DRAFT
Rinquelin Trail Lake Conservation Area

Fifteen-Year Area Plan

FY 2018-2032

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OVERVIEW

- **Official Area Name:** Rinquelin Trail Lake Conservation Area, #8233
- **Year of Initial Acquisition:** 1982
- **Acreage:** 286 acres
- **County:** Maries
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**
  - **A. Strategic Direction**
    The primary purpose of Rinquelin Trail Lake Conservation Area (CA) is to provide recreational opportunities to the public, including fishing, hiking, hunting, outdoor photography, wildlife viewing, and camping. The area is managed for the restoration and maintenance of forest and woodland natural communities, habitat for healthy wildlife populations, and diverse public recreational opportunities. Public use is encouraged and existing infrastructure (e.g., infrastructure surrounding the main lake) is maintained to invite public use.
  - **B. Desired Future Condition**
    The desired future condition of Rinquelin Lake CA is a woodland/forest complex with an interspersion of early successional old fields containing shrubby edge habitats to benefit upland wildlife. Focus should be made on the restoration, maintenance, and diversification of the old field communities.
  - **C. Federal Aid Statement**
    N/A

GENERAL INFORMATION AND CONDITIONS

I. <u>Special Consideration</u>

- **A. Priority Areas:** Maries River Fisheries Priority Watershed
- **B. Natural Areas:** None

II. <u>Important Natural Features and Resources</u>

- **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:** None

D. Other:

- **Woodlands:** The area is comprised of woodlands of varying quality. Some of the woodlands have been actively managed with thinning and burning, while others remain overstocked and lack fire disturbance. Woodlands were historically maintained by fire (Nelson, 2010) and all of the woodlands on Rinquelin Trail Lake CA need periodic fire disturbances to enhance and maintain their quality.
- **Ecological Subsection:** Rinquelin Trail Lake CA is located within the Central Plateau Subsection of the Ozark Highlands Ecological Section (Nigh & Schroeder, 2002). This subsection was historically dominated by a mosaic of tallgrass prairie and oak savanna/woodland complexes. Today the region is dominated by fescue pasture, and overstocked woodlands due to the absence of fire.

III. Existing Infrastructure

- Concrete boat ramp
- Primitive campground
- Three fishing jetties/platforms, one Americans with Disabilities Act (ADA) accessible
- Four parking lots, one ADA accessible
- One privy/restroom, ADA accessible
- Rinquelin Trail Lake fishing lake (29 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: None

D. Cultural Resources Findings: No known cultural resources.

E. Endangered Species: None observed.

F. Boundary Issues: Establishing accurate and identifiable boundary markers is a priority for this property.

MANAGEMENT CONSIDERATIONS

V. <u>Terrestrial Resource Management Considerations</u>

Challenges and Opportunities:

1) Monitor and manage the area's natural/existing features (e.g., woodland complexes, forests, and diverse old fields).
2) Support healthy wildlife populations to provide public outdoor recreational opportunities.
3) Suppress invasive species and the succession of woody vegetation that threaten the quality of open land habitat conditions.

Management Objective 1: Restore and maintain existing features, such as woodland and forest.

Strategy 1: Conduct forest inventories by compartment with an estimated re-entry time of 15 years, or as needed. Existing forest inventory data are current through FY2021. (Forestry)

Strategy 2: Use existing and future forest inventory information to identify management units containing predominantly woodland complexes. Use prescribed fire in these units to control woody vegetation development and encourage the expression of native herbaceous vegetation. (Forestry, Wildlife)

Strategy 3: Use existing and future forest inventory prescriptions to identify overstocked woodlands and forests. Conduct mechanical and/or chemical treatments on woodlands and forests using Department staff, contractors, and commercial harvests. Continue to conduct woodland/forest management on 25-30% of the identified acres between each forest inventory. (Forestry, Wildlife)

Strategy 4: Utilize a variety of sustainable forest management techniques to promote healthy forest and woodland communities including, but not limited to, timber harvesting, timber stand improvement, firewood cutting, salvage cuttings, tree planting, seeding and prescribed burning. (Forestry, Wildlife)

Strategy 5: Maintain a diversity of tree age classes that will provide both a diversity of wildlife habitat as well as resiliency to living and non-living (fire, weather, and climate) factors. (Forestry)

Strategy 6: Utilize best management practices during timber harvest as described in the Department's manuals: *Missouri Watershed Protection Practice* manual (Missouri Department of Conservation 2014) and the *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* (Missouri Department of Conservation, 2014). (Forestry)

Management Objective 2: Manage open lands to provide quality upland wildlife habitat and maintain the desired successional state.

