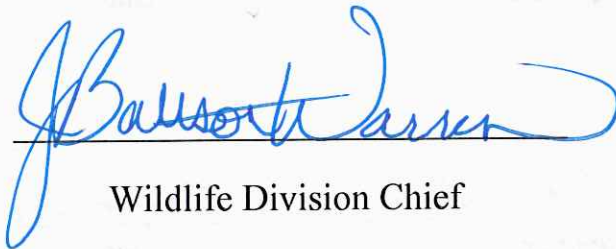


Elam Bend Conservation Area

Ten Year Area Management Plan FY 2014-2023




Wildlife Division Chief

1/27/15
Date

Elam Bend Conservation Area Management Plan Approval Page

PLANNING TEAM

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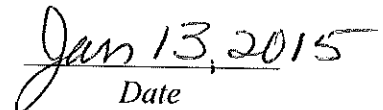
Steve Buback, Natural History Biologist

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NORTHWEST REGION

RCT Chair

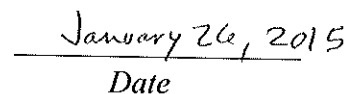

Signature


Date

WILDLIFE DIVISION

Wildlife Unit Chief


Signature


Date

OVERVIEW

- **Official Area Name:** Elam Bend Conservation Area, #7926
- **Year of Initial Acquisition:** 1979
- **Acreage:** 1,483 acres
- **County:** Gentry
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**

A. Strategic Direction

The primary purpose for acquiring the Elam Bend Conservation Area (CA) was to provide a river-oriented, multiple-use area for the public on an unchannelized portion of the upper Grand River. Management efforts are focused on creating and maintaining fish, forest and wildlife habitats (and their associated fauna), representative of the Central Dissected Till Plains Physiographic Area. Management efforts also emphasize the development of habitat that supports open woodland wildlife species. Species of priority concern include Eastern wild turkey and white-tailed deer. Other species of management consideration include bobwhite quail, Eastern wood-pewee, red-headed woodpecker and blue grosbeak.

B. Desired Future Condition

The desired future condition of Elam Bend CA is to return existing non-cropped open lands to a diverse native grassland, shrubland and cropland/idle field complex; and forested areas to diverse woodland communities.

C. Federal Aid Statement

This area, or a portion thereof, was acquired with Dingell-Johnson Sport Fish Restoration funds to restore and manage sport fish; conserve and restore sport fish habitat (or a buffer to protect that habitat); and provide public access for sport fishing.

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

D. Land Type Association: In the *Atlas of Missouri Ecoregions* (Nigh and Schroeder, 2002), the Elam Bend CA is in the Central Dissected Till Plains Section, Grand River Hills Subsection, Upper Grand River Landtype Association (LTA). The author (Nigh) notes that “Historically, the LTA was upland tallgrass prairie on divides that graded into oak savannas and woodlands in more dissected land.” Past land use practices have greatly altered the landscape from this historical description.

III. Existing Infrastructure

- 9 parking lots
- 2 ADA accessible privies
- 1 shooting range
- 3 fishable ponds
- 1 boat ramp
- 4 primitive camping areas
- approximately 6.0 miles of field access trails

IV. Area Restrictions and Limitations

A. Deed Restrictions or Ownership Considerations: None

B. Federal Interest: Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. Closures to sports fishing must be based on the recommendations of the state fish and wildlife agency for fish and wildlife management purposes. Federal funds may also 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: No known easements other than public utilities along road right-of-ways.

D. Cultural Resources: Yes, records kept with Missouri Department of Conservation (the Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources, found in the MDC Resource Policy Manual.

