

# **DRAFT**

# **Manito Lake**

# **Conservation Area**

## **Ten-Year Area Plan**

**FY 2015-2024**



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## OVERVIEW

- **Official Area Name:** Manito Lake Conservation Area, #8101
- **Year of Initial Acquisition:** 1981
- **Acreage:** 871 acres
- **County:** Moniteau, Morgan
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose**

### A. Strategic Direction

Manito Lake Conservation Area (CA) was acquired for the development of an 80-acre lake. The area is managed for its lake and aquatic habitats, early successional and prairie remnant wildlife habitats, restoration of woodland and glade communities, and maintenance of limited cropping. Management emphasis is placed on (1) actively managing open land early successional and grassland habitats and promoting native remnant prairie conditions that benefit wildlife; (2) demonstrating conservation farming and haying practices to compliment wildlife management and maintain high water quality within the watershed; (3) managing the lake as a quality fishery and with drawdown capabilities to enhance fisheries and aquatic resources; (4) creating shallow-water shoreline habitats for resident and migratory birds; and (5) providing opportunities for wildlife viewing, fishing, hunting, hiking and educational experiences for the public to enjoy.

### B. Desired Future Condition

Manage Manito Lake CA to support a quality fishery and aquatic habitat in the 80-acre lake; maintain early successional and prairie remnant wildlife habitats, woodland and glade communities and limited cropping.

### C. Federal Aid Statement

This area was acquired with Pittman-Robertson Wildlife Restoration funds to restore and manage wildlife, conserve and restore suitable wildlife habitat and provide public access for hunting or other wildlife-oriented recreation.

## 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. Communities of Conservation Concern:** Historic records note dry-mesic loess/glacial till prairie on Manito Lake CA. The conversion of land to agricultural fields and the invasion of exotic species diminished the quality and existence of these prairies.

**III. Existing Infrastructure**

- 1 fishing lake (Manito Lake, 77 acres)
- 1 lake dam (water control - drop inlet/two slide gates)
- 2 non-stocked ponds (1 acre)
- 2 pond dams
- 8 wildlife watering holes
- 1 privy, Americans with Disabilities Act (ADA) accessible
- 2 fishing jetties (1 ADA accessible)
- 6 gravel parking lots
- 1 paved parking area (ADA accessible)
- 1 concrete boat ramp (access to Manito Lake)
- 1 storage building (40' x 40')
- 0.25 mile lake entrance road

**IV. Area Restrictions or Limitations**

- A. Deed Restrictions or Ownership Considerations:** The 1982 Pilkenton Quitclaim Deed (1559) states “No more than one single-family dwelling may be constructed or located on said land.”
- B. Federal Interest:** Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. 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:** Phillips Pipeline easement for a buried pipeline crossing the area east and west near the center of the area (~3300 ft.). CO-MO Rural Electric Cooperative electric easements cross the area at three locations (~4000 ft.).
- D. Cultural Resource Findings:** No known cultural resources.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** None observed.
- G. Boundary Issues:** None
- H. Emergency Action Plan – Manito Lake Dam (NID MO31853):** The action plan drafted in cooperation with Missouri Department of Conservation (the Department) (Owner), State Dam Safety Officials, and Moniteau County

Emergency Officials, in September 2012 serves to reduce risk to human life and minimize property damage during an unusual or emergency event at Manito Lake Dam.

## MANAGEMENT CONSIDERATIONS

### V. Terrestrial Resource Management Considerations

#### **Challenges and Opportunities:**

- 1) Improve old field and early successional habitats by controlling exotic invasive plants and undesirable woody invasive species.
- 2) Maintain grasslands for quail, grassland birds and small game.
- 3) Restore native prairie remnants.
- 4) Manage cropland for wildlife food, nesting and brood rearing habitat.
- 5) Reduce excess tree stocking rates in woodland habitats.
- 6) Monitor small game hunting pressure.

**Management Objective 1:** Provide annual disturbance to maintain early to mid-successional old field habitats. Reduce fescue, invasive and woody species.

**Strategy 1:** Monitor old fields for undesirable invasive species and take appropriate management action as needed.

**Strategy 2:** Remove undesirable woody species.

**Strategy 3:** Farm or provide disturbance to control woody and invasive plants; reverse succession; and create bare ground. Prepare fields to establish forbs and wildlife friendly grasses.

