

McKinny Conservation Area

Fifteen-Year Area Management Plan FY 2017-2031





Wildlife Division Chief

20 March 2017
Date

McKinny Conservation Area Management Plan Approval Page

PLANNING TEAM

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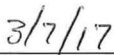
Date

WILDLIFE DIVISION

Wildlife Management Chief



Signature



Date

OVERVIEW

- **Official Area Name:** McKinny Conservation Area, #9236
- **Year of Initial Acquisition:** 1992
- **Acreage:** 120 acres
- **County:** Carroll
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

Provide, develop, manage, and protect quality wetland and woodland habitat and associated wildlife species while providing a variety of outdoor recreational opportunities for the public.
 - B. Desired Future Condition**

The desired future condition of McKinny Conservation Area (CA) is a healthy wetland and river bluff woodland complex.
 - 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
- D. **Other:** This area lies within the Missouri River Loess Woodland/Forest Breaks and Wakenda Missouri River Alluvial Plain Landtype Association. The Missouri River Loess Woodland/Forest Breaks Landtype Association consists of rugged, deep loess hills bordering the Missouri River valley. Historically, the landtype association was timbered in oak and mixed-hardwood, woodland, and forest. The Wakenda Missouri River Alluvial Plain landtype association consists of an exceptionally broad bottom enclosed by low bluffs mostly in Pennsylvanian shales. Historically, the entire landtype association was dominated by wet prairie and marshland. Poorly drained soils on the northern side of the river formerly supported one of the most extensive bottomland prairies on the Missouri River. (Nigh & Schroeder, 2002).

III. Existing Infrastructure

- One parking lot
- One camping area (no amenities provided)
- One water control structure
- McKinny Wetland (15 acres)

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:** Water and electric easements exist on the area (Figure 3).
- D. Cultural Resources Findings:** No known cultural resources.
- E. Endangered Species:** None observed.
- F. Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Prairie/Grassland Management: Native tallgrass prairies once dominated the landscape; however, lack of fire and conversion to cool-season grasses for forage production has eliminated most of these diverse natural systems. Diverse plant communities of native warm-season grasses have also been negatively affected by the introduction of invasive, sod-forming grasses.

Forest Management: McKinny CA consists of 70 acres of forested habitat. This is approximately 58 percent of the existing acreage.

Openland Management: The purpose of managing openlands on McKinny CA is to provide food and cover for wildlife; provide diversity in habitat, thus increasing edge and brood habitat through interspersions of idle fields; and economically control succession through disturbance (Figure 4).

Challenges and Opportunities:

1. Provide a diverse plant community and control invasive species.
2. Promote healthy upland and bottomland forests.
3. Provide wildlife habitat and a high energy food source for wildlife.
4. Maintain healthy wetland habitats.

Management Objective 1: Manage McKinny CA grasslands to provide a diverse plant community of warm- and cool-season grasses, legumes, forbs, and bare ground. The ideal condition would be for these fields to be maintained in 30-50% grasses, 30-40% annuals, forbs, or legumes, and 20-30% bare ground.

Strategy 1: Maintain grassland habitats using a combination of management techniques, including, but not limited to, prescribed burning, mechanical and chemical treatment to woody vegetation, disking, mowing, and overseeding. (Wildlife)

Strategy 2: Work with willing neighbors to expand grassland management beyond McKinny CA boundaries. (Wildlife, Private Lands Services)

Management Objective 2: Maintain and promote healthy upland and bottomland forests through the use of sustainable forest management practices. The primary goal is to optimize wildlife habitat and forest health.

Strategy 1: Implement forest prescriptions, as needed, based on future site visits with the resource forester and area manager. (Forestry, Wildlife)

Strategy 2: Utilize a variety of sustainable forest management techniques to promote healthy forest and woodland communities, including, but not limited to, timber harvesting, forest thinning, firewood cutting, salvage cuttings, tree planting, seeding, and prescribed burning. (Forestry)

Strategy 3: Conduct woodland burns, as appropriate and according to the burn plans. (Wildlife)

Management Objective 3: Utilize cropping and disturbance to promote desired early successional habitat through disturbance in subsequent years and to provide a high energy food source for wildlife in a manner that complies with the Natural Resources Conservation Service soil conservation plan and promotes small game management.

