

Rocky Fork Lakes Conservation Area

Ten-Year Management Plan

FY 2018-2027




Wildlife Division Chief


Date

Rocky Fork Lakes Conservation Area Management Plan Approval Page

PLANNING TEAM

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CENTRAL REGION

RCT Chair

Thomas M. Smith III
Signature

04-20-2018
Date

Wildlife Management Chief

Michael A. Schwan
Signature

4/24/18
Date

OVERVIEW

- **Official Area Name:** Rocky Fork Lakes Conservation Area, #7912
- **Year of Initial Acquisition:** 1979
- **Acreage:** 2,199 acres
- **County:** Boone
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

Restore the grassland and woodland communities and provide outdoor recreational opportunities for the public, such as target shooting and fishing.
 - B. Desired Future Condition**

The desired future condition of Rocky Fork Lakes Conservation Area (CA) are healthy woodland and grassland communities, reduced invasive species, quality fishing, and a safe well-maintained shooting range. The mined portions of the area will remain as they currently are since reclaiming those portions would be prohibitively expensive.
 - 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:** 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:** Yes, records kept with Missouri Department of Conservation (Department) natural history biologist.
- III. Existing Infrastructure**
 - Shooting range (Americans with Disabilities Act [ADA] accessible)
 - Rocky Fork Lake, 52-acre fishing lake
 - 88 other lakes and ponds (156 acres total)
 - One concrete boat ramp

- One floating ADA-accessible fishing dock
- Two privies (ADA accessible)
- Seven parking lots (lots at shooting range and near fishing dock are ADA-accessible)
- One small shed

IV. Area Restrictions or Limitations

A. Deed Restrictions or Ownership Considerations: None

B. Federal Interests: 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: Waterline, powerline

D. Cultural Resource Findings: No known cultural resources.

E. Endangered Species: None known.

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) Approximately 1,150 acres were strip-mined for coal from 1963 to 1972. The mined areas have an altered plant community that is dominated by invasive species, primarily fescue, autumn olive, bush honeysuckle, and sericea lespedeza.
- 2) Remnant native grassland communities of good quality remain on 105 scattered acres. Past management activities include prescribed fire, tree removal, inter-seeding forbs, and treatment of invasive species.
- 3) Thinning and prescribed fire have been used with success to manage the woodland acres. Autumn olive is a problem plant once the tree canopy is open and requires annual treatment.
- 4) A 1-acre glade is located near the northeast corner of the property and could be expanded with additional tree removal.
- 5) Open land south of the Mt Zion Church Road parking lot has too much fescue underneath the native plantings.

Management Objective 1: Reduce the abundance of invasive species on the mined-over areas.

Strategy 1: Monitor the non-mined portions for invasive species, including autumn olive, bush honeysuckle, fescue, and sericea lespedeza. (Wildlife)

Strategy 2: Apply invasive species management techniques including, but not limited to, chemical control and mechanical removal to reduce their abundance and spread, as needed on mined portions of the area. (Wildlife)

Strategy 3: Monitor all areas, where management has been implemented, to control invasive species to be sure efforts have been successful. (Wildlife)

Management Objective 2: Enhance the remnant native grassland communities.

Strategy 1: Implement appropriate management techniques, including the use of inter-seeding, prescribed fire, chemical application, and mechanical removal to enhance the native grassland communities. (Wildlife)

Management Objective 3: Enhance the woodland communities.

Strategy 1: Conduct a forest inventory and develop a corresponding forest management plan. (Forestry)

Strategy 2: Monitor forest/woodland/open land habitats for invasive vegetation, diseases, and insects. Use a combination of mechanical, herbicide, and prescribed fire to suppress any infestations that may develop. (Wildlife)

Strategy 3: Implement the forest management plan, which may include, but is not limited to, strategies to thin the overstory and use prescribed fire to remove trees less than 4 inches in diameter at breast height to allow more sunlight to reach the ground and stimulate the herbaceous community. (Wildlife, Forestry)

Strategy 4: To minimize soil loss, utilize best management practices during timber harvest and woodland management, as described in the Department's manuals *Missouri Watershed Protection Practices Recommended for Missouri Forests: 2014 Management Guidelines for Maintaining Forested Watersheds to Protect Streams* (Missouri Department of Conservation, 2014) and the *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* (Missouri Department of Conservation, 2014). (Wildlife, Forestry)

Management Objective 4: Expand the size of the glade.

