

Three Creeks Conservation Area

Ten-Year Area Management Plan
FY 2018-2027



Lisa D. Allen
Forestry Division Chief

5-09-18
Date

Three Creeks Conservation Area Management Plan Approval Page

PLANNING TEAM

A.J. Campbell, Resource Forester

Tim James, Wildlife Management Biologist

Darby Niswonger, Fisheries Management Biologist

Ann Koenig, Community Forester

Chris Newbold, Regional Natural History Biologist

Adam Doerhoff, Conservation Agent

Brian Flowers, Outdoor Skills Specialist

Ryan Lueckenhoff, Private Land Conservationist

CENTRAL REGION

RCT Chair

Thomas M. Stebbins III
Signature

04-24-2018
Date

FORESTRY DIVISION

Forest Management Chief

Justin Gachne
Signature

04-30-18
Date

OVERVIEW

- **Official Area Name:** Three Creeks Conservation Area, #8315
- **Year of Initial Acquisition:** 1984
- **Acreage:** 1,501 acres
- **County:** Boone
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**
 - A. **Strategic Direction**

Promote diverse wildlife habitat and compatible recreational opportunities at Three Creeks Conservation Area (CA).
 - B. **Desired Future Condition**

The desired future condition of Three Creeks CA is a landscape of oak-hickory forests and woodlands, bottomland hardwood forests, and grasslands with limited non-native, invasive species and provide habitat for wildlife and a variety of recreational opportunities for the public.
 - C. **Federal Aid Statement**

N/A

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- A. **Priority Areas:** Public Cave Karst Conservation Opportunity Area, Cave Focus Area
- 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:** Yes, records are kept with Missouri Department of Conservation (Department) natural history biologist. Managers should follow the Cave Management policy found in the Department Resource Policy Manual. All caves on this and other conservation areas are closed or restricted to public access. The fungus that causes White-nose Syndrome in bats has been documented in Missouri, resulting in the Department's White-nose Syndrome Action Plan that limits public access to protect bats.
- C. **Springs:** Yes, records kept with Department natural history biologist.

D. Other: Bass Creek, Bonne Femme Creek, and Turkey Creek run through the conservation area. The conservation area also contains many karst topographical features.

III. Existing Infrastructure

- Five parking lots and associated access roads
- Turkey Creek Nature Trail (3-mile interpretive hiking trail)
- Three Creeks Trail (8-mile hike/bike/horse trail)
- Two equestrian mounting blocks
- Four fishless ponds (1.0 acre total)

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: Utility easements, ingress/egress easement for a neighboring landowner.

D. Cultural Resources Findings: Yes, records kept with Department environmental compliance specialist. Managers should follow best management practices for cultural resources found in the Department Resource Policy Manual.

E. Endangered Species: Endangered species are known from this area. Area managers should consult the Natural Heritage Database annually and review all management activities with the natural history biologist.

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

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Continue suppressing non-native invasive species.
- 2) Continue promoting a mixture of warm-season grass, cool-season grass, and forbs in old fields and grasslands.
- 3) Promote habitat for threatened and endangered bat species.
- 4) Monitor for significant forest health issues, such as non-native, invasive insects and pathogens.

Management Objective 1: Maintain forest cover for wildlife and recreation.

Strategy 1: Monitor for the presence of invasive forest pests and plants by means of routine inventory and area inspections to assure a healthy, thriving forest habitat. (Forestry)

Strategy 2: Conduct habitat management activities to manage any insect and disease issues, as needed. (Forestry)

Strategy 3: Control known populations of non-native invasive plants using proven chemical and mechanical treatments. (Forestry)

Strategy 4: Identify and treat new populations of non-native invasive plants using proven chemical and mechanical treatments. (Forestry)

Strategy 5: Utilize Best Management Practices during habitat management as described in the Department's manuals: *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation* (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: Maintain grasslands and old fields to provide a balance of bare ground, warm- and cool-season grasses, annual forbs and shrubs to maintain and improve upland habitat.

Strategy 1: Utilize a variety of management techniques to promote a mixture of warm-season grass, cool-season grass, and forbs, eliminate or control undesirable grasses, provide bare ground, encourage annual forbs and promote areas of shrubby growth. Techniques will include, but are not limited to, spraying, prescribed burning, mechanical treatments, woody cover removal, disking, mowing, haying, planting and seeding. (Forestry)

Strategy 2: Continue managing old field habitats with small grain food plots on a rotational basis. (Forestry)

Management Objective 3: Promote habitat for bat species and protection of hibernacula.