E. Hazards and Hazardous Materials: None observed.

F. Endangered Species: None observed.

G. Boundary Issues: Extensive bank erosion along the Grand River has caused a significant shift in the river channel on the north and east boundary.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Over the past 80 years, much of the open land cover was converted to non-native cool-season grasses and legumes, such as orchard grass, timothy, smooth brome, clover, and more recently, tall fescue. Tall fescue has greatly reduced cover suitability for early-successional ground-dwelling wildlife species. In addition to the invasion of tall fescue, undesirable woody vegetation, such as honey locust, autumn olive, and Osage orange have encroached upon crop field borders and old fields, reducing the value of these areas to wildlife. Much of the forested area has been logged and/or grazed in the past, leaving it in a degraded condition. Undesirable species including honey locust, Osage orange, elm, and shingle oak occur throughout the area. Other species present include chinkapin oak, red oak, black oak, bur oak, white oak, shagbark hickory, green ash, hackberry, Kentucky coffeetree, black walnut, cottonwood, and silver maple. The area was last inventoried in 1997. Timber stand improvement was completed on approximately 115 acres in 2001. The area is scheduled for an inventory in Fiscal Year 2015 (FY15).

Challenges and Opportunities:

The primary methods of managing herbaceous and forested cover on the Elam Bend CA will be through the Department's Permittee Agriculture Crop program, mechanical tree removal, herbicide application, and prescribed fire.

Management Objective 1: Improve open lands for wildlife species dependent upon early-successional habitat.

Strategy 1: Decrease undesirable herbaceous and woody cover.

Management Objective 2: Create and maintain open woodland plant communities. Management recommendations for all forested stands will be developed in cooperation with Forestry Division.

Strategy 1: Complete forest inventory in FY15.

Strategy 2: Identify tracts best suited for woodland management.

Strategy 3: Manage woodland units for thin canopies and ground flora components.

Strategy 4: Manage forest stands using both even and uneven-aged silviculture.

Management Objective 3: Increase year-round forage availability for deer. The management efforts in Objectives 1, 2 and 3 should provide and maintain adequate habitat conditions for turkeys without any specific focus on turkey management.

Strategy 1: Create and maintain quality year-round forage for deer.

Management Objective 4: Monitor deer populations annually to provide information for setting and/or adjusting harvest regulation changes.

Strategy 1: Conduct an annual spotlight deer survey between October 15 and November 5.

VI. Aquatic Resource Management Considerations

Management of aquatic resources on Elam Bend CA focuses on the Grand River and small ponds.

Challenges and Opportunities:

- 1) There are about 3.5 miles of the Grand River which border portions of the north and east boundaries of the area. This potentially provides direct public access to the largest continuous reach of the upper Grand River. However, severe erosion of the riverbank on much of the area restricts access by foot.
- 2) The main recreational activities on the river include angling and floating (canoes, kayaks, etc.). There is a concrete boat ramp on the area that facilitates access to the river for these activities. This ramp is subjected to regular impacts from flood events, including heavy accumulations of silt and collections of woody debris.
- 3) There are three small ponds (<1 acre each) with adequate depths to support sport fishing. In these ponds, nuisance aquatic vegetation is common; extensive control methods are often not cost-effective, given their relatively remote locations.
- 4) Wildlife water holes are generally unable to support sportfish populations, yet serve as important areas for amphibians, reptiles, aquatic invertebrates, and wetland plants. In addition, they provide dispersed water sources for terrestrial wildlife species. Many were created as grade controls for soil erosion issues, while others are simply old ponds which have become shallow and over-grown with trees. Species supported by these wetlands have not been formally inventoried.

Management Objective 1: Maintain good access to the river for angling and floating.

Strategy 1: Continue regular maintenance on the boat ramp. This may include the placement of large rocks to secure the structure, if threatened by scour holes or bank erosion; or it may involve the removal of heavy silt loads and woody debris jams.

Management Objective 2: Maintain angling opportunities in ponds which are capable of supporting sportfish.

Strategy 1: Manage aquatic and pond-side vegetation to allow reasonable shore angling by limiting sediment and nutrient inputs; mowing; and when needed, applying targeted aquatic herbicide. Promote beneficial aquatic plants, where appropriate and when possible, through seeding and transplanting.