Strategy 1: Implement the forest management plan, which may include, but is not limited to, strategies to remove trees by cutting and conducting prescribed fires to expand the glade boundary, as needed. (Wildlife)

Strategy 2: Monitor glade for invasive vegetation. Use a combination of mechanical, herbicide, and prescribed fire to suppress any infestations that may develop. (Wildlife)

Management Objective 5: Reduce the amount of fescue in the field adjacent to the Mt. Zion parking lot.

Strategy 1: Time the use of fire and herbicide applications to reduce the fescue while promoting the growth of native grasses and forbs. (Wildlife)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Rocky Fork Lake receives considerable fishing pressure as do several of the more easily accessible strip pits.
- 2) During the summer months, aquatic vegetation can make bank-fishing difficult in Rocky Fork Lake.
- 3) Rocky Fork Creek has a high aesthetic value before it flows into the mined-over land.

Management Objective 1: Monitor and manage Rocky Fork Lake and strip pits to provide sustainable and diverse fishing opportunities and maintain accessibility for users of all abilities.

Strategy 1: Monitor fish populations annually and recommend fishing regulation changes as needed. (Fisheries)

Strategy 2: Stock catfish annually. (Fisheries)

Strategy 3: Annually construct fish attractors using hardwoods, eastern red cedar, or recycled Christmas trees. (Fisheries)

Management Objective 2: Treat aquatic vegetation that interferes with bank-fishing.

Strategy 1: Physically remove or apply herbicide to aquatic plants that interfere with bank-fishing. (Fisheries)

Strategy 2: Mow, as needed, to provide accessibility for bank-fishing. (Wildlife)

Management Objective 3: Maintain the aesthetic quality of the upper reach of Rocky Fork Creek.

Strategy 1: Inspect all riparian corridors to ensure compliance with the *Watershed and Stream Management Guidelines for Lands and Waters Managed by the Missouri Department of Conservation* (Missouri Department of Conservation, 2009). (Wildlife)

Strategy 2: Implement and maintain good riparian corridor practices on Rocky Fork Lake CA, based on inspection results and according to *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009). (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Provide for hunting, fishing, and wildlife viewing opportunities.
- 2) Provide accessibility to area users with mobility disabilities.
- 3) Maintain area infrastructure at current levels.
- 4) Provide the public with opportunities to safely use the shooting range.

Management Objective 1: Provide for hunting, fishing, and wildlife viewing opportunities.

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

Strategy 2: Maintain field roads and trails that provide access to area users, where practical. (Wildlife)

Management Objective 2: Provide accessibility for all anglers and range users.

Strategy 1: Maintain the floating dock and shooting range so that they are Americans with Disabilities Act (ADA) accessible. (Wildlife, Design and Development)

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

Management Objective 3: Maintain area infrastructure at current levels.

Strategy 1: Maintain infrastructure according to the Department guidelines. (Wildlife)

Management Objective 4: Provide the public with opportunities to safely use the shooting range.

Strategy 1: Maintain firearms range according to the Department *Shooting Range Facility Program Manual* (Missouri Department of Conservation, 2013). (Wildlife, Outreach and Education, Design and Development)

Strategy 2: Continuously evaluate safety and accessibility of the range for all users. Submit appropriate requests for small construction and capital improvement projects as needed (Wildlife, Outreach and Education, Design and Development)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Build relationships with neighboring landowners.
- 2) Enforce area regulations to provide a safe and inviting area for public use.

- 3) Provide readily available information about the area for the public.
- 4) Consider land acquisition, when available.

Management Objective 1: Build relationships with neighboring landowners.