**Strategy 4:** Conduct a cedar sale where stand density and size class are desirable and access is feasible.

**Management Objective 2:** Manage 140 acres of grassland and prairie remnant habitats for quail and grassland wildlife.

**Strategy 1:** Manage grassland habitats for wildlife.

**Strategy 2:** Renovate or reclaim warm-season grass plantings to control fescue invasion and to reduce woody invasion. Maintain existing productive stands of warm-season grasses.

**Strategy 3:** Improve grassland diversity with shrubby cover and native forbs.

**Management Objective 3:** Manage cropland for wildlife benefit and demonstrate sound agricultural conservation practices.

**Strategy 1:** Manage cropland acres to provide early successional habitat. Manage idle acres and legumes for wildlife food and cover.

**Strategy 2:** Expand dove and small game management and provide hunting and wildlife viewing opportunities for area users by maintaining wheat, sunflowers, millet, green browse and standing crops.

**Strategy 3:** Incorporate cover crop plantings to improve soil health.

**Management Objective 4:** Actively manage the 173 acres of woodlands on the area and monitor overall health.

**Strategy 1:** Apply stand prescriptions recommended from the most recent inventory by harvesting, woodland thinning and prescribed burning, where needed.

**Strategy 2:** Remain up to date on the inventory schedule to reassess woodland conditions.

**Strategy 3:** Continually monitor the overall woodland health.

## **VI. Aquatic Resource Management Considerations**

### **Challenges and Opportunities:**

- 1) Maintain area ponds to be used by multiple wildlife species.
- 2) Manage fish populations at Manito Lake.

**Management Objective 1:** Maintain healthy ponds that support aquatic and terrestrial wildlife needs.

**Strategy 1:** Monitor the health of the small ponds on an annual basis, and address any prospective problems as needed.

**Management Objective 2:** Manage fish populations and provide public fishing opportunities in Manito Lake.

**Strategy 1:** Perform electrofishing surveys every three years to assess the fish population in Manito Lake.

**Strategy 2:** Maintain fish habitat structures to enhance the fishery and fishing.

**Strategy 3:** Maintain existing aquatic vegetation and work to increase aquatic vegetation in Manito Lake through plantings and water level control.

**Strategy 4:** Provide annual maintenance stocking of 8 to 12 inch channel catfish in Manito Lake to maintain the channel catfish population.

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

### **Challenges and Opportunities:**

- 1) Create multiple public use opportunities.
- 2) Monitor and implement a high standard of area maintenance.

**Management Objective 1:** Provide area users with compatible and inviting multiple use opportunities for recreation, education and information.

**Strategy 1:** Maintain accurate area information and regulations through the atlas database, area brochures, posted information and staff contacts with area users.

**Strategy 2:** Promote compatible safe uses such as hunting, fishing, bird watching, hiking and nature photography.

**Management Objective 2:** Provide area and facility maintenance in a manner that promotes public use.

**Strategy 1:** Conduct timely area and facility maintenance. Coordinate assistance during high public use. Address erosion concerns and hazards. Consult and involve Design and Development staff as needed.

**Strategy 2:** Provide disability accessibility, as needed.

## VIII. Administrative Considerations

### **Challenges and Opportunities:**

- 1) Continue good relations with neighboring landowners.
- 2) Enforce area and statewide regulations.

**Management Objective 1:** Maintain contact with neighbors regarding management and public use on the area.

**Strategy 1:** Monitor area boundaries to ensure proper signing and avoid boundary confusion.

**Strategy 2:** Inform neighbors prior to prescribed burns and special activities that may require special permission.

**Management Objective 2:** Administer area and statewide regulations to promote safe public use opportunities.

**Strategy 1:** Ensure special use permittees and contractors follow conditions within the contractual agreement.

**Strategy 2:** Work with Conservation Agents to enforce and investigate violations of the Wildlife Code and area regulations.

## MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY21	FY23	FY24
<b>Terrestrial Resources Management</b>										
<i>Objective 1- Old Field Management</i>										
Strategy 4		X								
<i>Objective 4 - Woodland Management</i>										
Inventory	X									
Apply Prescription			X	X						

## APPENDICES

### Area Background:

Manito Lake CA was historically a prairie. Seven tracts comprised the original land purchase of 851 acres; one 20-acre tract was added in 2008. Agricultural practices of grazing, haying and row cropping were the primary land uses at the time of acquisition. Construction of Manito Lake was completed in 1984. The lake was filled in the winter of 1984-1985. A bur oak tree was planted in 1874 by 9-year-old Andrew Wolfe and is marked by a carved wood sign on the east side of the area.

