** Christian
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statement of Purpose:**
 - A. Strategic Direction**

Busiek State Forest and Wildlife Area is managed for forest, woodland, and glade natural communities and the species they support.
 - B. Desired Future Condition**

The desired future condition of Busiek State Forest and Wildlife Area is a healthy forest, woodland, and glade landscape that supports upland game and other associated wildlife and plant species.
 - C. Federal Aid Statement**

N/A

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
 - A. Priority Areas:** Bull Creek Fisheries Priority Watershed
 - 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:** Yes, records kept with Missouri Department of Conservation (Department) natural history biologist. Managers should follow the Cave Management policy found in the Department Resource Policy Manual. All caves on this and other conservation areas are closed or restricted to public access. The fungus that causes White-nose Syndrome in bats has been documented in Missouri, resulting in the Department's White-nose Syndrome Action Plan that limits public access to protect bats.
 - C. Springs:** Yes, records kept with Department natural history biologist.

D. Other: Occurs in the Ozark Highlands Section, White River Hills Subsection. Historically, glade, and mixed oak and pine oak woodlands dominated this landscape.

III. Existing Infrastructure

- One unstaffed shooting range west of Highway 65 along Camp Creek
- Eight designated campsites
- Four parking lots: one at the range, one designed for horse trailer use, one off Highway A, and the main parking lot near the campsites for general public use
- Two foot bridges: one for the shooting range, one near the main parking lot
- Eighteen miles of multi-use (hike/bike/horse) trails

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:** There is a roadway easement for Don Anderson (Quarry). Highway 65 bisects the area.
- D. Cultural Resources:** Yes, records kept with the Department environmental compliance specialist. Managers should follow best management practices for Cultural Resources found in the Department Resource Policy Manual.
- E. Endangered Species:** None observed.
- F. Boundary Issues:** Establishing accurate and identifiable boundary markers is a priority for this property.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Site quality for tree growth is low on the south- and southwest-facing slopes, where glades and woodlands are present. Higher site quality is present in forested stands on the ridge tops and on north-facing slopes.
- 2) Monitor forest stands for insects and diseases (e.g., emerald ash borer, gypsy moth, thousand cankers disease, etc.).
- 3) Encroaching eastern red cedars threaten the high quality glade natural communities at Busiek State Forest and Wildlife Area. Prescribed fire is needed

to keep these communities healthy and diverse. However, use of fire near Highway 65 is a challenge.

- 4) Control of invasive species on the area, such as sericea lespedeza, Johnson grass, and eastern red cedar is a continuing challenge.

Management Objective 1: Maintain forest cover for wildlife and recreation.

Strategy 1: Monitor forested stands and glade areas for insects and diseases as well as for invasive species on an ongoing basis, as regular area maintenance and boundary work is performed. (Forestry)

Strategy 2: Conduct forest management activities to manage any insect and disease issues, as needed. (Forestry)

Strategy 3: Suppress all wildfires. (Forestry)

Strategy 4: Conduct forest inventory. Previous inventories were conducted in Compartment 1, 1994; Compartment 2, 2008; and Compartment 3, 1996. (Forestry)

Management Objective 2: Maintain high quality glade and woodland natural communities.

Strategy 1: Apply prescribed fire on a three- to five-year rotation. (Forestry)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Busiek State Forest and Wildlife Area contains approximately 6 miles of stream frontage: 3 miles of Camp Creek and 3 miles of Woods Fork.
- 2) The area also contains first- and second-order ephemeral streams, which flow from the uplands into Woods Fork and Camp Creek.

Management Objective 1: Maintain, enhance, or expand the riparian corridors of Woods Fork and Camp Creek to a minimum of 100 feet and the first- and second-order streams to a minimum of 50 feet on both stream sides, where appropriate.

Strategy 1: Allow natural regeneration to vegetate the riparian corridors, or plant trees and shrubs within the corridors, where regeneration is not likely to succeed. (Fisheries, Forestry, Wildlife)

Strategy 2: Monitor areas of stream bank erosion and address erosion using Department stream stabilization guidelines, where appropriate. (Fisheries, Forestry)

Strategy 3: Implement stream best management practices on all streams according to the Department's *Watershed and Stream Management Guidelines for*

Lands and Waters Managed by the Missouri Department of Conservation
(Missouri Department of Conservation, 2009). (Fisheries, Forestry)

Management Objective 2: Implement appropriate watershed best management practices on all Department managed areas.

Strategy 1: Conduct glade/woodland restoration, and associated forest management activities on the area according to the Department's *Missouri Watershed Protection Practice Recommended Practices for Missouri Forests: 2014 Management Guidelines for Maintaining Forested Watersheds to Protect Streams* (Missouri Department of Conservation, 2014). (Fisheries, Forestry, Wildlife)

Strategy 2: Manage roads and trails according to appropriate best management practices to minimize runoff and sedimentation into stream resources. (Fisheries, Forestry)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) The area contains 18 miles of multi-use trails (hiking, mountain biking, horseback riding, and running).
- 2) The area receives heavy public use in the form of hiking, camping, photography, birding, horseback riding, mountain biking, running, hunting, geocaching, educational field trips/trainings, and target shooting activities. All-terrain vehicles are prohibited on the area.
- 3) Heavy public use necessitates the need for enforcement and patrols to ensure safety for area users and cleanliness of the area.
- 4) It is a challenge locating users that need assistance, medical or otherwise, and providing medic assistance to injured area users.
- 5) The area contains an unstaffed rifle/pistol range, consisting of 100-, 50-, and 25-yard shooting distances with two shooting benches at each distance.