Strategy 1: Maintain closure of all caves located on the conservation area and monitor for unauthorized use. (Forestry, Wildlife)

Strategy 2: Refer to *Guidelines for Avoiding and Minimizing Impacts to Federally-Listed Bats on Missouri Department of Conservation Lands* (Missouri Department of Conservation, 2016) when felling trees. (Forestry)

VI. Aquatic Resource Management Considerations

There are five streams on the Three Creeks CA that total approximately 9.1 miles. All streams have good riparian corridors that help maintain healthy aquatic ecosystems and

prevent stream bank erosion. There are two unnamed first-order streams (0.1 and 0.5 miles in length), one third-order stream (Turkey Creek, 5.0 miles in length), and two fourth-order streams (Bonne Femme Creek and Bass Creek, 2.5 and 1.0 miles in length, respectively) on the area. Bonne Femme Creek, Turkey Creek and Bass Creek are the area's largest streams and provide limited wade fishing opportunities. The streams on the area are intermittent losing streams, with the water draining into the Devil's Icebox and Hunter Cave karst ecosystems. These areas are highly sensitive to surface water pollution and sedimentation, so best management practices at the surface relating to these streams are essential.

Challenges and Opportunities:

- 1) Maintain and enhance the forested riparian corridor along stream areas.
- 2) Protect, enhance, and maintain area stream resources to support diverse aquatic life.

Management Objective 1: Maintain or establish (where needed) forested riparian corridors along area streams.

Strategy 1: Maintain 200-footwide wooded corridors (100 feet on each side of stream) along all area streams in accordance with the *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009). (Forestry)

Strategy 2: Encourage neighboring forest landowners to follow the best management practices outlined in *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation* (Missouri Department of Conservation 2009) or in the *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* (Missouri Department of Conservation, 2014) when conducting forestry operations on their lands. (Forestry)

Management Objective 2: Maintain and enhance (where needed) water quality and diverse stream fauna.

Strategy 1: Develop and implement management recommendations, as needed, for area streams with erosion problems. (Fisheries)

Strategy 2: Periodically monitor area terrestrial and aquatic habitat conditions to ensure that best management practices are used to limit erosion and sediment input into streams. (Forestry, Fisheries)

Management Objective 3: Survey area stream fish populations to determine diversity and quality of fish communities.

Strategy 1: Inventory area stream fish communities by periodic electrofishing and/or seining surveys to determine species composition and status. (Fisheries)

VII. Public Use Management Considerations

Three Creeks CA is heavily used by recreational users with diverse interests. Maintaining accessible trails that attract users and minimize conflicts is a priority for the area management team.

Challenges and Opportunities:

- 1) Maintain interpretive and multi-use trails.
- 2) Provide hunting and wildlife viewing opportunities.
- 3) Provide interpretive opportunities.
- 4) Build relationships with neighboring landowners.
- 5) Address conflicting uses to the extent possible.

Management Objective 1: Maintain interpretive and multi-use trails.

Strategy 1: Conduct an assessment of trail conditions. Identify problem erosion areas and sections that need re-routing to improve sustainability and reduce maintenance. (Forestry, Design and Development)

Strategy 2: Continue exploring options to reopen a closed portion of the multi-use trail. This portion of the trail was closed because erosion made a necessary creek crossing impassable. (Forestry)

Strategy 3: Identify and reach out to local horseback riding individuals and/or groups to facilitate communication about changes to trail system. (Forestry)

Strategy 4: Update and maintain accurate signage on all trails consistent with Department guidelines. (Forestry)

Strategy 5: Routinely inspect trails for downed trees, erosion issues, and damage. Remove downed trees from trails and repair trails where needed. (Forestry)

Management Objective 2: Provide hunting and wildlife viewing opportunities.

Strategy 1: Conduct management activities that will provide diverse habitat for native species. (Forestry)

Strategy 2: Conduct invasive species suppression, when necessary, to improve wildlife habitat. (Forestry)

Management Objective 3: Provide interpretive opportunities.

Strategy 1: Provide interpretive brochures for the Turkey Creek Trail at the Deer Park Road kiosk. (Forestry)

Strategy 2: Routinely check the condition of interpretive trail markers on the Turkey Creek Trail. (Forestry)

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

Strategy 1: Work with neighbors to minimize any boundary, trespass, road issues or any other issues affecting the conservation area or private property. (Forestry)

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

Strategy 3: Determine and clearly mark all area boundaries. Monitor area boundaries on a regular basis to ensure proper signage. (Forestry)

Strategy 4: Resolve boundary issues with adjoining landowners as they arise. (Forestry)

Strategy 5: Continue maintenance of signage and access roads. (Forestry)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain area infrastructure at current levels.
- 2) Enforce area and statewide regulations to ensure protection for area users and resources.
- 3) Maintain roads for public access.

Management Objective 1: Maintain area infrastructure at current levels.

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

Management Objective 2: Monitor and administer area and statewide regulations to ensure public safety and satisfaction.