Strategy 1: Utilize a variety of management techniques to eliminate or control undesirable vegetation, provide bare ground, encourage native forbs and grasses, and promote the desired structure. Techniques will include, but are not limited to, spraying, prescribed burning, mechanical treatments, woody cover removal, disking, mowing, haying, grazing, and seeding. (Wildlife**)**

Strategy 2: Maintain and rotate food plots to provide public uses, such as hunting and wildlife viewing opportunities. (Wildlife**)**

Management Objective 3: Reduce or eliminate invasive species.

Strategy 1: Prioritize, monitor, and plan for the control of invasive species. (Wildlife)

Strategy 2: Implement invasive species control with priority given to areas delineated during monitoring. (Wildlife)

VI. <u>Aquatic Resource Management Considerations</u>

The 29-acre Rinquelin Trail Lake provides fishing opportunities for largemouth bass, bluegill, redear sunfish, and channel catfish. Only electric motors are permitted. There is one disabled-accessible fishing jetty. Sunken evergreen trees provide fish habitat and are excellent places to fish.

Challenges and Opportunities:

1) Manage fish population in Rinquelin Trail Lake.
2) Enhance diversity and quality of aquatic resources.
3) Protect water quality and habitat in streams.

Management Objective 1: Monitor and manage Rinquelin Trail Lake to provide sustainable and diverse fishing opportunities.

Strategy 1: Annually conduct spring electrofishing to monitor populations of largemouth bass and bluegill. (Fisheries)

Strategy 2: Conduct hoop-netting for catfish, as needed, to manage catfish populations. (Fisheries)

Strategy 3: Maintain current creel and length limits unless desired population indices are not met for three years. (Fisheries)

Management Objective 2: Monitor and manage Rinquelin Trail Lake and its watershed to enhance diversity and quality of aquatic resource.

Strategy 1: Monitor aquatic plants when sampling. (Fisheries)

Strategy 2: Maintain aquatic vegetation below 30 percent coverage. (Fisheries)
Strategy 3: Plant native species of shoreline vegetation from seed to improve diversity as needed. (Fisheries)
Strategy 4: Construct evergreen brush piles as needed. (Fisheries)

Management Objective 3: Protect water quality and habitat in streams.

Strategy 1: Maintain riparian corridors on Rinquelin Trail Lake CA per *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009). (Wildlife)
Strategy 2: Identify riparian corridors that need to be widened and establish appropriate vegetation using tree planting, direct seeding or allowing natural regeneration. (Wildlife)

VII. Public Use Management Considerations

Challenges and Opportunities:

1) Provide area users with varied recreational opportunities (e.g., fishing, hunting, camping, and nature/wildlife viewing).
2) Provide the public with information regarding Rinquelin Trail Lake.

Management Objective 1: Provide area users compatible and inviting multi-use opportunities for recreation.

Strategy 1: Maintain accurate area information and regulations through the Atlas database, area brochures, posted information, and staff contacts with area users. (Wildlife)
Strategy 2: Annually distribute a fishing report in the Missouri Department of Conservation's *Fishing Prospects at Selected Missouri Lakes and Streams.* (Fisheries)
Strategy 3: Promote compatible and safe recreational opportunities (e.g., fishing, hunting, wildlife viewing, camping, and nature photography). (Wildlife)
Strategy 4: Manage special use permits and coordinate seasonal uses to prevent multi-use conflicts. (Wildlife)
Strategy 4: Repair and maintain all fishing jetties/platforms, parking lots, and privy at Rinquelin Trail Lake CA. (Forestry)

VIII. Administrative Considerations

Challenges and Opportunities:

1) Maintain cooperation and good relations with neighboring landowners.

2) Enforce area and statewide regulations to ensure protection for area users and resources.
3) Maintain dam structure and its associated infrastructure.

Management Objective 1: Maintain area boundaries and access roads to reduce any potential conflicts and confusion with neighboring landowners.

Strategy 1: Inspect and maintain signage on a regular schedule. Replace or repair signage, as needed. (Forestry, Wildlife)

Strategy 2: Continue maintenance and signage on access roads. (Forestry, Wildlife)

Management Objective 2: Monitor and administer area and statewide regulations for area user satisfaction.