Management Objective 1: Maintain public access at the four parking areas.

Strategy 1: Perform regular parking lot maintenance, including grading, replacing gravel and parking lot posts, and maintaining signs. (Forestry, Design and Development)

Management Objective 2: Maintain an area that is safe and inviting for public use.

Strategy 1: Plan and coordinate routine and group patrols during peak activity periods to ensure compliance with area regulations. (Protection)

Strategy 2: Increase uniformed and plain clothes patrols of the shooting range to reduce littering and safety violations. (Protection)

Strategy 3: Increase patrols in the northwest section (Stoneshire) of the area to reduce the amount of all-terrain vehicle traffic and related misuse. (Protection)

Strategy 4: Continue to address special use camping permit concerns by coordinating with Forestry Division. (Protection)

Management Objective 3: Provide clearly marked and identifiable trails to allow for points of reference when locating users needing assistance.

Strategy 1: Improve signage of the color-coded trail system. (Forestry)

Strategy 2: Re-establish vegetation on closed and unofficial trails to discourage use. (Forestry)

Management Objective 4: Maintain a high level of safety for range users and non-users. Maintain an inviting range while reducing misuse.

Strategy 1: Perform biannual range inspections. (Outreach and Education)

Strategy 2: Perform regular maintenance on the range, including replacing target holding system, signs, and perimeter wire, as needed. (Forestry)

Strategy 3: Determine if patrols of the range are needed to enforce rules associated with range use. (Protection)

Management Objective 5: Maintain a range management plan that utilizes the environmental stewardship process as a guide.

Strategy 1: Perform biannual range inspections. (Outreach and Education)

Strategy 2: Perform tasks as directed by the environmental stewardship plan associated with range management. (Forestry)

Strategy 3: Work within the budgetary process to enhance the range site in a way that maintains safety while reducing erosion and enhancing the environmental features of the range (Outreach and Education, Forestry, Fisheries, Design and Development)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Boundary issues could arise as private lands adjacent to Busiek State Forest and Wildlife Area develop.

APPENDICES

Area Background:

The original 740 acres of Busiek State Forest and Wildlife Area was purchased from Dr. Paul Busiek in 1981, with Dr. Busiek donating approximately 25 percent of the purchase price to the Missouri Department of Conservation (the Department) in honor of his parents. All other land was purchased by the Department. In 2014, 199 additional acres were acquired from Missouri Department of Transportation. This new purchase will be left without designated trails due to its proximity to the shooting range and to provide uninterrupted hunting.

Busiek State Forest and Wildlife Area was purchased for a variety of purposes: to provide forest wildlife habitat improvement for public recreation, demonstration and education; to provide sustainable forests that yield diverse plant communities; and to protect and improve the riparian and stream resources along Camp Creek and Woods Fork of Bull Creek.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Woodland and Upland forest	2,454		91
Glades	165		6
Old Field	69		2
Food Plot	11		1
Other (parking lots, shooting range)	2		< 1
Total	2,701		100
Stream frontage		6	

Public Input Summary:

The draft Busiek State Forest and Wildlife Area Management Plan was available for a public comment period Sept. 1-30, 2016. The Missouri Department of Conservation received comments from five respondents (Appendix A). The Busiek State Forest and Wildlife 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.

Prior to writing the draft area management plan, the Department conducted a public input process (the Busiek State Forest and Wildlife Area Idea Gathering Stage) from Oct. 15 – Dec. 31, 2015. During this “idea gathering” stage, the Department received 98 comments from 96 respondents (see *Busiek State Forest and Wildlife Area Idea Gathering Stage Public Input Summary* at <http://short.mdc.mo.gov/ZJ2>). The area planning team took comments into

consideration as they drafted this 10-year management plan. Department responses to comments received during the fall 2015 idea gathering stage can be found in the report, *Missouri Department of Conservation Responses to Public Comments – Busiek State Forest and Wildlife Area Idea Gathering Stage*. This report is available upon request by contacting Amy Buechler (amy.buechler@mdc.mo.gov).

Department responses to themes and issues identified through the Busiek State Forest and Wildlife Area Management Plan public comment period.

Suggests adding privies, especially near campsites and shooting range.

Due to past flooding events, soil type, and topography of the land, construction of permanent restrooms or privies is not feasible on this area. We are considering the possibility of contracting a “porta-potty” service during peak usage months.

Suggests adding rain shelters and benches to area trails.

Benches along the trails may be considered. When shade shelters were constructed in the past by a Boy Scout troop, they were vandalized and/or destroyed within the first month of construction.

Supports maintaining and improving equestrian trails.

All trails at Busiek State Forest and Wildlife Area are multi-use. Trails are systematically re-routed due to severe erosion. This work is done primarily by our volunteer workforce (Show-Me Missouri Back Country Horsemen are a strong presence in this workforce).