Strategy 1: Ensure all Special Use Permit users and contractors are following standards set within the contractual agreement. Address violations in a punctual manner. (Forestry)

Strategy 2: 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. (Forestry)

Strategy 3: Maintain signs according to Department policy. (Forestry)

Strategy 4: Maintain accurate and timely information on the Department's Atlas Database. Review information annually. (Forestry)

Management Objective 3: Maintain roads for public access.

Strategy 1: Grade and remove brush as needed from right of ways. (Design and Development)

Strategy 2: Continue to explore options with Boone County for winter maintenance of Deer Park Road and Tomlin Hill Road. (Forestry)

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:

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Aquatic Resource Management										
<i>Objective 3</i>										
Strategy 1					X					
Public Use Management										
<i>Objective 4</i>										
Strategy 3		X					X			

APPENDICES

Area Background:

Three Creeks Conservation Area (CA) is located in Boone County (halfway between Columbia and Ashland). The area takes its name from the three creeks that run through the area: Turkey Creek, Bass Creek, and Bonne Femme Creek. The rugged forest features scenic bluffs, intermittent streams, geologic formations, and old eastern red cedar trees. Through the years, the area was treated like much of Missouri's land. The timber was grazed and logged and occasional fires swept through the area. Because of these practices, the land has suffered sheet and gully erosion.

Three Creeks CA was considered for purchase as a result of substantial public input and interest in protecting the surrounding Three Creeks area from further urban development, which would destroy its appearance and natural features.

Moreover, Three Creeks CA was acquired to maintain and manage representative plant and animal communities and to provide outdoor recreational and educational opportunities in an urbanizing region of central Missouri.

Much of the land in the surrounding area was purchased by freed slaves following the Civil War. Generally, the tracts were small (usually 40- or 80-acre parcels). Land that could be seeded to pasture for grazing or plowed with a horse was farmed into the 1930s, when many families could no longer support themselves on the small tracts of land. Many had to sell their property due to the economic conditions during the Depression. The reduction in the number of landowners has continued up to the present time. Seven identifiable house sites have been located on the initial 685 acres.

The forest was harvested heavily after the turn of the 20th century and indiscriminate harvesting continued occasionally until the time of purchase by the Department. Frequent fires and grazing of the area were common practices until the last few decades.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest and Woodland	1,241		82
Grassland (non-prairie)	180		12
Old Field	70		5
Glade	10		1
Total	1,501		100
Stream Frontage		9	

Public Input Summary:

The draft Three Creeks Conservation Area Management Plan was available for a public comment period Dec. 1–31, 2017. The Missouri Department of Conservation received comments from 18 respondents (Appendix A). The Three Creeks 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.

Prior to writing this draft area management plan, the Department conducted a public input process (the Three Creeks Conservation Area Management Plan Idea Gathering Stage) from March 1-31, 2016. During this “idea gathering” stage, the Department received input from 33 respondents (See “Three Creeks Conservation Area Management Plan Idea Gathering Stage Public Input Summary” at <http://short.mdc.mo.gov/ZwV>). The area management planning team took comments into consideration as they drafted this 10-year management plan for Three Creeks Conservation Area. Department responses to comments received during the March 2016 idea gathering stage can be found in the report, *Missouri Department of Conservation Responses to Public Comments – Three Creeks Conservation Area Idea Gathering Stage Public Input Summary*. This report is available upon request by contacting Amy Buechler (amy.buechler@mdc.mo.gov).

Department responses to themes and issues identified through the Three Creeks Conservation Area Management Plan public comment period.

Terrestrial Resource Considerations

Suggests more removal of invasive species (e.g., red cedars, autumn olive, honeysuckle).

Suggests eliciting volunteer help to remove invasive species.

The area management team agrees with this concern and actively manages all known non-native invasive plant species using proven chemical and mechanical methods. This issue is identified in management Objective 1 on Page 4. The area management team appreciates that citizens are willing to help with invasive species suppression; however, Department policy prohibits volunteers from using the motorized equipment and herbicides used by the Department for these purposes.

Suggests more aggressive management to reduce the deer population (and damage caused by deer) at the area.

Hunting on Three Creeks CA is subject to statewide deer hunting regulations that are reviewed every year by Department staff.

Suggests management to increase the deer population at the area (e.g., create quality deer bedding, food, and cover).

White-tailed deer are habitat generalists and the mixture of forest, woodland, old field, grasslands, and managed food plots at Three Creeks CA provide suitable habitat for deer and many other native wildlife species.

Suggests adding a management objective for glade management.

Habitat management in this planning period will focus on the removal of non-native, invasive species. Some of this activity may occur on area glades where eastern red cedar is considered invasive.

Would like to know how cattle will be kept out of the woods and streams if grazing is used to manage grasslands.