Strategy 1: Monitor and mitigate vandalism and illegal activities by seasonally closing some area restrooms. (Forestry, Protection)

Strategy 2: Ensure all special use permit users and contractors are following standards set within the contractual agreement, and confront any violations in a punctual manner. (Wildlife, Protection)

Strategy 3: Work in cooperation with conservation agents and other law enforcement to enforce and investigate violations of the *Wildlife Code of Missouri* and other state laws. (Protection)

Management Objective 3: Monitor and maintain lake infrastructure.

Strategy 1: Maintain lake dam to ensure it meets standards of Missouri Department of Natural Resources periodic inspection. (Forestry, Wildlife)

Lands Proposed for Acquisition:

When available, inholdings and/or 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:

	FY18	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**FY32**
Terrestrial Resource Management Considerations															
Objective 1															
Strategy 1					X										

APPENDICES

Area Background:
The 286 acres comprising Rinquelin Trail Lake Conservation Area were acquired by the Missouri Department of Conservation through five separate transactions between 1982 and 1990.

The area is named after a Native American trail that passed through Vienna, Missouri and connected the Gasconade and Osage rivers. Some early maps named the trail "The Rinquelin Trail" to the mouth of the Osage River.

The area features a 29-acre lake with a boat ramp, fishing jetties, and a double-pit privy that are accessible to people with disabilities. The lake has three parking lots that accommodate 26 vehicles.

Wildlife habitat management on the area includes disturbing old fields, planting native grasses, and conducting forest and woodland management.

Current Land and Water Types:

Land/Water Type	**Acres**	**Miles**	**% of Area**
Woodland	122		43
Old Fields	83		29
Forest	43		15
Open Water	29		10
Grassland	9		3
Total	**286**		**100**
Stream Frontage		1	

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.

Missouri Department of Conservation. (2014). *Missouri Forest Management Guidelines Voluntary Recommendations for Well-Managed Forests*. Jefferson City, Missouri: Conservation Commission of the State of Missouri.

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, Missouri: Conservation Commission of the State of Missouri.

Missouri Department of Conservation. (2016). *Natural Heritage database [Arc Geographic Information System data files]*. Retrieved from Missouri Department of Conservation shape files.

Nelson, P. W. (2010). *The Terrestrial Natural Communities of Missouri.* Jefferson City, MO: Missouri Natural Areas Committee, Missouri Department of Natural Resources.

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

Maps:

Figure 1: Area Map
Figure 2: Existing Cover Types
Figure 3: Natural Communities Types
Figure 4: Area Infrastructure and Facilities