Appreciates the opportunity to ride horses on Busiek State Forest and Wildlife Area trails.

Offers volunteer assistance maintaining and marking trails.

Thank you Show-Me Missouri Back Country Horsemen for your assistance with trail maintenance. We will continue to welcome volunteers. Anyone interested in volunteer opportunities should contact the area manager to discuss options and protocol.

Suggests patrolling area on horse to enforce no “off-trail” riding.

We heavily rely on self-patrolling trail users. We would appreciate your assistance in making sure “off trail” excursions do not occur.

Wonders if volunteer opportunities or service projects are available for youth at Busiek State Forest and Wildlife Area.

Several service projects have been discussed with the Primary (Junior Sunday school class) of the Church of Jesus Christ of Latter Day Saints; there is an annual volunteer workday that occurs on Busiek State Forest and Wildlife Area in May or June. Shade shelters have been constructed

in the past by a Boy Scout troop, but were vandalized and/or destroyed within the first month of construction.

References:

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

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: Vicinity Map

Figure 3: Aerial Map

Figure 4: Facilities Map

Figure 5: Easement Map

Figure 6: Food Plot Map

Figure 7: Land Cover Type Map

Additional Appendices:

Appendix A: Busiek State Forest and Wildlife Area Management Plan Public Comments

Figure 1: Area Map

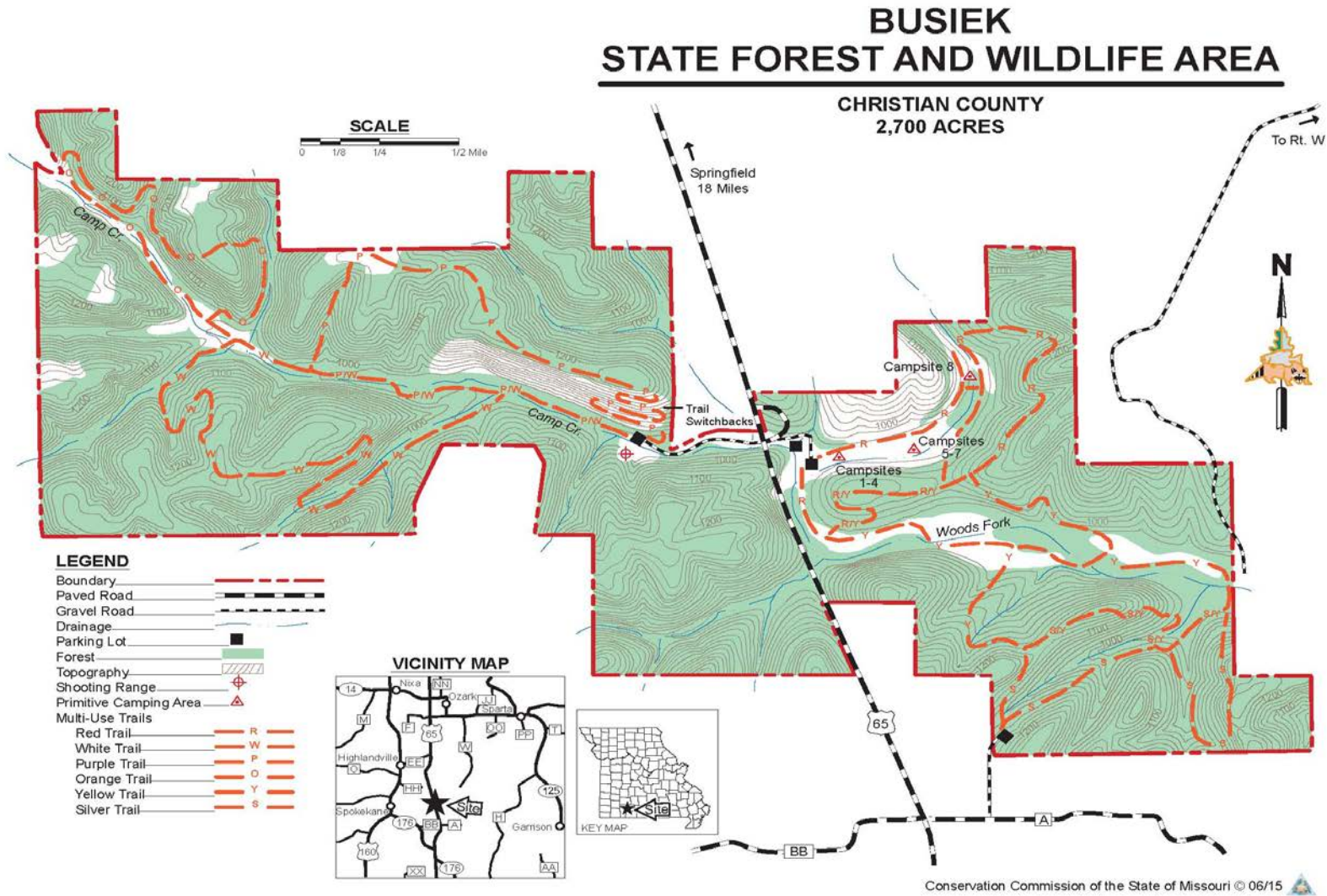