Strategy 1: Maintain clearly identified property lines by inspection and marking on a regular cycle. (Wildlife)

Strategy 2: Work with neighbors to minimize boundary issues, trespass, or any other issues affecting the conservation area or adjoining private property. (Wildlife)

Strategy 3: Promote habitat management on neighboring landowner properties. (Private Land Services, Wildlife)

Management Objective 2: Cooperatively patrol the area and report unauthorized activities.

Strategy 1: Regularly patrol and enforce the *Wildlife Code of Missouri*, with emphasis on off-trail abuse, vandalism, littering, and response to public complaints. (Protection, Wildlife)

Management Objective 3: Inform public about area regulations.

Strategy 1: Maintain signs according to Department policy. (Wildlife)

Strategy 2: Maintain accurate and timely information on the Department's Atlas Database. Review information annually. (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 for this management plan are considered ongoing.

APPENDICES

Area Background:

Rocky Fork Lakes Conservation Area (CA) was established in March 1979 when 2,025 acres were purchased for \$379,000 from the Peabody Coal Company using Design for Conservation funds. Approximately 1,150 acres of the area’s 2,200 current acres were strip-mined for coal from 1963 to 1972. Prior to the Department’s acquisition, 75,000 trees and shrubs were planted on 70 percent of the mined-over area while the other 30 percent were planted to cool-season grasses. The strip-mining created 88 permanent water bodies, ranging in size from 0.1 to 52 acres, the largest being Rocky Fork Lake. There are approximately 116 acres of water on the area that support fish and aquatic vegetation. There are also two other small pits that are too acidic to support fish or wildlife. Spoil piles left over from the strip-mining continue to act as a source of sulfuric acid, which inhibits the establishment of aquatic life in these pits. In 2008, a joint effort between Missouri Department of Natural Resources and the Department completed a 40-acre reclamation project to protect water quality and restore habitat. A shooting range opened to the public in 1991 and was renovated in 2014 for safety and user improvements.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest	1,509		69
Grassland	400		18
Open Water	156		7
Old Field	100		5
Infrastructure	20		<1
Wetlands	15		<1
Total	2,199		100
Stream Frontage		2.1	

Public Input Summary:

The draft Rocky Fork Lakes Conservation Area Management Plan was available for a public comment period Dec. 1–31, 2017. The Missouri Department of Conservation received comments from seven respondents (Appendix A). The Rocky Fork Lakes 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 the Rocky Fork Lakes Conservation Area Management Plan public comment period.

Suggests better enforcement to deter illegal/restricted activities at the area (particularly, at the Patricia Road access). Suggestions to deter activities include installing a gate to reduce infractions or closing the Patricia Road access.

We have not been aware of any illegal activities occurring at this parking lot. We will maintain a cable gap across the service trail at this location. If you notice illegal activities, please contact the regional office at 573-815-7900.

Suggests establishing a pheasant population at Rocky Fork Lakes Conservation Area.

Pheasants do not persist well in central Missouri, despite having been stocked in the past. We do have some grasslands on the area that are in pretty good shape, but they are not extensive enough to ensure that pheasants could do well here. There are a few locations in other portions of the state where they can and do sustain themselves.

Suggests planting duck food in the area ponds.

The area has numerous bodies of water that support native aquatic plants used by ducks.

Suggests prohibiting the use of lead shot at the conservation area.

The prohibition of lead shot is primarily reserved for locations where it is possible for large concentrations of waterfowl to feed. There are no current plans to change regulations of lead shot on the area.

Suggests liming hedge rows and fields.

This is not a priority for this formerly mined area as the area has no current agricultural uses.

Has noticed a decline in deer abundance at the area in the past few years. Suggests prohibiting antlerless deer hunting.

The recommendation is appreciated, but with there being no hunting allowed on the adjoining Finger Lakes State Park, it is feared that removing antlerless deer harvest on the area could contribute to a larger deer population that could be problematic for neighbors.

Has not seen food plots at the conservation area in recent years. Would like to know if, or why, food plots are no longer planted at the area.

Food plots are not a priority for this area. The area lacks an agricultural use that would provide opportunity for some food plots to be developed.

Has noticed a decline in rabbits near the area. Would like to know how to increase rabbit abundance.