The Department has no plans to graze livestock on the grasslands on the area.

Suggests liming hedge rows and fields.

This is not a priority for the area, because our native soils support diverse, native vegetation. Lime may be used as a soil amendment if it is determined that the pH is too low in managed food plots.

Values the varied wildlife that is supported by the conservation area (and that frequents neighboring properties).

Thank you for your comment. Providing diverse wildlife habitat is a Department priority.

Aquatic Resource Considerations

Suggests planting duck food in area ponds.

The small ponds on the area provide important habitat for reptiles and amphibians and are managed for this purpose. These small waterholes see little use by migrating waterfowl.

Public Use Management Considerations

Supports reopening the previously closed trail. Suggests rerouting the trail to avoid causing any damage to the stream. Suggests posting a sign to indicate the cause and duration of the trail closure.

The multi-use trail loop that was closed due to flood damage in 2011 was recently evaluated for reopening. A project to establish crossings on Turkey Creek was determined to be infeasible, unstable, and unsafe for area users; therefore, the loop cannot be re-established at this time. A feasible alternate route for the closed portion of the multi-use trail does not exist within the current area boundaries due to steep topography and the location of Turkey Creek. Portions of

the trail that are stable and maintainable have been reopened, but will not connect to form a loop in the immediate future. We are currently exploring additional options for reopening this loop in the future.

Suggests providing better access to the creek.

The existing trail system provides foot, bike, and equestrian access to the three creeks that cross the area. We are currently exploring options to reopen a closed portion of the multi-use trail, but there are currently no plans to add trails or modify trail use regulations.

Suggests providing area trail maps at the parking lot and online.

Brochures with a detailed map of the area are available at each of the four parking lots. The area management team regularly checks parking lots and refills empty brochure holders as needed. We recently updated the brochure/map for the Turkey Creek Interpretive Hiking Trail and placed an additional brochure holder at the Deer Park Lane parking lot to ensure that this document is available to area users. The area map is also available online on the Department webpage.

Suggests better trail maintenance. Suggests better marking of trails.

Some unofficial, user-created trails exist that are not maintained by the area management team. The area management team checks sign adequacy along official trails while performing routine maintenance, such as mowing. If signs are damaged or missing, the area management team will replace them in a timely fashion.

Suggests providing more miles of horse trails at the area. Appreciates horse-riding opportunities available at Three Creeks CA.

The Department is currently exploring options for reopening a closed portion of the multi-use trail, but there are currently no plans to add trails or modify trail use regulations.

Does not support horse-riding on the area trails. Feels that Three Creeks CA is too small to accommodate both horse-riding and hiking on the trails. Is concerned about increased erosion and compaction of trails caused from horse-riding.

While user group conflicts cannot always be avoided, this area provides both multi-use and single-use trails for those area users who do not wish to encounter equestrian users. Horse use on multi-use trails is compatible with the goals and management of this area. The management team acknowledges that horse use does provide special challenges on trail design, maintenance, and enforcement, and we are committed to doing our best to address those challenges.

Suggests contacting the Sierra Club about changes to the trail system.

The Department values input from conservation partners and the public. The Department has worked with Sierra Club and other interested parties regarding trail regulation changes in the

recent past and we welcome additional input from them and all interested parties regarding trails and all area management.

Values the recreational opportunities available at Three Creeks CA (e.g., hiking, water recreation, deer hunting).

Thank you for your comment. Providing recreational opportunities is a Department priority.

Suggests allowing biking on the interpretive trail (without horse-riding).

The area management team thinks that a hiking only trail helps minimize conflict between hikers, cyclists, and equestrian users.

Suggests posting signs to prohibit trail use by cyclists and horse-riders during wet conditions.

The official Three Creeks CA brochure asks users to “refrain from using bicycles and horses on the trails at these times.” The area management team did not incorporate this comment into the plan because the team lacks the resources to place and remove “trail closed” signs based on changing trail conditions.

Would like further clarification explaining why the looped trail was closed.

The multi-use trail loop that was closed due to flood damage in 2011 was recently evaluated for reopening. A project to establish crossings on Turkey Creek was determined to be infeasible, unstable, and unsafe for area users; therefore, the loop cannot be re-established at this time. A feasible alternate route for the closed portion of the multi-use trail does not exist within the current conservation area boundaries due to steep topography and the location of Turkey Creek. Portions of the trail that are stable and maintainable have been reopened, but will not connect to form a loop in the immediate future. We are currently exploring additional options for reopening this loop.

Administrative Considerations

Supports existing rifle restrictions on the area to promote safety of area visitors.

Thank you for your comment. Providing an area for diverse recreational uses is a Department priority.

Suggests allowing all-terrain vehicles on the area, especially for individuals with mobility disabilities.