Figure 2: Vicinity Map

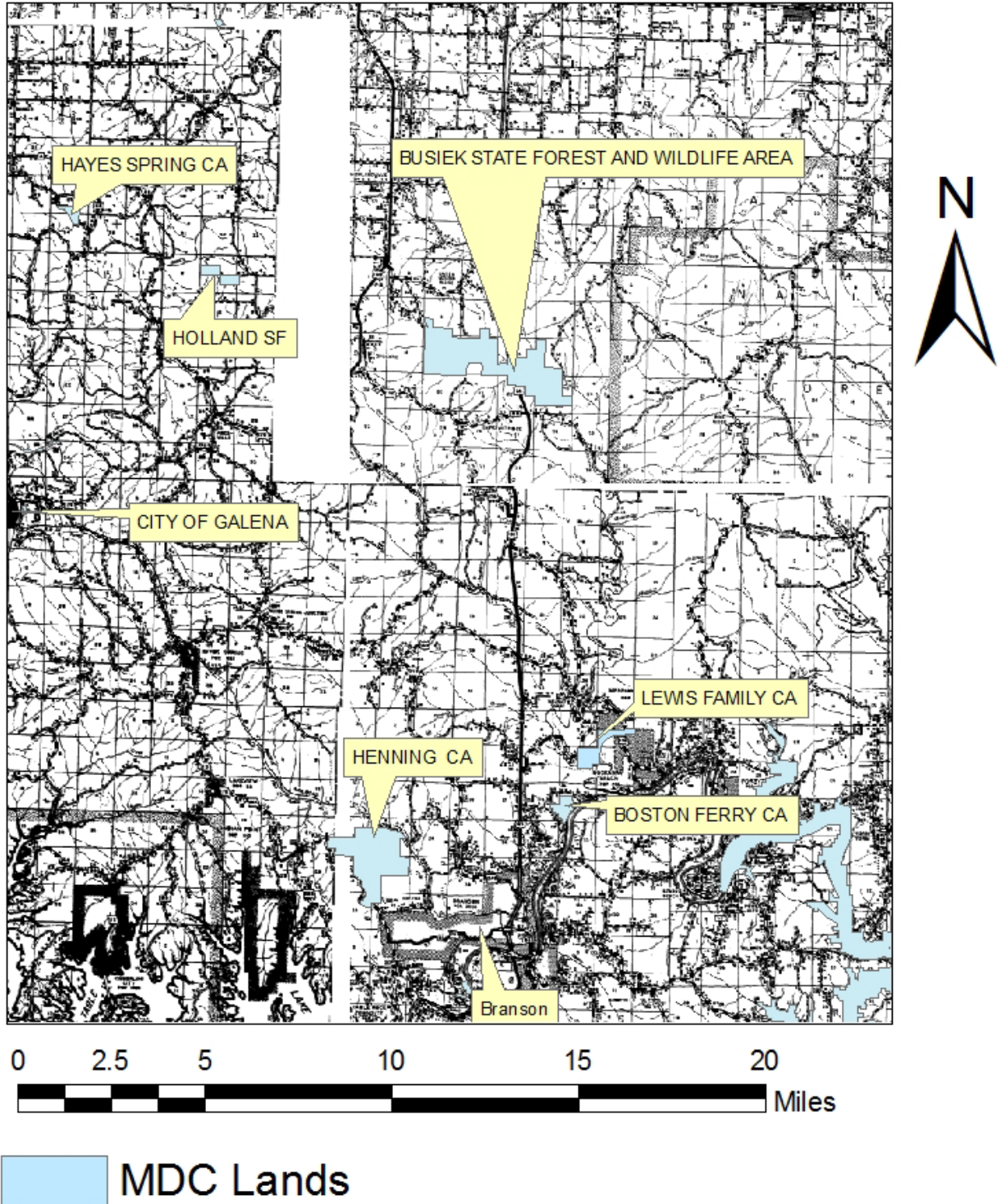


Figure 3: Aerial Map

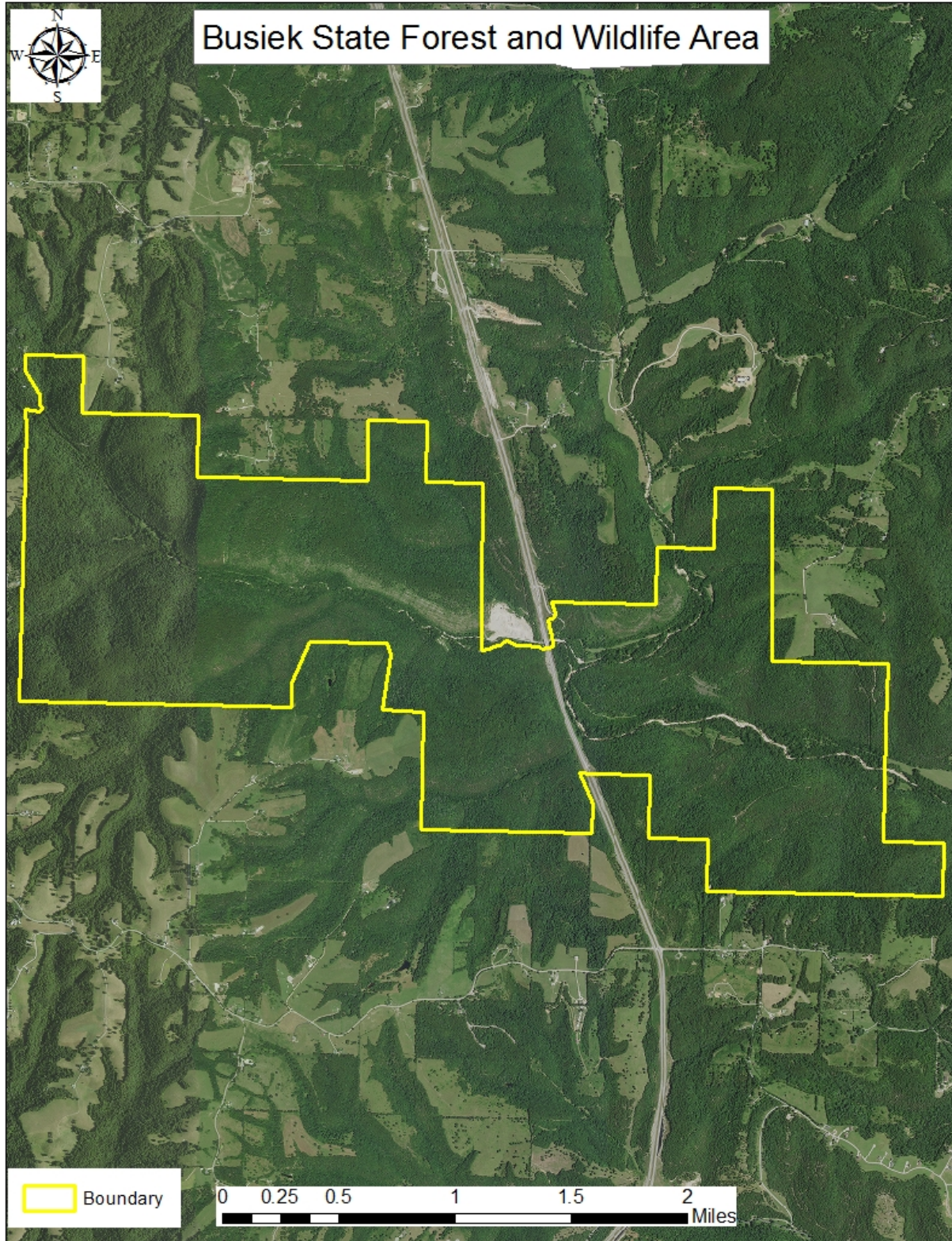


Figure 4: Facilities Map

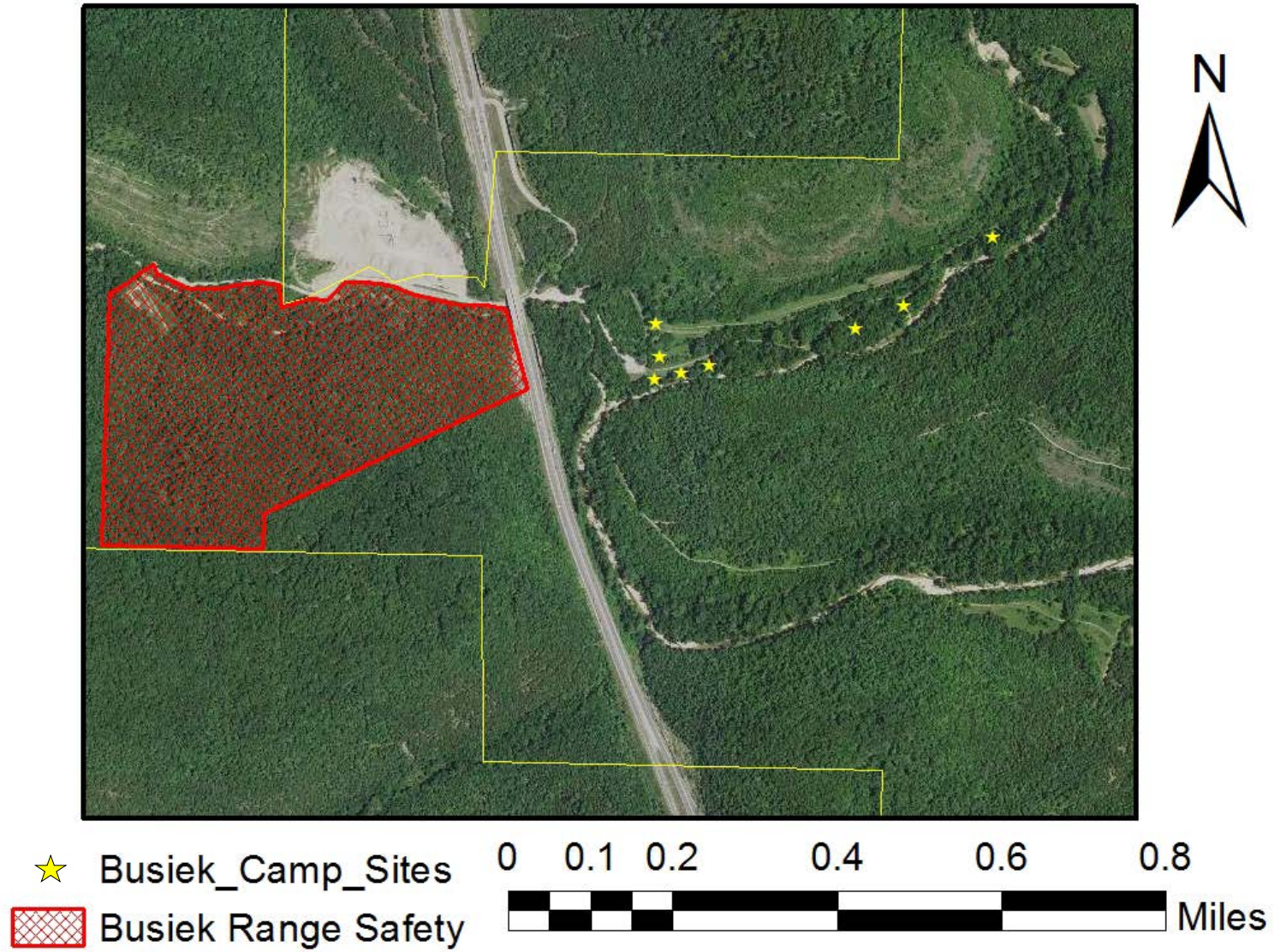


Figure 5: Easement Map

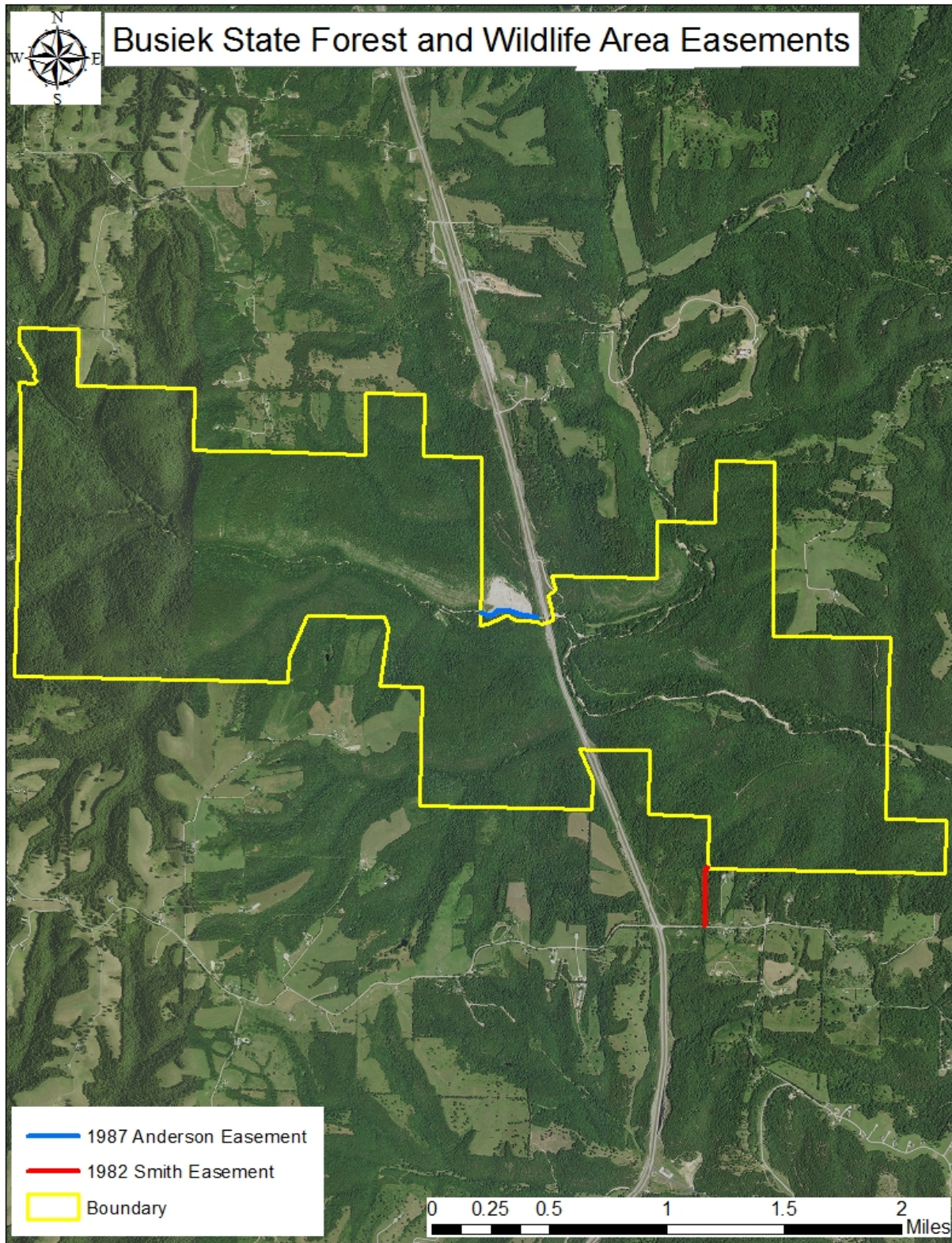


Figure 6: Food Plot Map

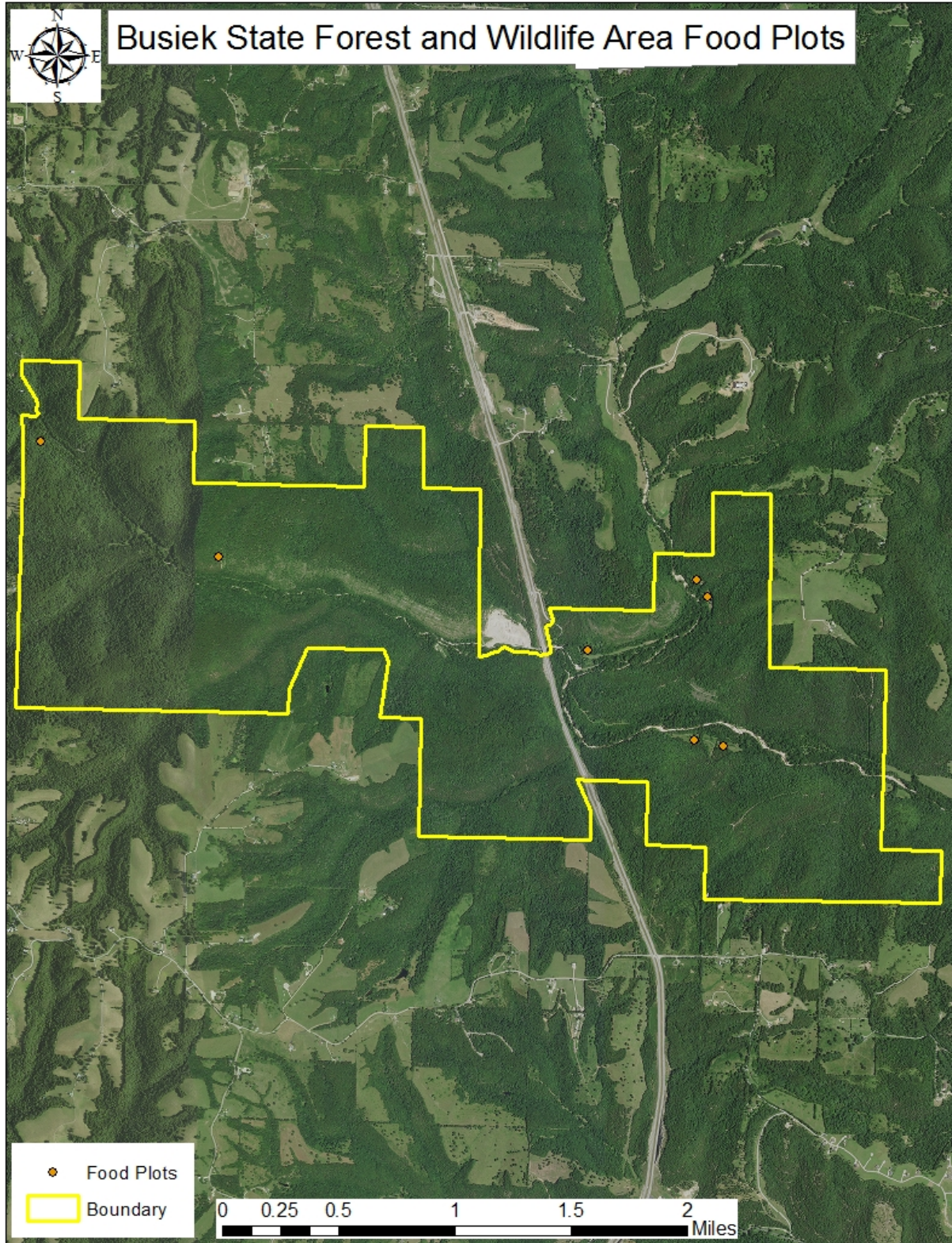
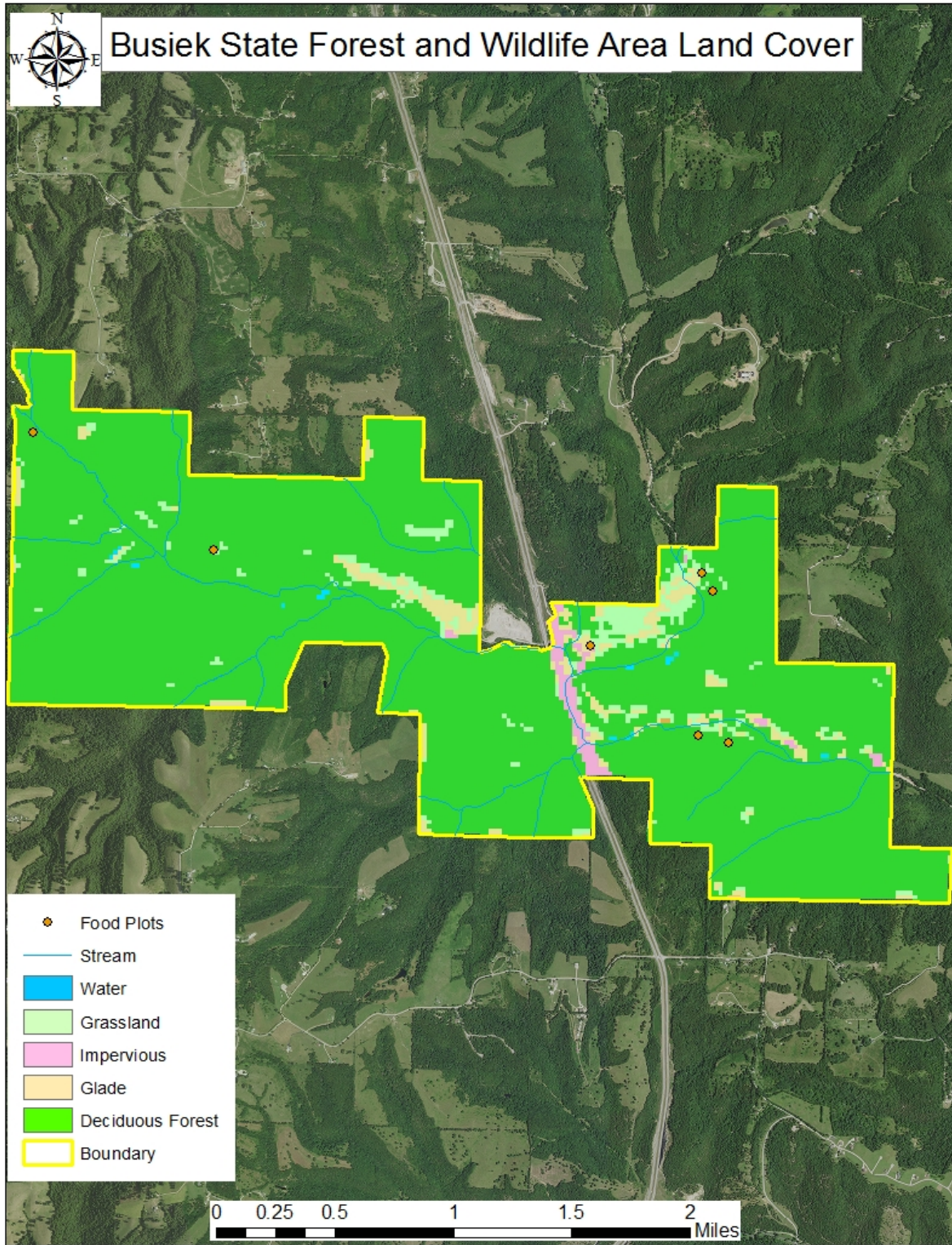