Large brush pile development is a good method that can be used to provide opportunity for rabbit population increases. Some recent management in the northeast grasslands portions of the area may prove beneficial for local rabbit populations.

Suggests better marking of area boundaries.

Boundary marking is typically done on a schedule. If there is a particular portion of boundary needing special attention, please notify the area manager at 573-445-3882.

Suggests implementing more restricted hours/days at the shooting range to provide more times of peace and quiet for neighbors.

Unstaffed shooting range hours of operation are covered by the *Wildlife Code of Missouri*. Suggestions for statewide regulation changes are considered by the Regulations Committee. The planning team will discuss options for altering hours of operation through regulation.

Is concerned about safety at the shooting range. Suggests having range safety volunteers at the shooting range on the weekends.

Interested volunteers may contact the area manager at 573-445-3882.

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. (2013). *Shooting range facility program manual*. Jefferson City, MO: Missouri Department of Conservation.

Missouri Department of Conservation. (2014a). *Missouri forest management guidelines: Voluntary recommendations for well-managed forests*. Jefferson City, MO: Conservation Commission of the State of Missouri.

Missouri Department of Conservation. (2014b). *Missouri watershed protection practices recommended 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: Topographic Map

Figure 3: Cover Types

Figure 4: Easements

Additional Appendices:

Appendix A: Rocky Fork Lakes Conservation Area Management Plan Public Comments

Figure 1: Area Map

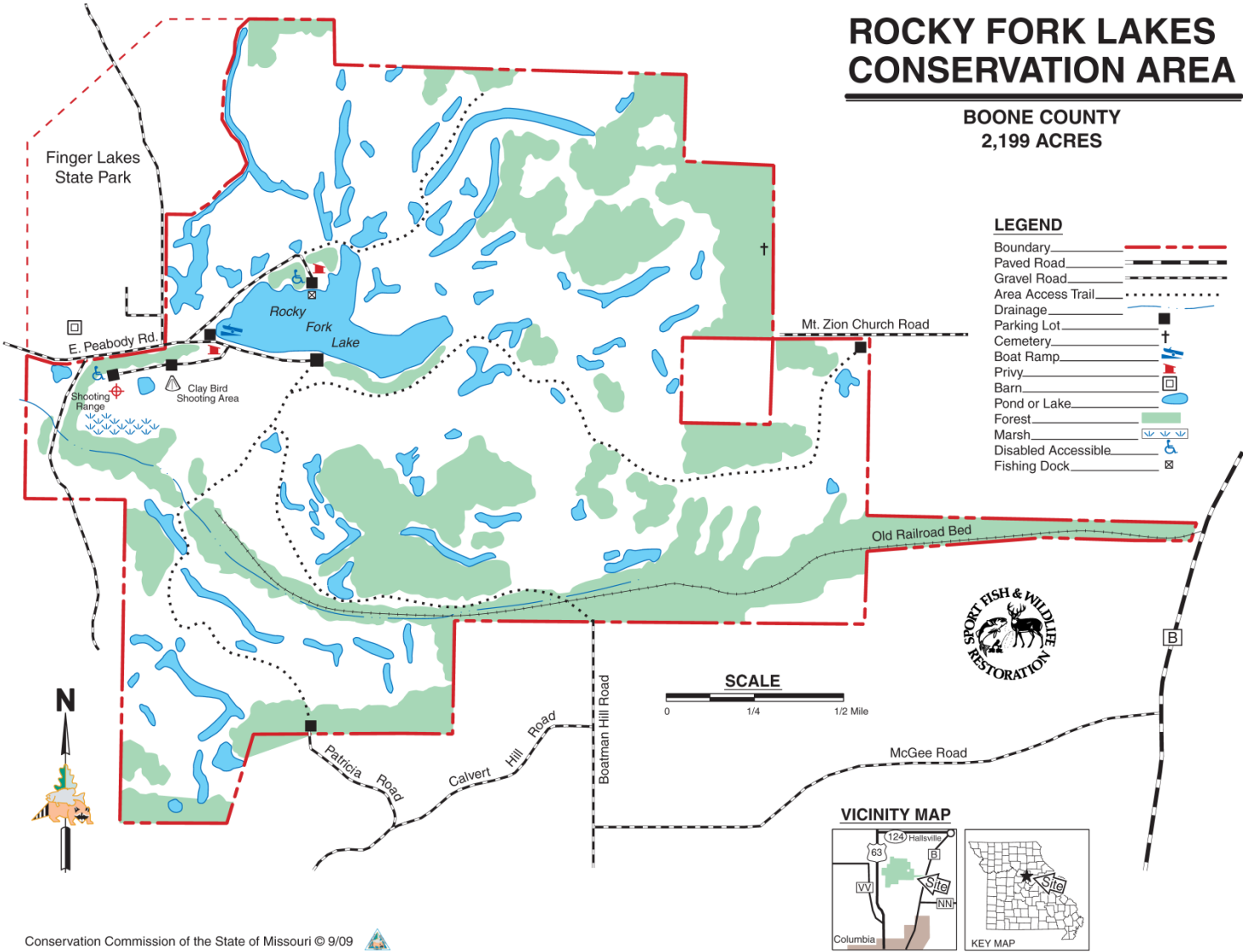


Figure 2: Topographic Map

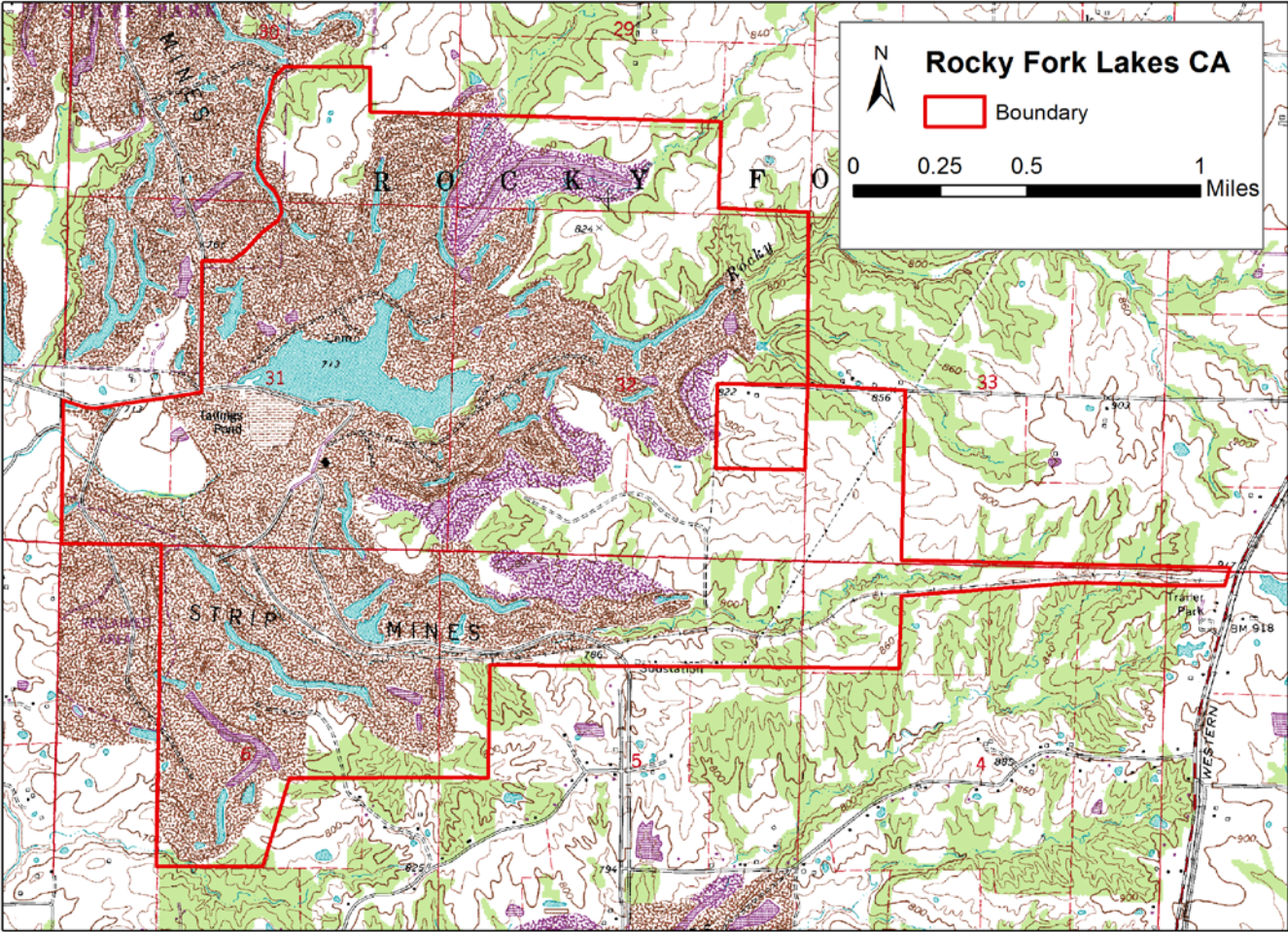