There are currently no plans to modify trail use regulations on the area. Individuals with mobility disabilities are encouraged to contact the area manager regarding the use of mobility devices on the area.

Suggests patrolling area trails (e.g., using volunteers such as Master Naturalists).

The area management team appreciates the offer to help patrol the trail. Area users are encouraged to report observed maintenance issues, such as downed trees, to the area manager. Area users are encouraged to report any observed illegal activity to local authorities or conservation agents for enforcement of area regulations.

Suggests better enforcement of motor vehicles on area roads.

Conservation agents regularly patrol this area. Area users are encouraged to report any observed illegal activity to local authorities or conservation agents for enforcement of area regulations.

Suggests notifying the public and providing a chance to comment if significant tree removals occur.

If the area management team determines that forest management practices involving the harvest of trees is necessary to address forest health concerns, the neighboring landowners will be notified prior to commencement of management as per Department policy. Any and all forest management activities that may occur will be planned by a Resource Forester and adhere to *Missouri Forest Management Guidelines* (Missouri Department of Conservation, 2014), Department policy, and Sustainable Forestry Initiative standards.

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 providing/enforcing a leash requirement for dogs. Encountered dogs off-leash and was concerned for child's safety.

Pets and hunting dogs are permitted, but must be on a leash or confined at all time. Hunting dogs may be used off the leash and unconfined for hunting and training purposes. A hunting permit is required to train dogs in pursuit of wildlife. Conservation agents and members of the area management team enforce the leash requirement when violations are observed. Users are encouraged to report this regulation violation to the area manager or local conservation agent.

Suggests making the area an archery-only area to provide more hunting opportunities and increased safety for area users.

The Department's Regulations Committee conducts an annual review of the *Wildlife Code of Missouri* and develops recommendations for changes based on input from local staff. If staff determine that a regulation change making Three Creeks CA archery only will enhance resource management capabilities and/or benefit the public, it will propose this regulation change to the regulation committee.

Supports limited maintenance and management of the area to keep costs minimal and to keep the area “natural.”

The area management team will continue to maintain the area according to Department standards. Compared to other public lands in the vicinity such as state and city parks, Three Creeks CA fits well into the description of ‘limited maintenance and management.’

Other Comments

Supports the plan. Supports the emphasis on protecting species of conservation concern, aquatic habitat, and terrestrial habitat; preventing habitat degradation; and cooperating with neighboring landowners.

Thank you for your comment and for supporting conservation.

Suggests adding a glade (that is upstream of Bass and Turkey Creek) to the land cover map.

Thank you for your suggestion. We have amended the map.

Would like advice on how to manage property that borders the conservation area.

Providing technical assistance to landowners is a Department priority. Any landowner seeking assistance is encouraged to contact their local Department Resource Forester or Private Lands Conservationist by calling 573-815-7900 or visiting the Department’s contact website at <https://mdc.mo.gov/contact-engage>.

Suggests changing wording under Existing Infrastructure from “two horse blocks” to “two equestrian mounting blocks.”

Thank you for your comment. The wording has changed based on your suggestion.

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, MO: 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, MO: Conservation Commission of the State of Missouri.

Missouri Department of Conservation. (2016). *Guidelines for avoiding and minimizing impacts to federally-listed bats on Missouri Department of Conservation lands*. Jefferson City, MO: Conservation Commission of the State of Missouri.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Topographic Map

Figure 4: Land Cover Map

Figure 5: Easement Map

Additional Appendices:

Appendix A: Three Creeks Conservation Area Management Plan Public Comments

Figure 1: Area Map

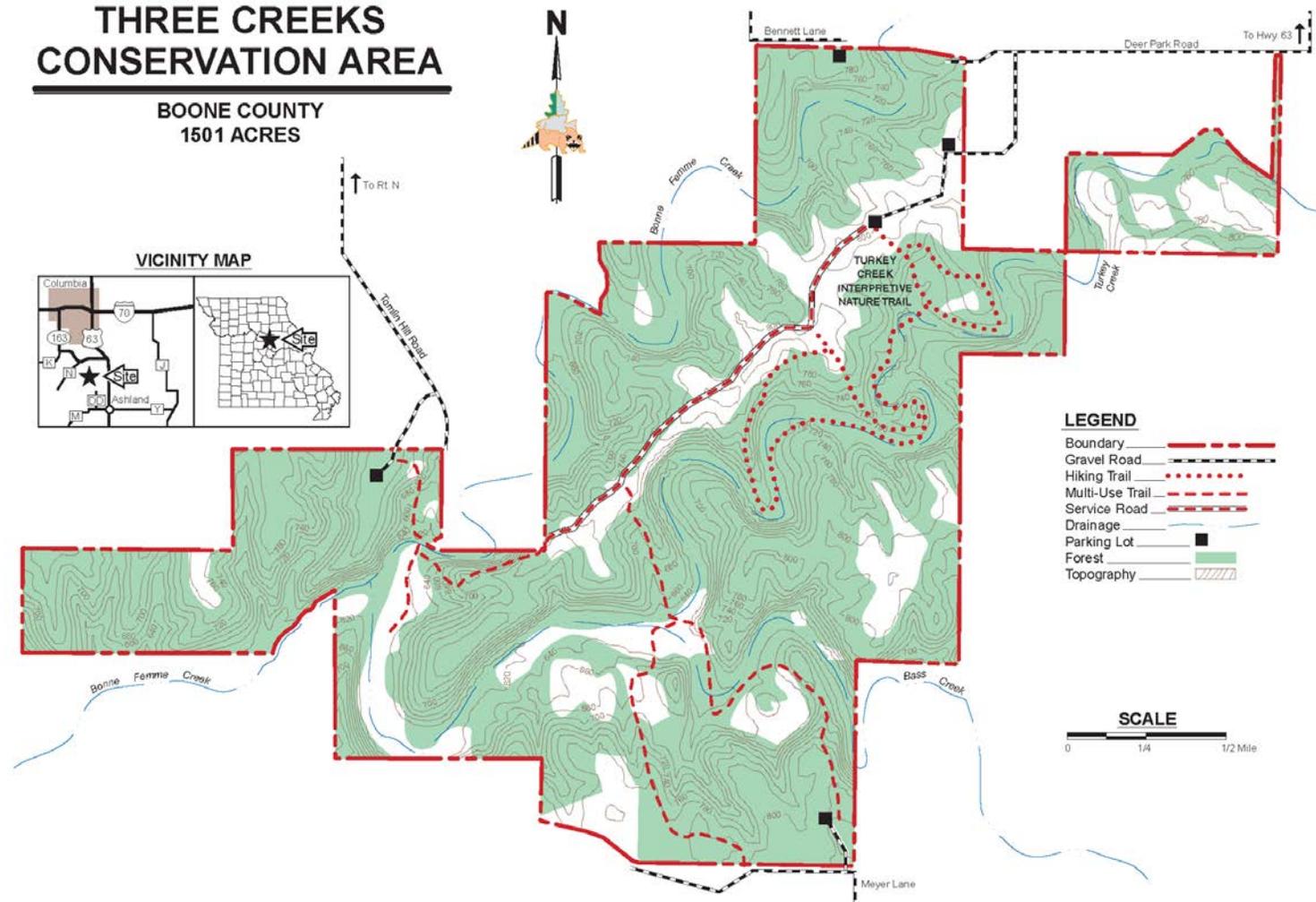


Figure 2: Aerial Map

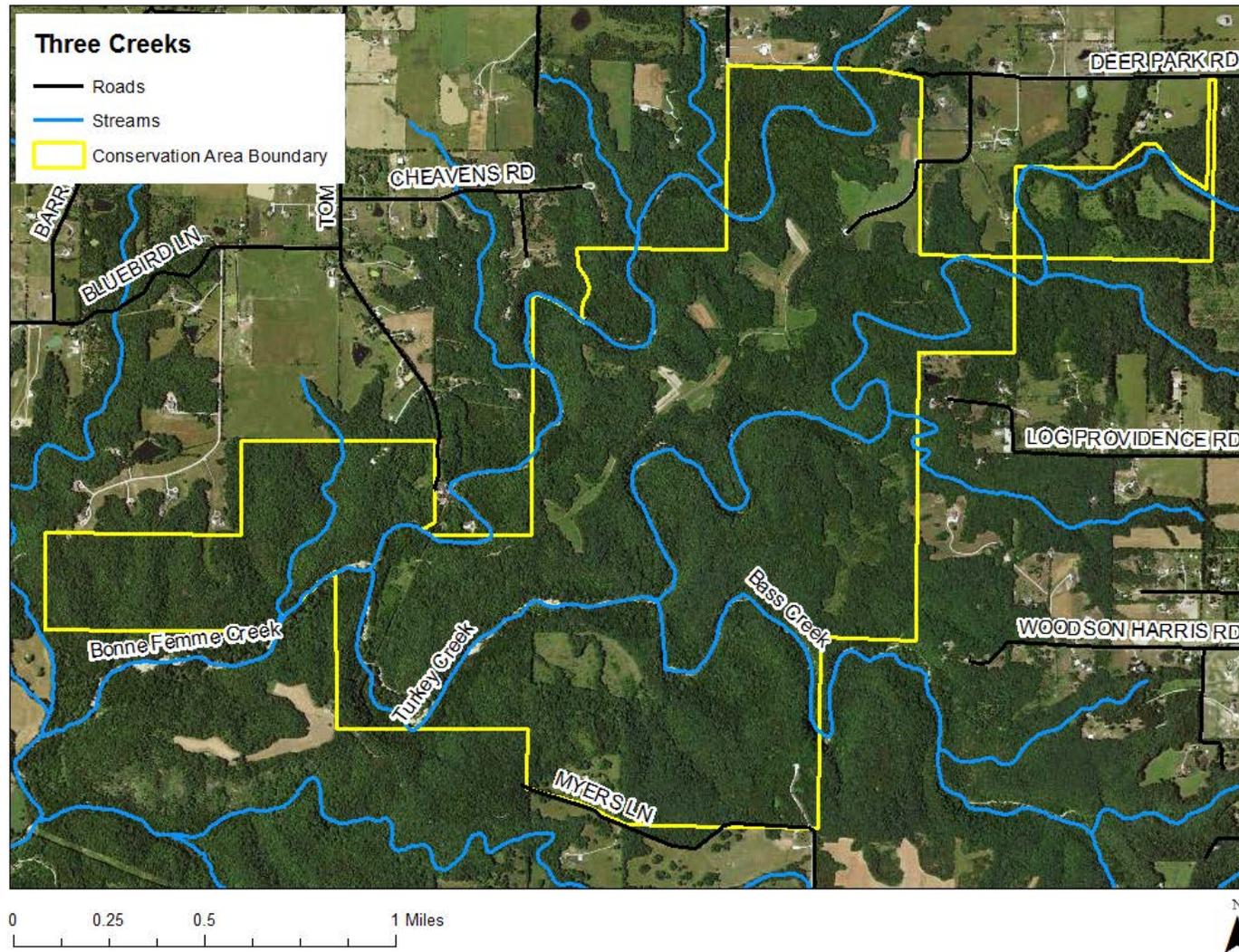


Figure 3: Topographic Map