Strategy 1: Maintain food plots in idle field areas. Food plot rotation is variable, but a sorghum, soybean or corn/legume/idle rotation is preferred. (Wildlife)

Management Objective 4: Manage and maintain old field areas to provide nesting and brood rearing habitat, such as bare ground, annual forbs, warm- and cool-season grasses, and shrubs.

Strategy 1: Maintain old field habitats in various successional stages providing 30-50% warm- and cool-season grasses, 20-30% annual forbs, 10-20% shrubs, and 20-30% bare ground using a combination of management techniques, including, but not limited to, prescribed burning, mechanical tree removal, disking, mowing, and over seeding. (Wildlife)

Management Objective 5: Maintain healthy wetland habitats.

Strategy 1: Monitor wetland areas for invasive species. Suppress any infestations that may develop. (Wildlife)

Strategy 2: Maintain native vegetation and promote early successional plant communities, where feasible, using a combination of techniques including, but not limited to, prescribed burning, mechanical tree removal, disking, mowing, planting of annual grain food plots, and over seeding. (Wildlife)

VI. Aquatic Resources Management Considerations

Challenges and Opportunities:

- 1) Aquatic resources are limited to portions of an unnamed stream and two first-order streams.
- 2) Maintain riparian corridors.

Management Objective 1: On riparian and streamside habitats, implement and maintain good riparian corridor practices, as outlined in the Missouri Department of Conservation's (the Department's) *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009).

Strategy 1: Periodically monitor habitat conditions of area streams. (Fisheries)

Strategy 2: Identify riparian corridors that need to be widened and establish appropriate vegetation using tree planting, direct seeding, or allowing natural regeneration. (Fisheries, Wildlife)

VII. Public Use Management Considerations

McKinny CA is managed primarily for upland and wetland wildlife species and consequently receives significant public use during the spring turkey, fall firearms deer, and waterfowl seasons. Other upland wildlife such as bobwhite quail and cottontail rabbits are pursued to a lesser extent, based on reports from Wildlife and Protection staff.

Challenges and Opportunities:

- 1) Provide hunting and viewing opportunities.
- 2) Improve educational and interpretive opportunities.

Management Objective 1: Promote diverse recreational opportunities on the area that are consistent with defined management objectives and sensitive to the natural communities and features of the area.

Strategy 1: Maintain parking lot/camping area, bulletin board, and service road to promote a presentable appearance for area users. (Wildlife)

Strategy 2: Annually review Atlas database to maintain current and up-to-date information for the public. (Wildlife)

Management Objective 2: Provide public hunting and viewing opportunities.

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

Management Objective 3: Improve educational and interpretive opportunities on McKinny CA.

Strategy 1: Communicate to the public recreational opportunities (e.g., using brochures, Atlas database). (Wildlife)

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

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

Strategy 1: Work with neighbors to minimize any boundary, trespass or any other issues affecting McKinny CA or private property. (Wildlife)

Strategy 2: Promote habitat management on neighboring landowner's properties. (Private Land Services, Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

- 3) Maintain area infrastructure at current levels.
- 4) Facilitate good relationships with neighboring landowners.
- 5) Consider acquisition of land, when available.

Management Objective 1: Maintain area infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with Department guidelines. (Wildlife)

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 are considered ongoing.

APPENDICES

Area Background:

McKinny Conservation Area is in Carroll County, about 1 mile south of Dewitt. This area was donated to the Missouri Department of Conservation in 1989 by Joseph J. McKinny in memory of his parents, William W. and Anna McKinny. The area is on the edge of the Missouri River floodplain. One-third of the area consists of forested Missouri River bluff. The bottom ground is a combination of forested and open wetlands.

Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Forest/Woodland	70		58
Old Field	18		15
Wetland	15		13
Grassland	10		8
Open Land/Food Plot	7		6
Total	120		100
Stream Frontage		1,404	

Public Input Summary

The draft McKinny Conservation Area Management Plan was available for public comment Nov. 1-30, 2016. The Missouri Department of Conservation received no comments during this time period.