Strategy 2: Mow regularly to maintain pond dams devoid of trees and shrubs, and to minimize potential for leaking and associated negative impacts to fish habitat.

Strategy 3: Control muskrat and beaver in fish ponds, where burrowing creates a significant threat to the integrity of the dam or safety hazards for mowers on the dam.

Strategy 4: Add at least one brush pile to each manageable pond, where cover is limited (i.e., no other brush piles or very limited submerged vegetation). Brush piles should be replaced, as needed, due to natural breakdown and loss of effectiveness over time.

VII. Public Use Management Considerations

The Elam Bend CA is managed for upland game and non-game wildlife species. The majority of public use is from deer, turkey, and small-game (rabbit and quail) hunters. Area ponds and streams receive low fishing pressure, with the exception of the Grand River, which runs along the area's northeast boundary for approximately 3.5 miles.

Challenges and Opportunities:

- 1) In 2006, the Department opened an unstaffed rifle and shotgun range. The range features 25-, 50- and 100-yard rifle stations, as well as a shotgun station. The range is well used, especially prior to firearms deer season.
- 2) Primitive camping is allowed at four sites in the area. These areas are used heavily during deer and turkey seasons with lighter use during summer holidays.
- 3) Deer regulations for the CA were changed from statewide regulations to any-deer permits (no antlerless permits) in 2005. In addition, the area is within the boundaries of the four-point antler restrictions. Currently, the CA's deer population is good. As deer harvest regulations are evaluated for all CA's, additional deer harvest strategies may be considered to further enhance public-use opportunities, while maintaining a quality deer population.

Management Objective 1: Monitor use of area by deer hunters.

Strategy 1: Continue parking lot surveys on opening weekend of firearms deer season to track trends in hunter numbers.

Management Objective 2: Manage the CA to provide access to river fishing and quality hunting opportunities for white-tailed deer, Eastern wild turkey and small-game wildlife (rabbits, quail, squirrels, etc.). Maintain public-use opportunities for other activities, such as mushroom hunting, bird watching and sight-seeing.

Strategy 1: Annually review area regulations, particularly as they relate to deer hunting.

Strategy 2: Maintain interior service roads to provide easy and unrestricted foot access for area users.

Strategy 3: Maintain primitive camping areas in a condition that invites public use.

Strategy 4: Consider increasing primitive camping.

Management Objective 3: Manage shooting range to invite public use.

Strategy 1: Conduct routine litter patrols to keep the range clean.

Strategy 2: Work with other Department staff to ensure the backstop berms are kept in good repair.

VIII. Administrative Considerations

Challenges and Opportunities:

The Elam Bend CA is bordered by approximately 1.5 miles of county roads. Additional administrative duties may result from working with the local Gentry County governments in maintaining these road right-of-ways.

Management Objective 1: Maintain county right-of-ways bordering Department areas.

Strategy 1: Work with county authorities as the need arises.

Management Objective 2: Maintain adequate boundary fencing.

Strategy 1: Work with neighboring landowners as the need arises.

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

Strategies are considered ongoing unless listed in the following table:

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Terrestrial Resources Management										
Objective 2										
Strategy 1		X								
Strategy 2		X								
Aquatic Management Considerations										
Objective 1										
Strategy 1			X							
Strategy 2		X					X			
Objective 2										
Strategy 1	X			X			X			X
Public Use Management										
Objective 2										
Strategy 4			X							

APPENDICES

Area Background:

The Department initially purchased property for Elam Bend Conservation Area in 1979 to provide a river-oriented, multiple-use area on an unchannelized portion of the upper Grand River. Subsequent additions to the area have increased its size to 1,483 acres.

In 2006, the Department opened an unstaffed shooting range on the north end of the CA. The range features a shotgun shooting area and rifle shooting stations at distances of 25, 50 and 100 yards. The range is a popular place for residents of Gentry and surrounding counties.