Figure 1: Area Map

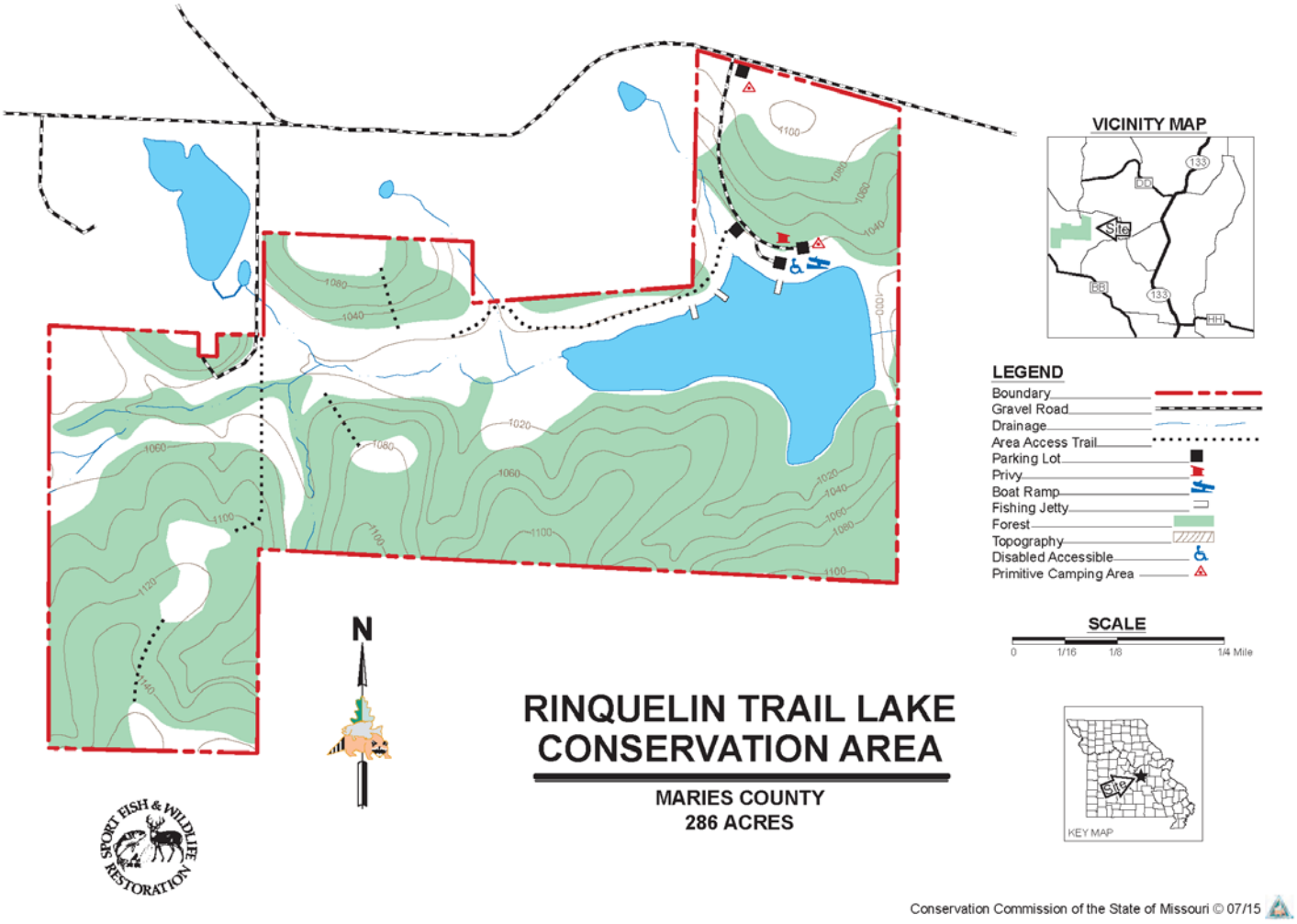


Figure 2: Existing Cover Types

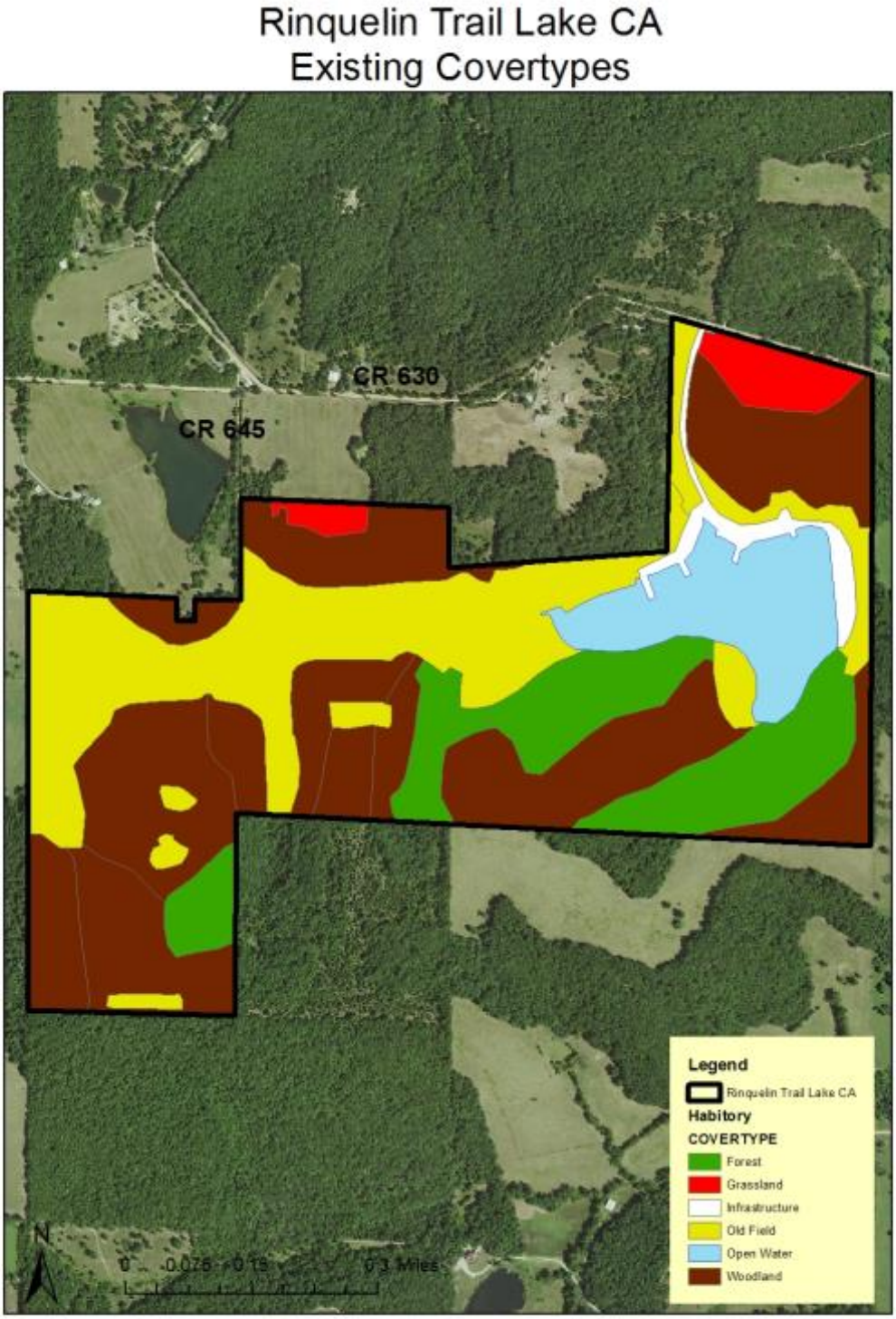