References:

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

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

Maps:

Figure 1: Area Map

Figure 2: Infrastructure and Public Use Facilities Map

Figure 3: Area Easements Map

Figure 4: Habitat Cover Types Map

Figure 5: Streams Map

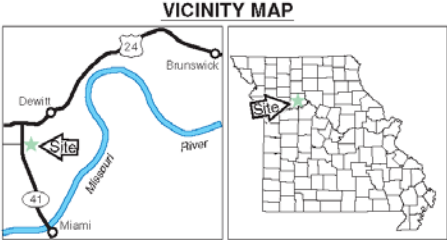
Figure 6: Topographic Map

Figure 7: Soils Map

Figure 1: Area Map

MCKINNY CONSERVATION AREA

CARROLL COUNTY
120 ACRES



LEGEND

Boundary	
Paved Road	
Gravel Road	
Drainage	
Area Access Trail	
Parking Lot	
Primitive Camping Area	
Forest	
Topography	
Wetlands	

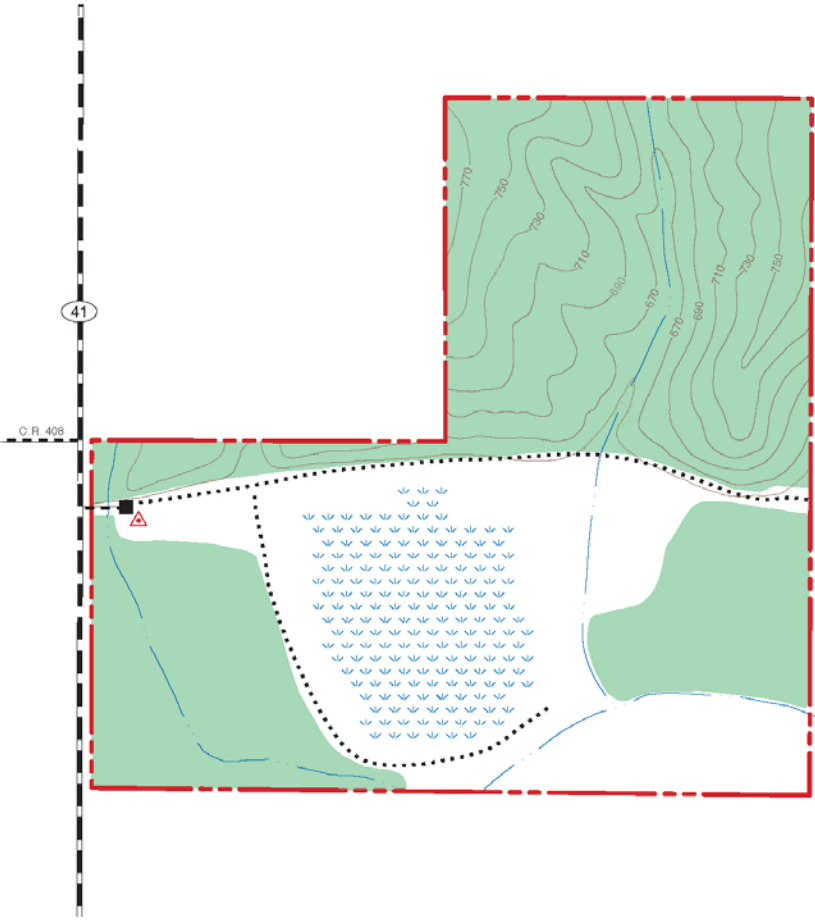
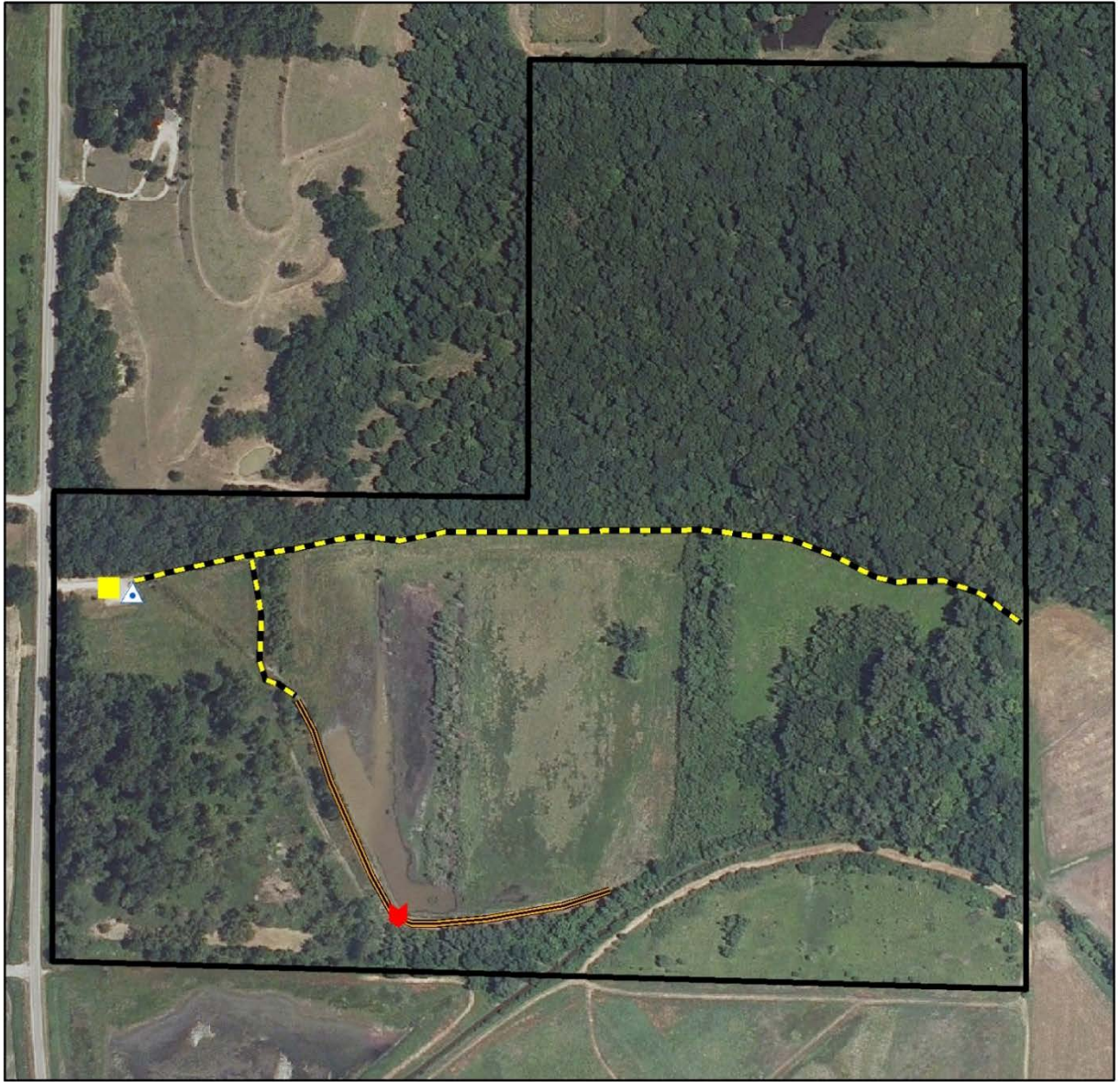