Because of its size and diversity, Elam Bend Conservation Area is managed for a wide range of game and non-game wildlife species. Management activities on the area include farming, timber stand improvement, prescribed burning, edge feathering, and food plots. A concrete boat ramp in the east-central part of the area provides easy access to the Grand River.

Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Forest and Woodland	721		49
Old Field	370		25
Cropland	290		19
Grassland (non-prairie)	100		7
Impoundments	2		<1
Total	1,483		100
Stream Frontage		18,480 (Grand River)	

Public Input Summary:

The draft Elam Bend Conservation Area Management Plan was available for a public comment period July 1–31, 2014. The Missouri Department of Conservation received comments from two respondents (Appendix A). The Elam Bend 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 Elam Bend Conservation Areas public comment period

Suggests adding an equestrian trail and primitive equestrian campsite.

The area planning team considered the suggestion of developing a multi-use trail that would allow equestrian use and primitive equestrian campsite. There are currently five Conservation Areas in the Northwest Region that have multi-use trails allowing equestrian use (Riverbreaks CA, Honey Creek CA, Bonanza CA, Bunch Hollow CA, and Poosey CA). In addition, Crowder State Park (Missouri Department of Natural Resources) and Mozingo Lake (owned by the City of Maryville) have horse trails open to public use.

The establishment of a multi-use trail would increase area maintenance and enforcement requirements such as erosion control, litter patrols, unauthorized trail use and the potential spread and/or introduction of invasive plant species. Given that there are currently seven other public multi-use trails allowing equestrian use within the Northwest Region, the planning team does not recommend developing an equestrian trail or campground on the Elam Bend CA.

References:

Nigh, T. A., & Schroeder, W.A.. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Land Cover Types

Figure 3: Forest Stand Map

Figure 4: Spotlight Deer Survey Routes

Additional Appendices:

Appendix A: Draft Elam Bend Conservation Area Public Comments

Figure 1: Area Map

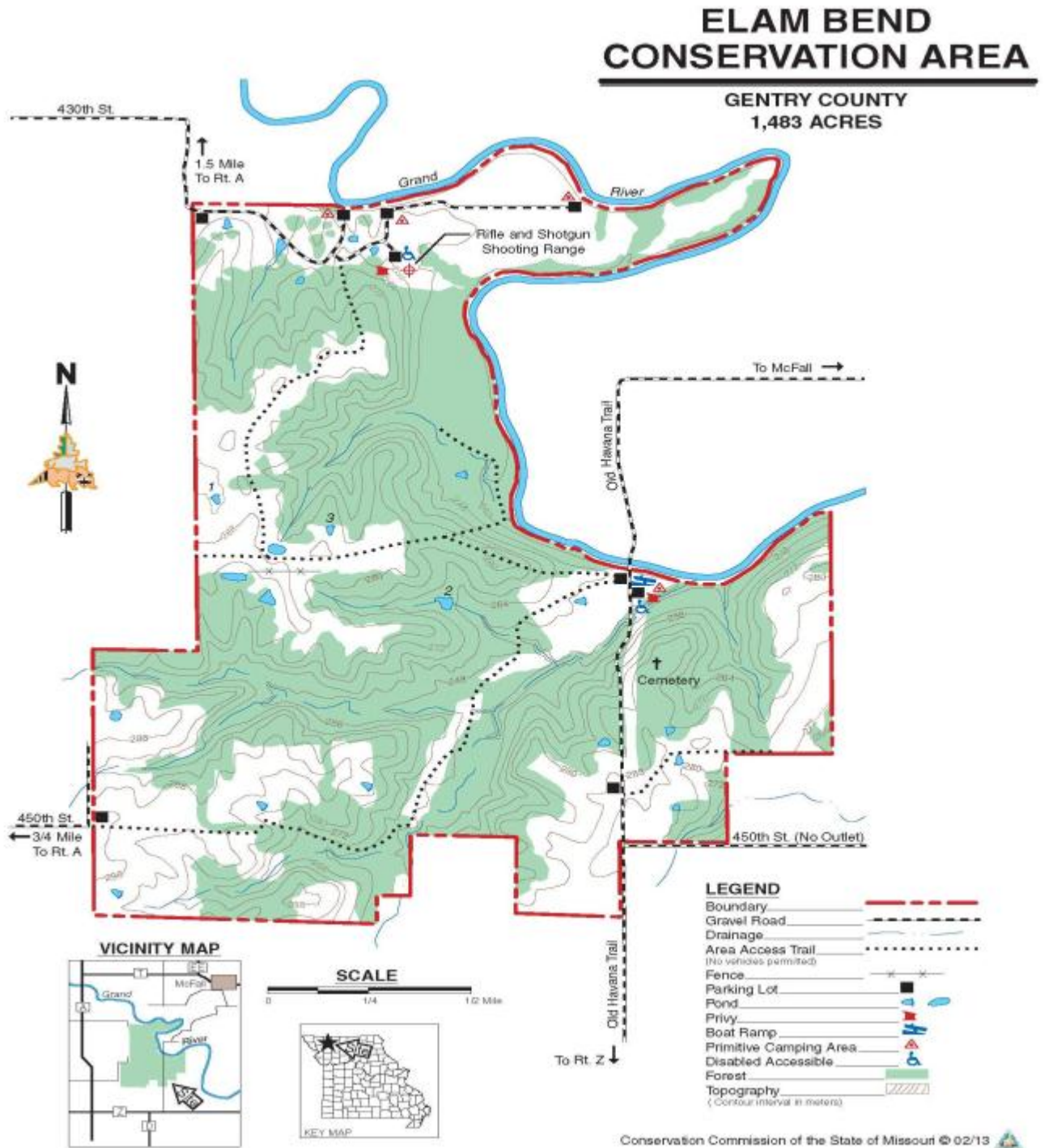
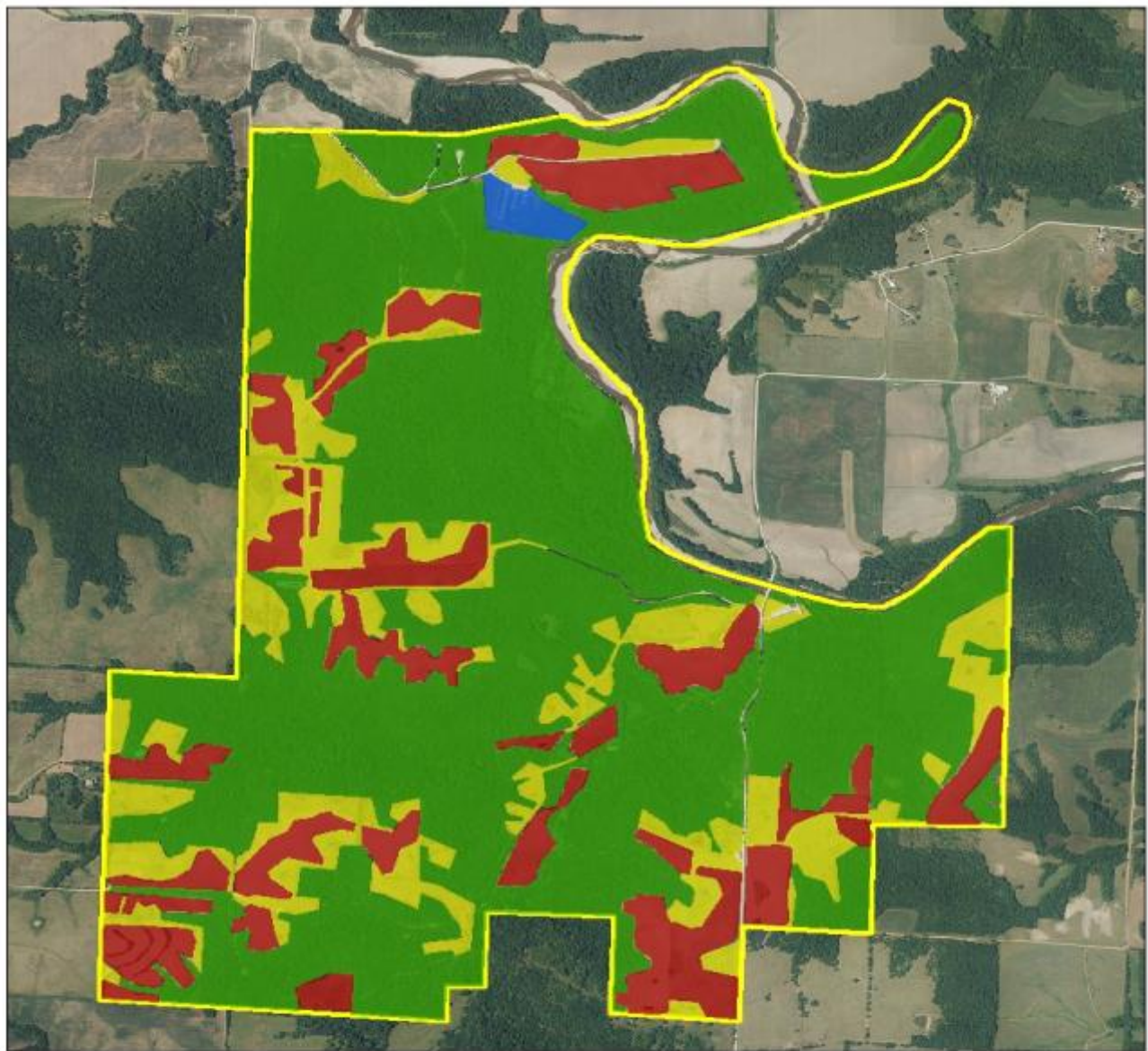