Figure 7: Land Cover Type Map



Appendix A. Busiek State Forest and Wildlife Area Management Plan Public Comments

Department responses to the received public comments during the period of Sept. 1-30, 2016:

My 11/12 year old Primary (Jr. Sunday School) class of the Church of Jesus Christ of Latter Day Saints is looking for a service project, probably to be done in conjunction with an Eagle Scout Project or just scout service hours. My family has enjoyed the Busiek Conservation Area since we moved to the area 18 years ago. We appreciate the State maintaining it in its natural state. We have camped there (before there were official campsites), and I have taken approximately 150 12-16 year old girls for a day camp in preparation for girls camp at another location. Could you please contact me with volunteer opportunities that you feel would fit with your needs. Call or text and email. Thank you, ***** *****

Maintain and improve equestrian trails. Move them periodically as erosion becomes an issue. Consider purchasing / leasing horses for ranger patrols to ensure no "off trail" excursions.

A toilet is the big thing that is needed at Busiek. With all the people at the gun range for hours. The people hiking & biking and horse back riders for the day. And the big one is the overnight campers. We are talking more waste than a mid size dairy farm. The people hiking & biking and horseback are not all in one place. But people at the gun range, some can not walk any distance. The over night camper all are going in the same place. This is a waste problem that needs to have something done.

Know it would cost money to put anything on hill side but the government tells farmers everyday "Clean water is cheap". Think it is time for the government to step up.

Would like to suggest small, rustic rain shelters, 2 or 3 per trail, made of inexpensive materials with signs "not responsible for accidents." If budget would allow, rustic benches would offer a great place to stop and rest with water and snacks.

Also suggest cabin built and employment position opened for me to live on Busiek while I maintain trails and stuff. LOL! I know I am being funny, but it doesn't hurt to ask!

Show-Me Missouri Back Country Horsemen would like to thank the Department for the opportunity to comment on the Busiek SF and WA Draft Management Plan, and we would like to express our appreciation to the management for making the trails on this wonderful area available to horseback riders.

Subject to available volunteers, SMMBCH offers to assist the Department in implementing needed maintenance and improvement measures described in Public Use Management Objectives 1 and 3 as well as installing the mounting block and kiosk. We also offer assistance and expertise with planning and marking needed rerouting and treatment of eroded trail segments.

We repeat a suggestion from our previous input: A vault toilet near the shooting range (above the flood zone) would be appreciated by all users.

We will continue our partnership with the Area Manager to maintain and improve the trails and associated infrastructure. Thank you again for the opportunity to make these comments.