Figure 2: Infrastructure and Public Use Facilities Map



Legend










- | | |
|---|---|
|  Parking Lot |  Access Trail |
|  Primitive Camping |  Levee |
|  Water Control Structure |  McKinny CA Boundary |



Figure 3: Area Easements Map



Legend

-  Public Water Supply Line
-  Road Right-of-Way
-  McKinny CA Boundary

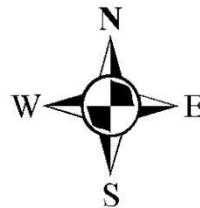
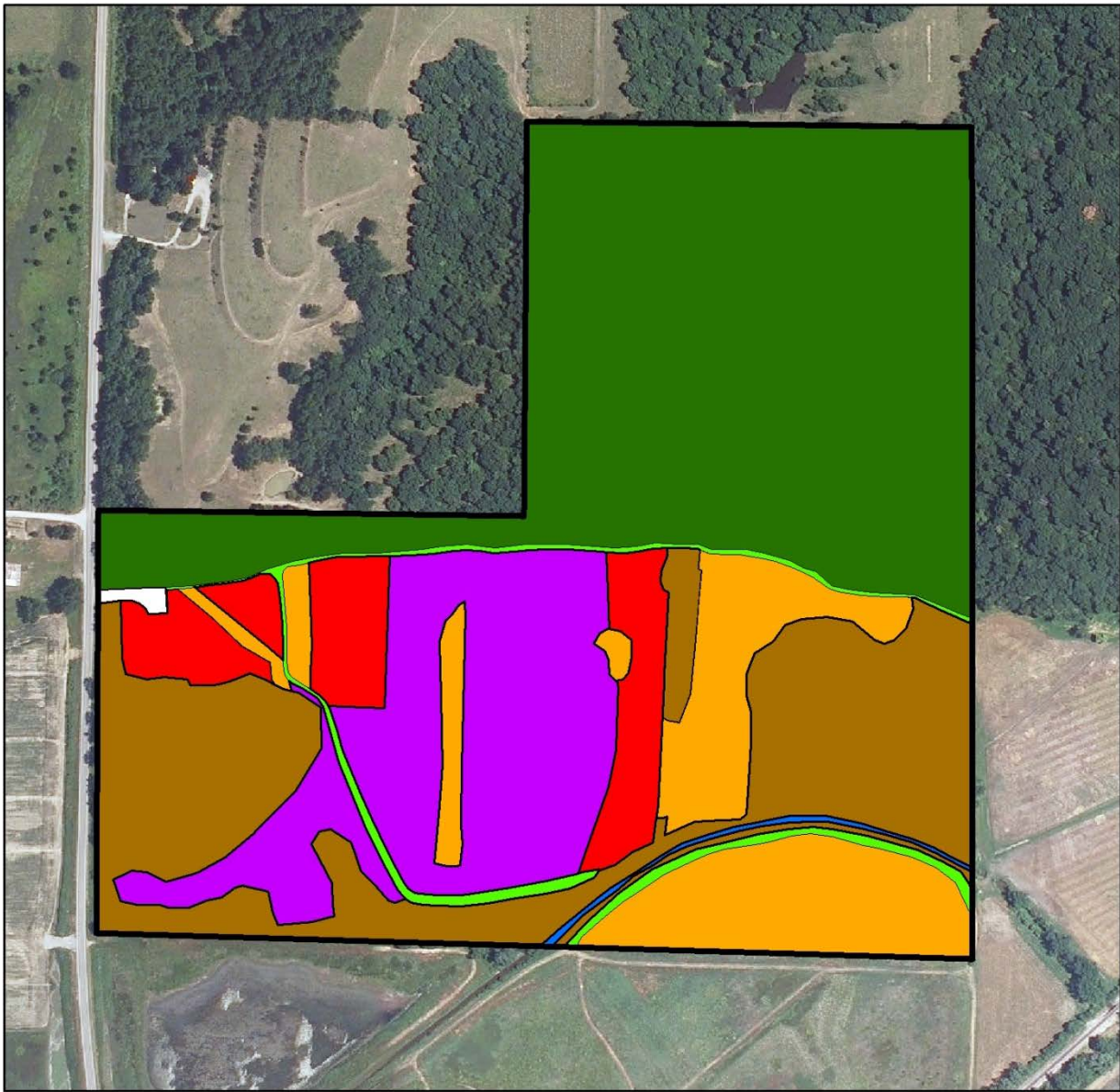


Figure 4: Habitat Cover Types Map



Legend

Habitat Cover Types

- | | | |
|---|---|---|
|  Openlands/Food Plot |  Grassland |  Infrastructure |
|  Forest |  Old Field |  Wetland |
| |  Permanent Water |  Woodland |
| | |  McKinny CA Boundary |