Figure 3: Cover Types Map

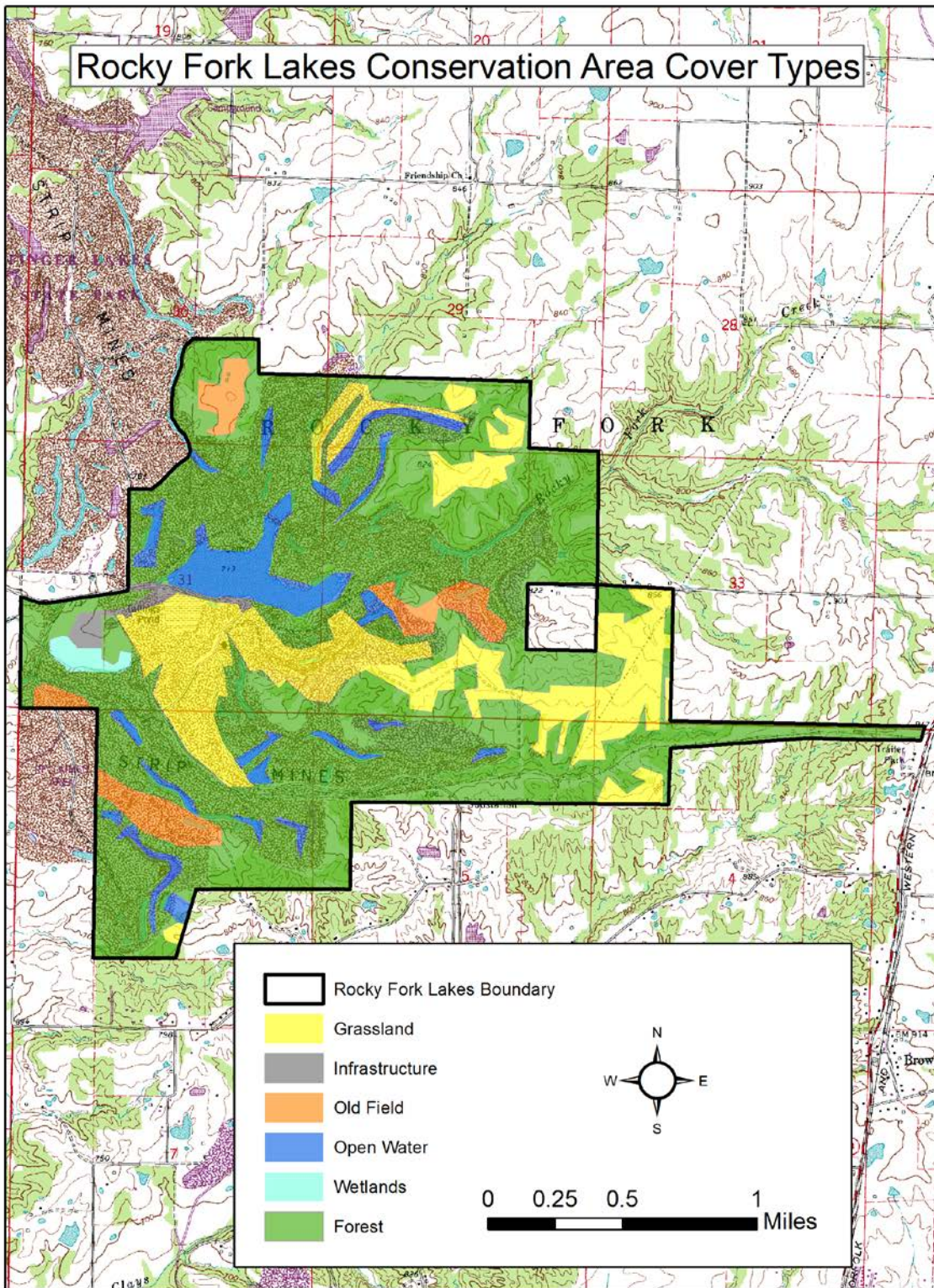
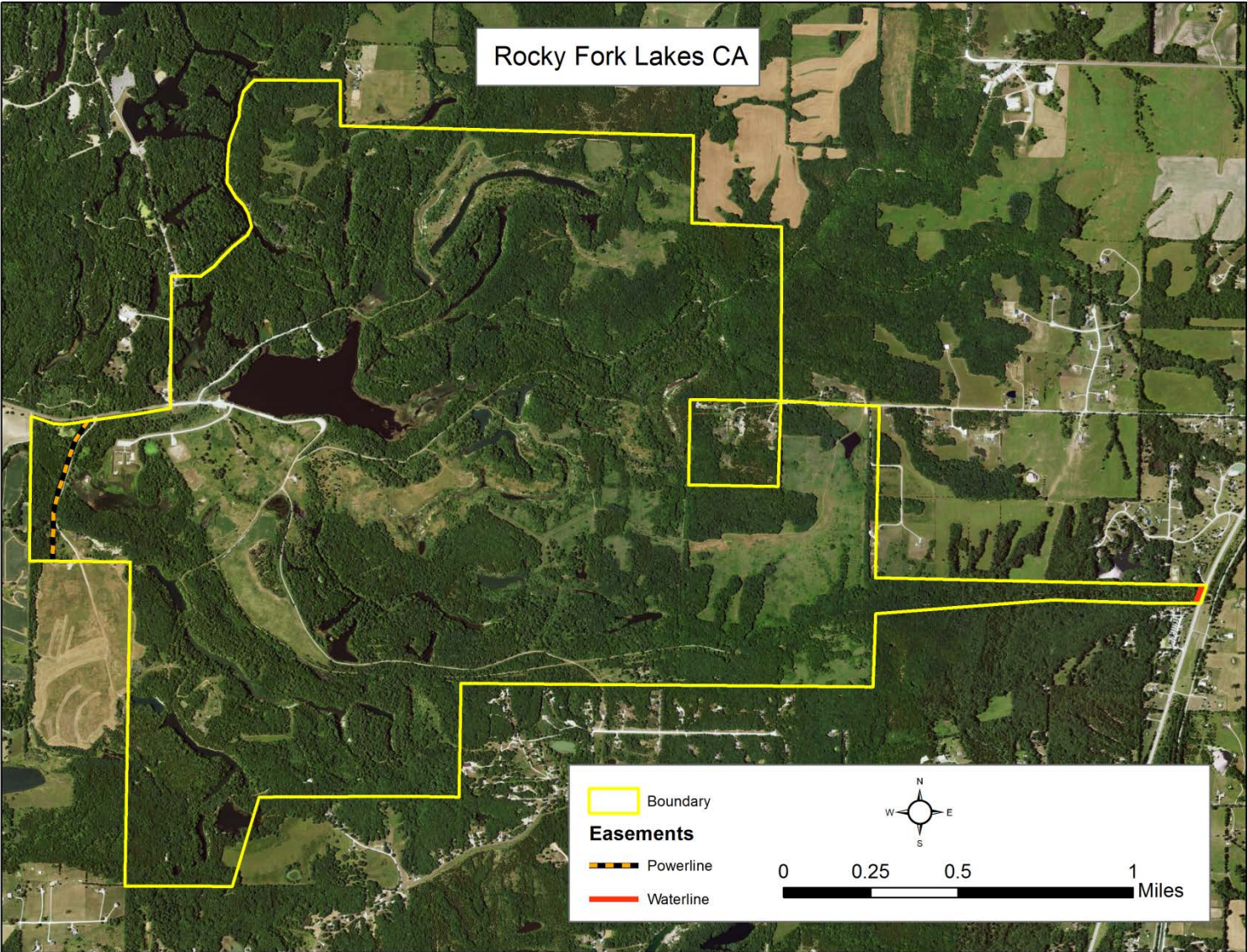