Figure 2: Land Cover Types



Legend
Cover type_E lam Bend
Cover_type
■ Crop
■ Forested
■ Old field
■ Shooting range
■ Elam Bend Boundary

1,500 750 0 1,500 Feet



Figure 3: Forest Stand Map

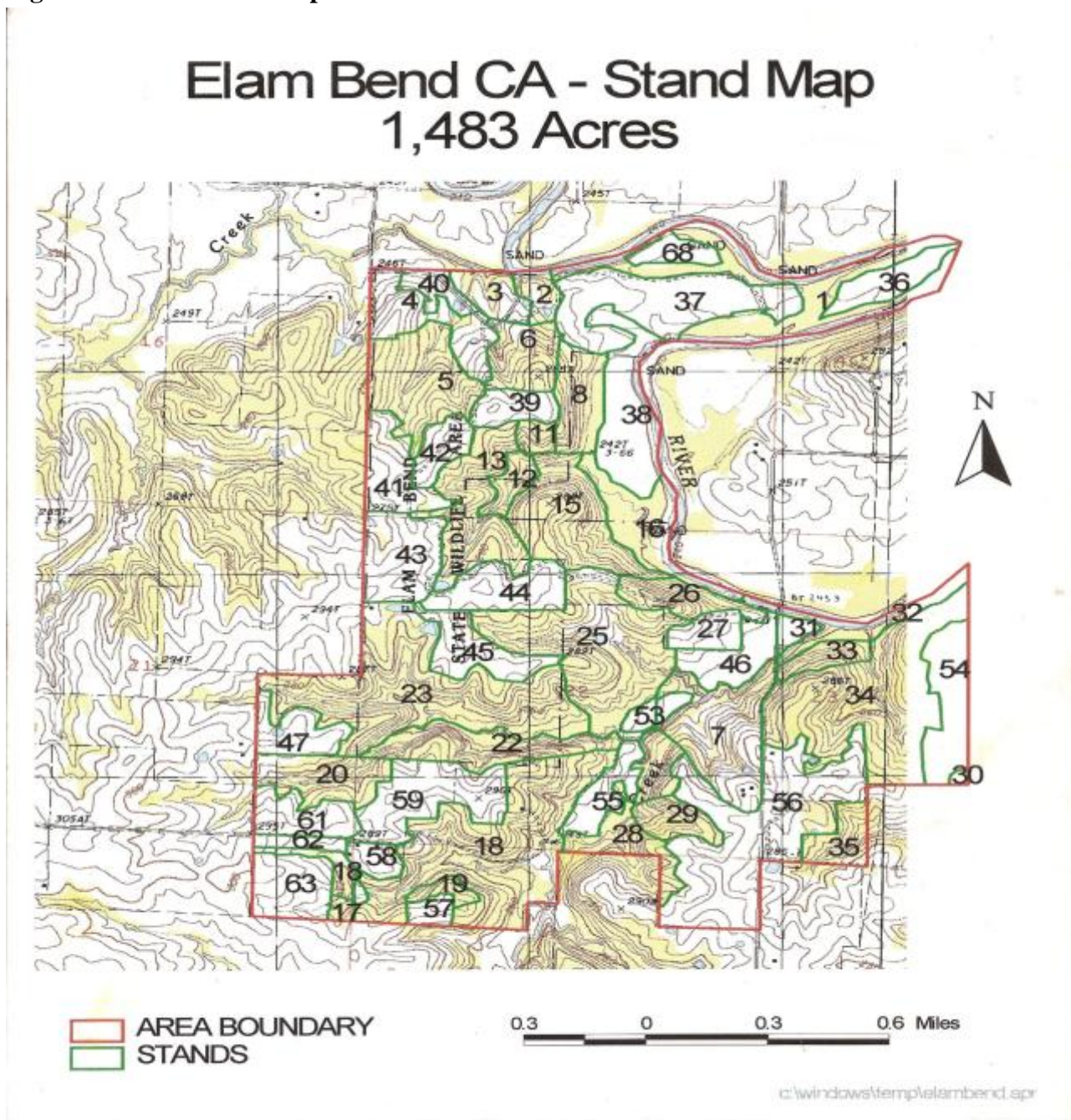
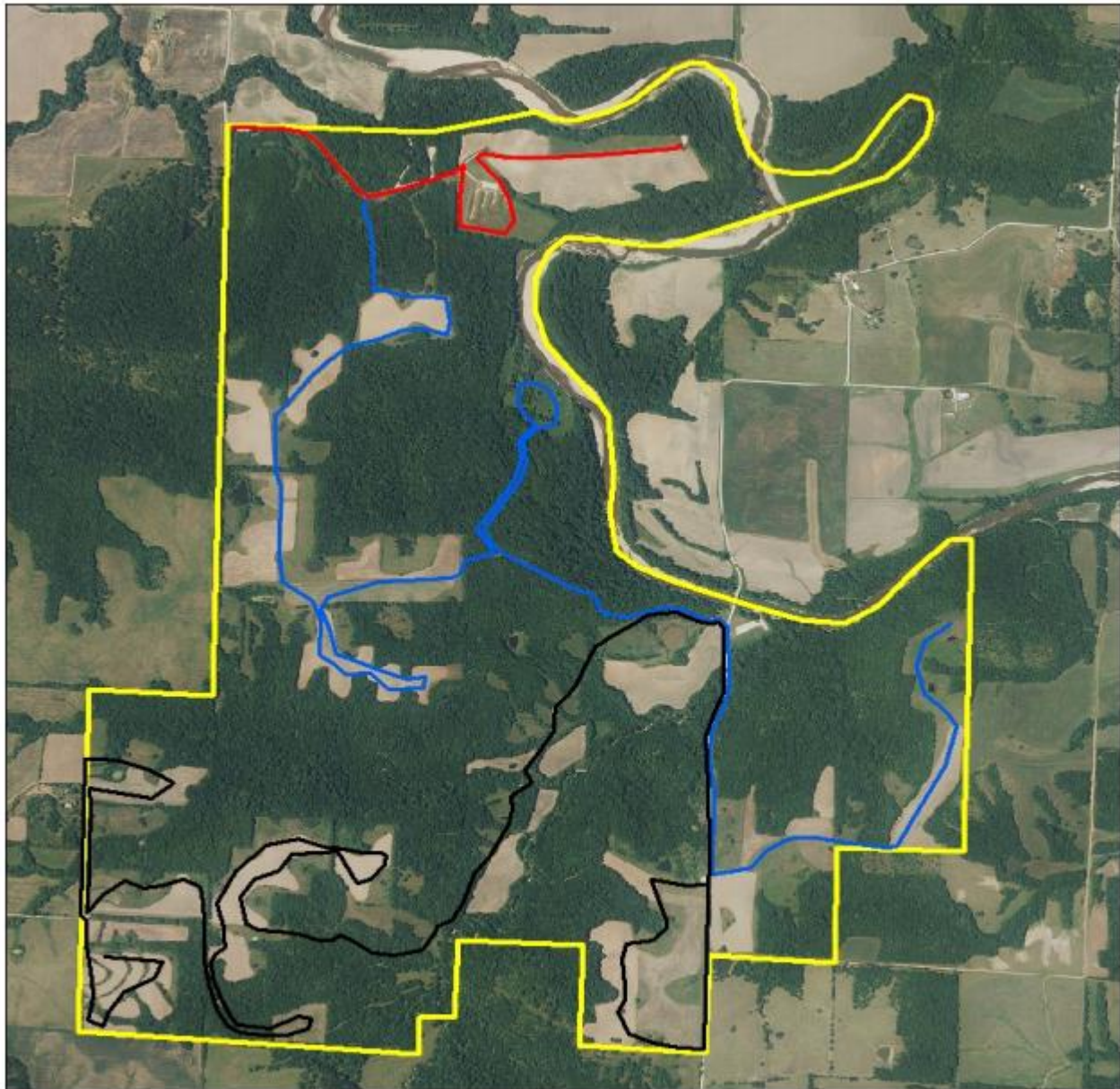
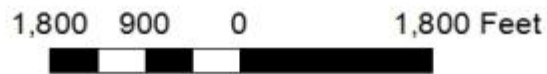