Figure 5: Streams Map



Legend

— STREAMS

□ McKinny CA Boundary

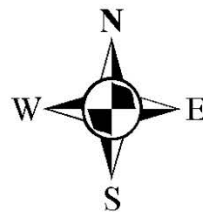
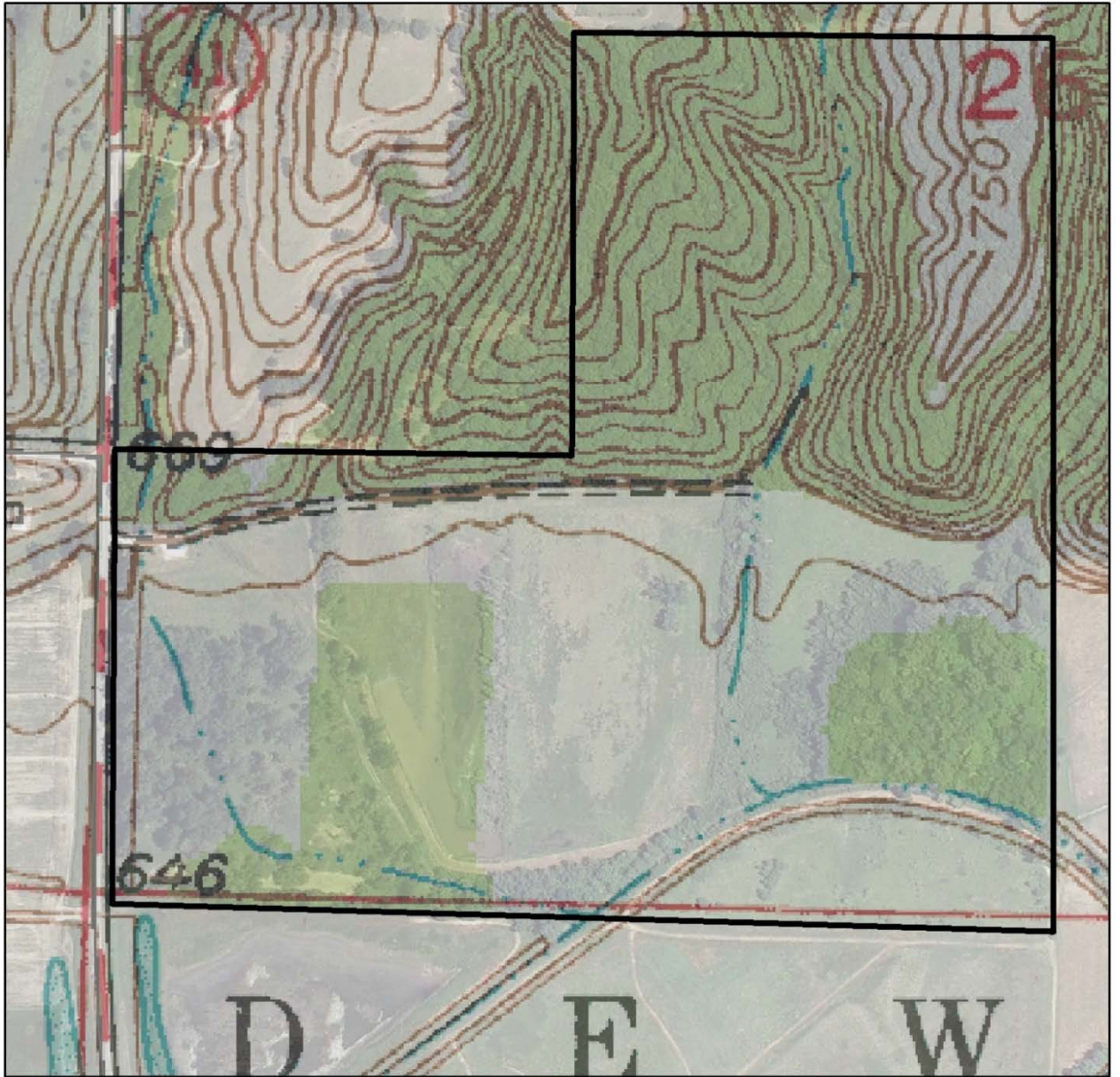


Figure 6: Topographic Map



Legend

 McKinny CA Boundary



Figure 7: Soils Map



Legend

McKinny CA Soils

SOIL ID

- 07C2 - Knox silt loam, 5 to 9 percent slopes, eroded
- 07F - Knox silt loam, 20 to 30 percent slopes

- 08D3 - Knox silty loam, 9 to 14 percent slopes, severely eroded
- 30 - Nodaway silt loam
- 66 - Gilliam silt loam
- 90 - Waldron silty clay loam
- McKinny CA Boundary