Figure 4: Easement Map



Appendix A: Rocky Fork Lakes Conservation Area Management Plan Public Comments

Received during public comment period (Dec. 1–31, 2017):

<p>Hello, I live on Patricia Rd off of Calvert hill Rd in Columbia MO. That butts up to Rocky Fork . We have a lot traffic day and night contains with high speed, suspicious activity such as sex, drugs,alcohol four wheeler I think if you put up a gate it would stop alot of this Thank you *****</p>
<p>Would love to see some pheasant established at this park. It seems to me there is enough grassland to maintain a stable population of pheasants.</p>
<p>1 plant duck food on all ponds so they will light in M.O. instead of other states 2. no lead shot. shot guns make 95% of the lead in the wild. Healthy soil =healthy plants =healthy animals. The reproductive of the hen ducks will fall !!!!! and everything else 3. Lime the hedge rows and fields to help neutralize the dissolved lead 4 . leave the Rifles and pistols alone! it has lost 3 times in top federal courts because police have protective closing</p>
<p>The Patricia road access should either be closed or should be patrol much heavier by conservation agents. As someone who lives near the access point it has become a haven for strange and possible illicit activity. Some of this activity has been reported by myself and others but nothing has been done about it. Examples include trash/ underwear and empty condom wrappers in the Patricia road parking area. Also I have noticed a decline in the deer population over the past five or so years . Where it was common to see deer every other day. I now only see deer a handful of times in an entire season . I also seem to remember food plots being planted on conservation but the appear to be abandoned .</p>
<p>I grew up on land bordering this area and my parents still live there off Patricia Road. When I grew up there were lots of rabbits. We have gone years without seeing any but saw a few this year. Is there anything we can do to help them continue to rebound. It's not loss of habitat where we are. Also, although there is a shooting range, there are people who meet at the end of Patricia road and shoot guns- target shooting. I was sitting in a tree stand during opening weekend on my parents land and Sunday afternoon's hunting was ruined by a group of people shooting multiple guns at the end of the road. Thank you for all that you do and I am looking forward to improvements that you will make.</p>
<p>Over all Rocky Fork is a very nice area, and I have used the area off and on for the last 20 or so years.I have noticed a decline in deer population at least on the southwest side. We have experienced a spike in the number of trespassing incidents this year and we attribute it The the amount of people coming in from patrica ave. Patricia ave has a very high volume of traffic at all hours or the night. We have had a few stands stolen over the years and have had people sit in our stands from Rocky Fork the boundaries are not clearly marked anymore. As for the deer population I would love to see Rocky Fork stop anterless for a a bit I sat in some of my most productive area and have only seen one deer and that was on September 24th. I really like the idea of muzzle loaders being allowed during firearms season but it's a double edge sword it's has increased the amount of trespassing and I think it has hurt the over all deer population a bucks only for a few years may be a good idea. And that range o my God we hear auto fire weekly and sometimes well after dark can the local people that live here get at least one day a</p>

week or month where we don't have to hear constant gun fire I have no issues with people enjoying them selves but would like a quiet day even if it's one day a month.

Please implement the use of range safety volunteers during the weekends in this area. Even with the recent construction to make the range a safer place, I have still had the unfortunate scenario of being down range while individuals began shooting. This has happened on 4 different occasions. Every time, I took all precautions to ensure that it was safe to go down range with all of the other shooters. However, in every instance an individual unaware of the rules/etiquette of a public range would set up and begin firing without noticing that people were down range. I have since quit visiting this range as a result.