Figure 3: Natural Community Types

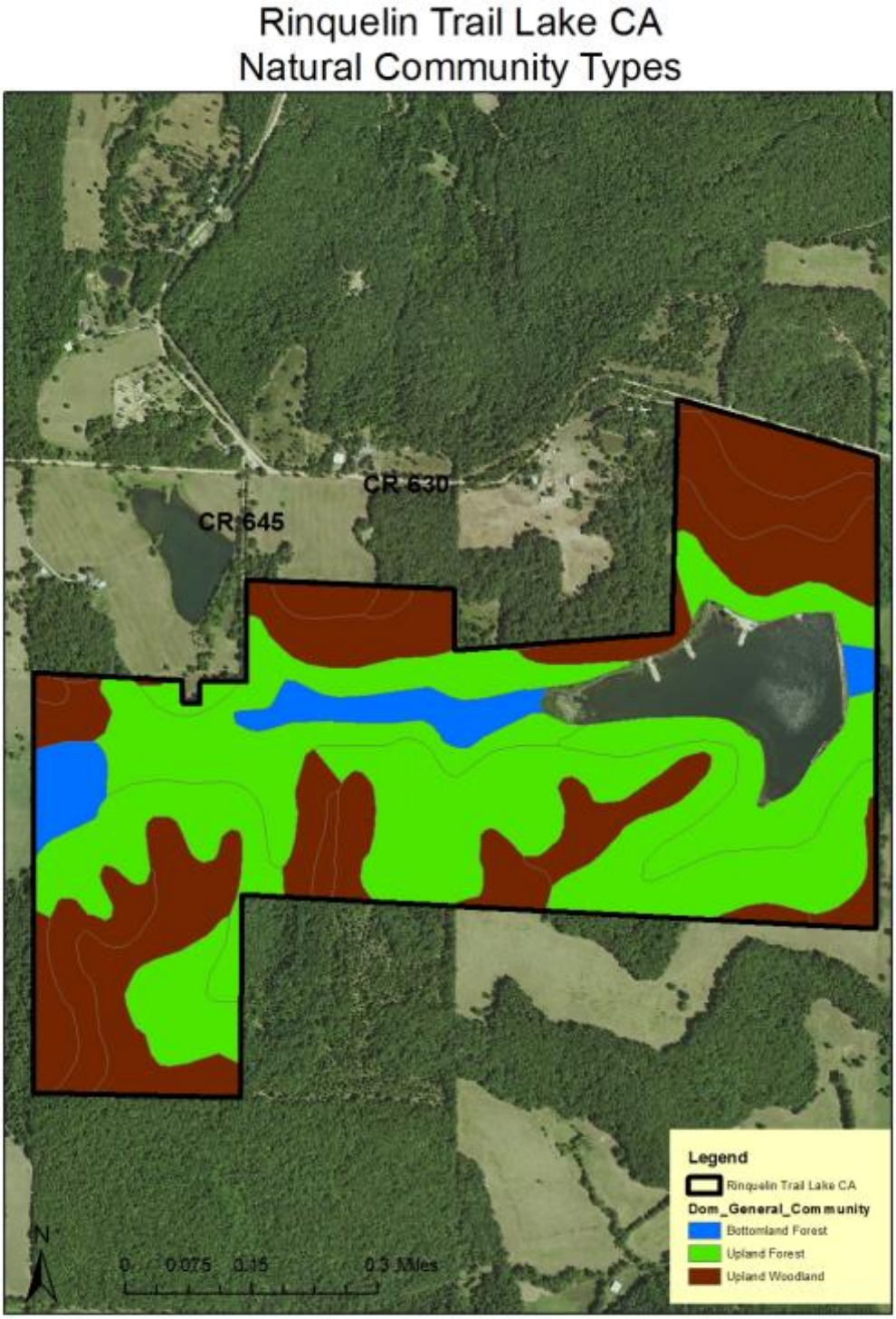
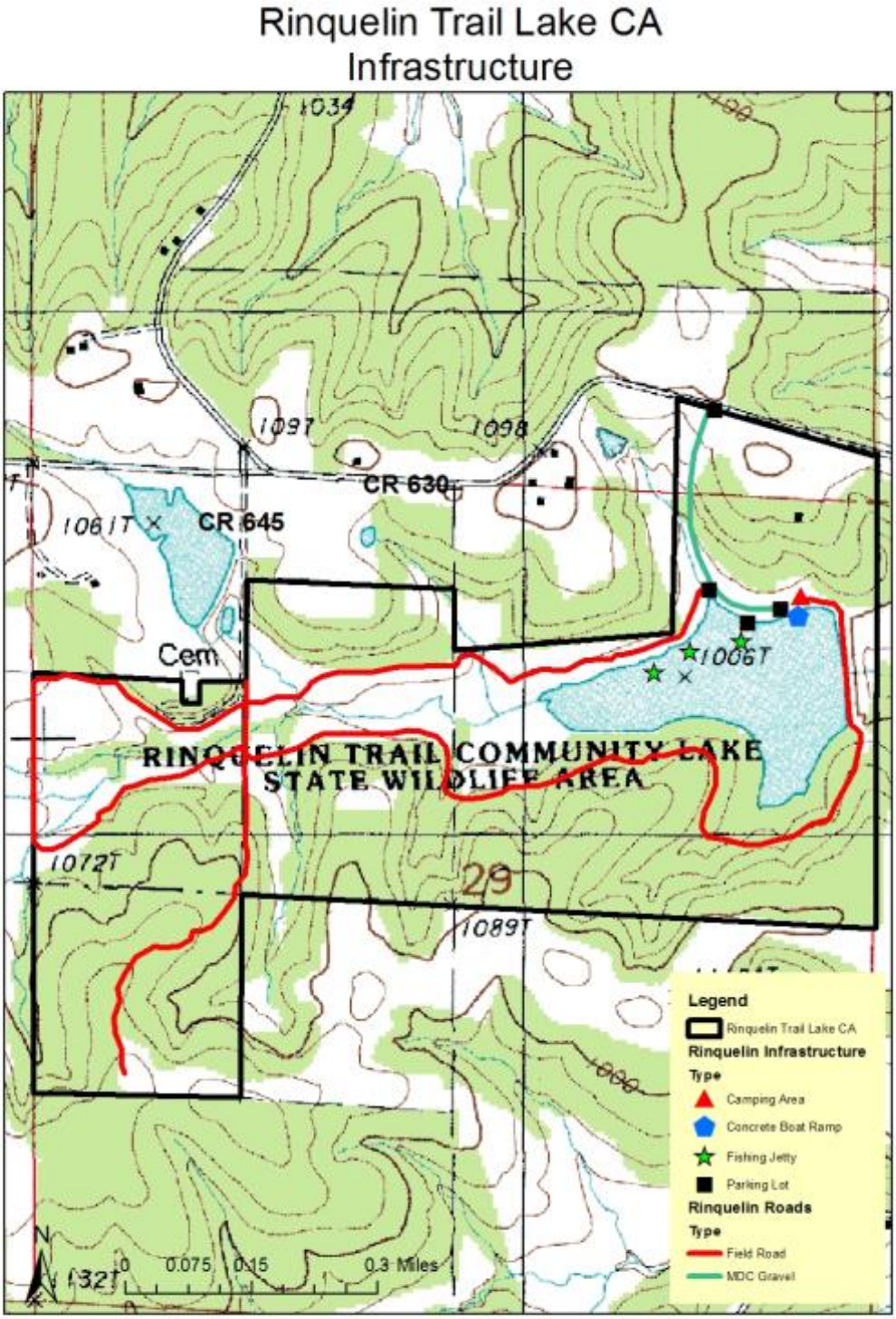


Figure 4: Area Infrastructure and Facilities



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