### Current Land and Water Types:

Land/Water Type	Acres	% of Area
Old Field	347	42
Woodland	173	20
Grassland	140	16
Cropland	124	14
Impounded Water	79	7
Glade	8	1
<b>Total</b>	<b>871</b>	<b>100</b>

### References:

Missouri Department of Conservation. (1982). *1982 Manito lake area plan*. Jefferson City, Missouri: Department of Conservation.

Missouri Department of Conservation. (1983). *Project Job # 81-01-04 general plan -77 ac Manito Lake*. Missouri Department of Conservation.

Missouri Department of Conservation. (n.d.). Natural Heritage database. Jefferson City, Missouri: Missouri Department of Conservation.

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

### Maps:

Figure 1: Area Map

Figure 2: Habitat Map

Figure 3: Area Infrastructure Map

Figure 1: Area Map

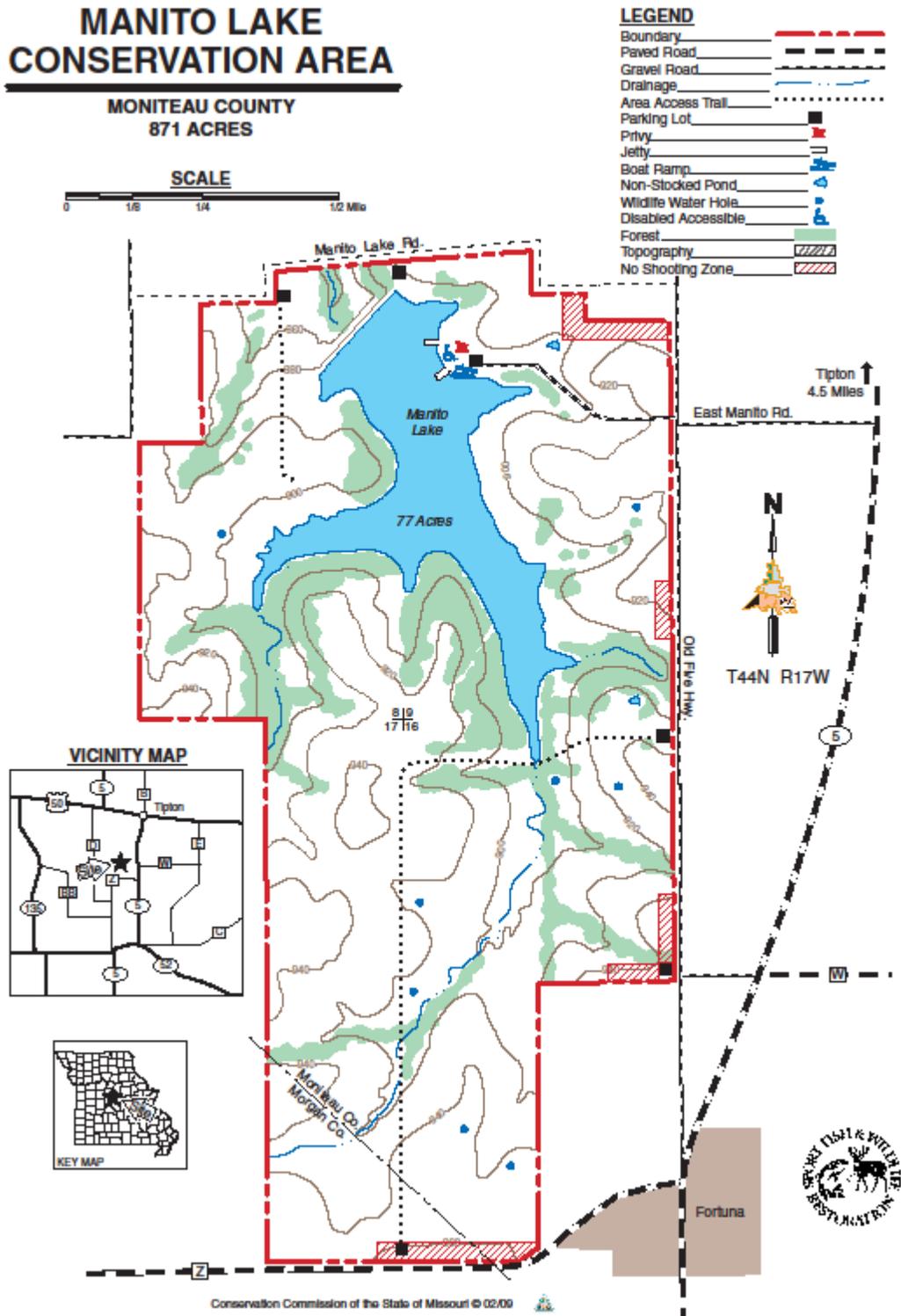


Figure 2: Habitat Map

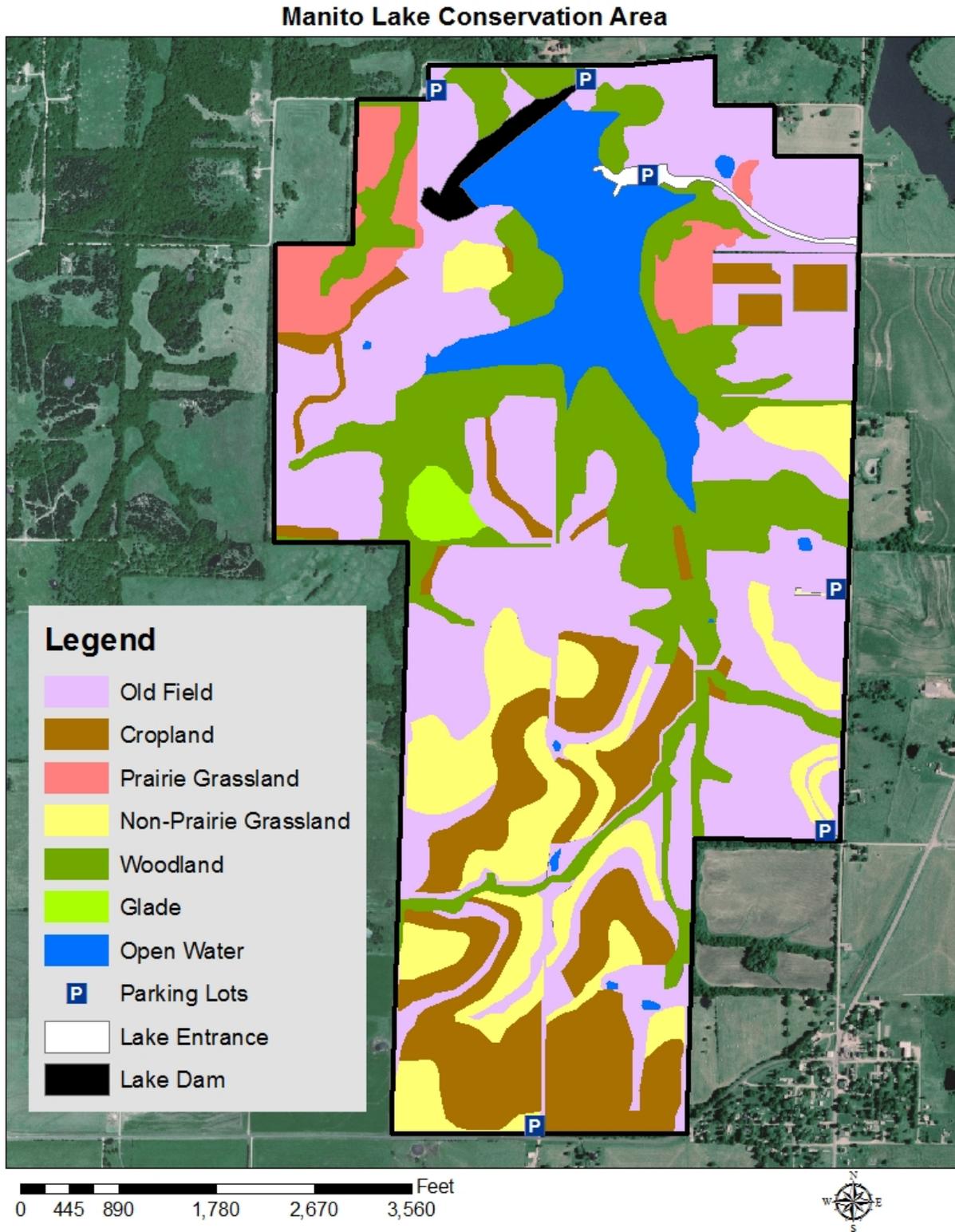
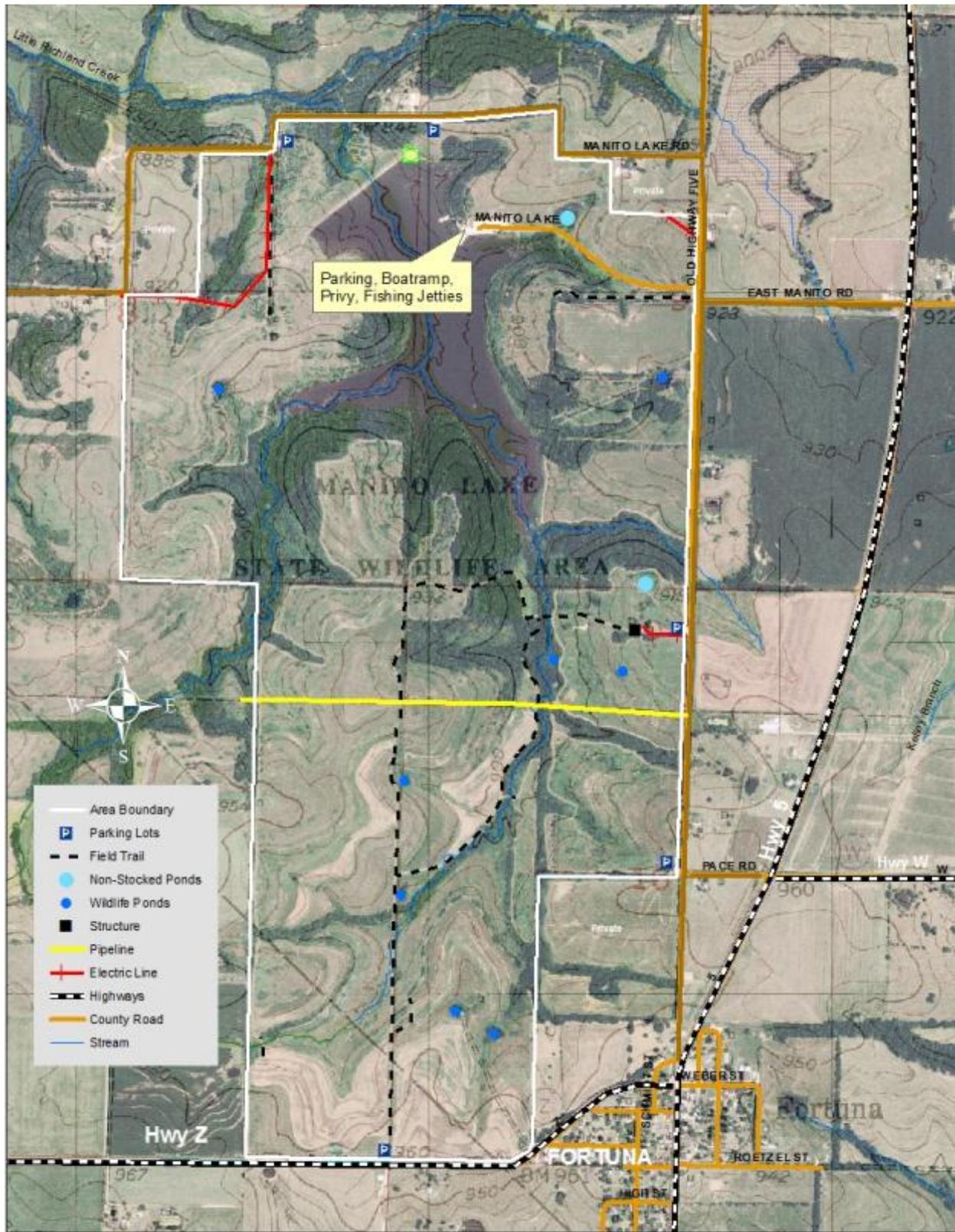


Figure 3: Area Infrastructure Map



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