Figure 4: Spotlight Deer Survey Routes



- Legend**
Elam Bend deer survey
Route
1
2
3
Elam Bend Boundary



Appendix A: Draft Elam Bend Conservation Areas Management Plan Public Comments

Received during public comment period (July 1-31, 2014)

As you develop the next 10 year management plan for Elam Bend, please do not discriminate against equestrian trail riders. With 1,483 acres, there is room for an equestrian trail and possibly even a primitive horse camp. This area holds a lot of historical relevance to it with the Pony Express, etc. Trail riders would love to ride their horses in the area of their ancestors and this has the potential to bring more revenue to the local business owners through fuel, groceries, and tourism. I will volunteer my time to spearhead a fundraiser and bring together volunteers to aide in building up the trails and maintaining these trails for future equestrian use. Thank you for your consideration.

(phone call) – A citizen called to express her interest in an equestrian trail at Elam Bend Conservation Area. She noticed there are few equestrian trails in Northwest Missouri/St. Joseph area and thinks the historical perspective of being near the Pony Express would be a great tourism draw. A primitive equestrian campground would be a nice feature as well. She is willing to volunteer to help find funding or volunteers for trail work. Protecting the environment is very important.

Approving this for trail riding and primitive camping would open up additional riding in this area of the state as well and being a part of the history of the Pony Express. I belong to a group and we have managed trails and kept the camp areas clean and organized for all to use.