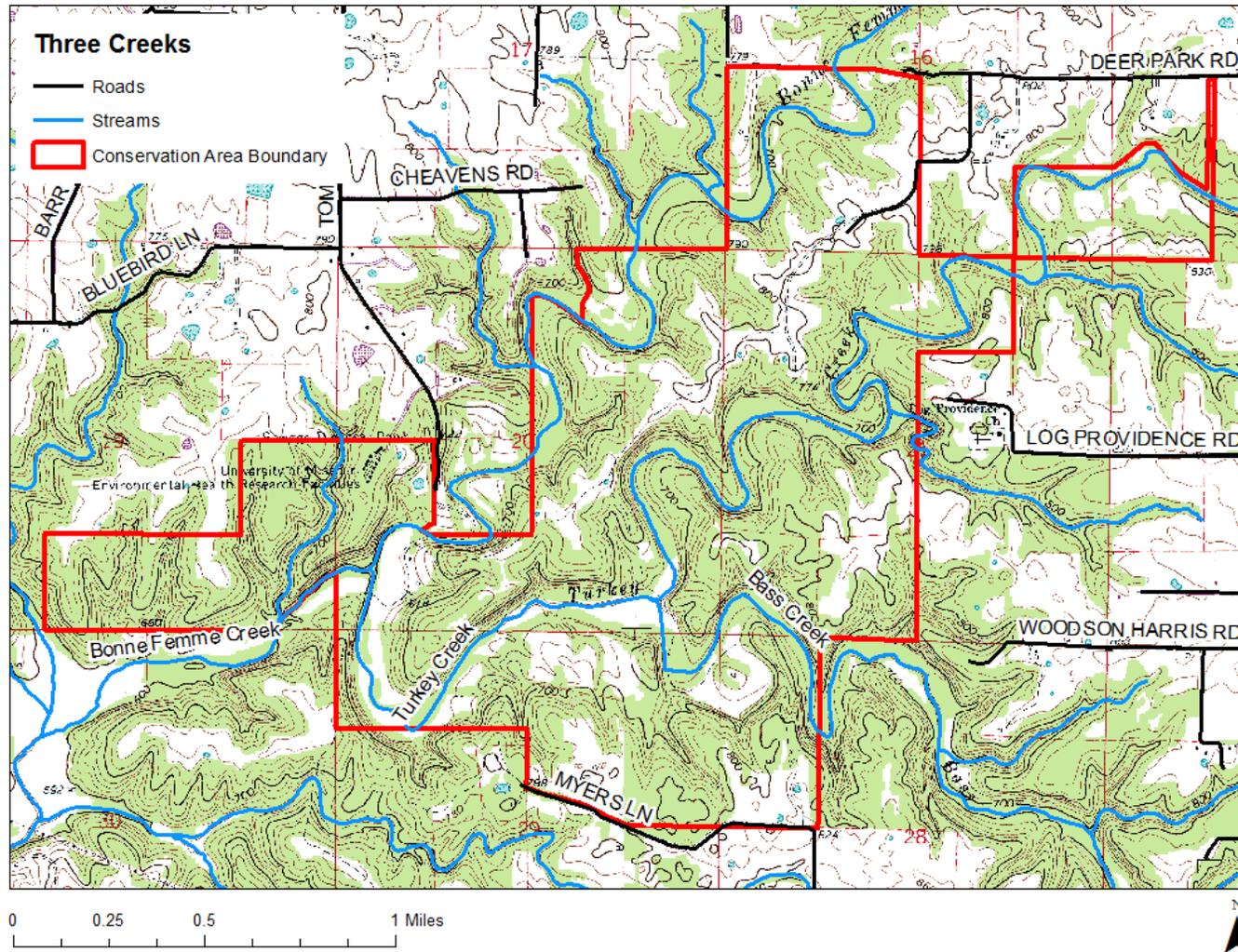


Figure 4: Land Cover Map

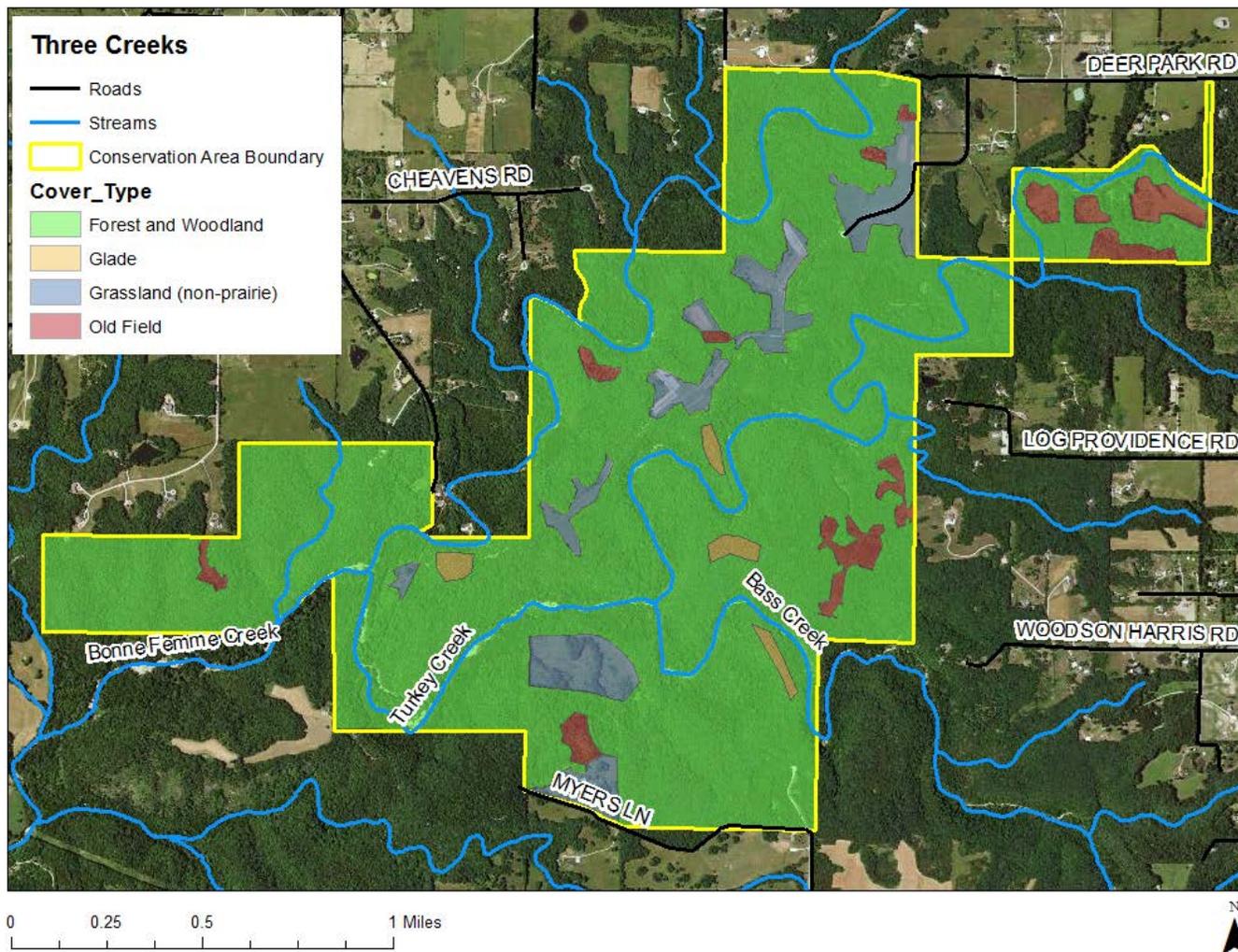
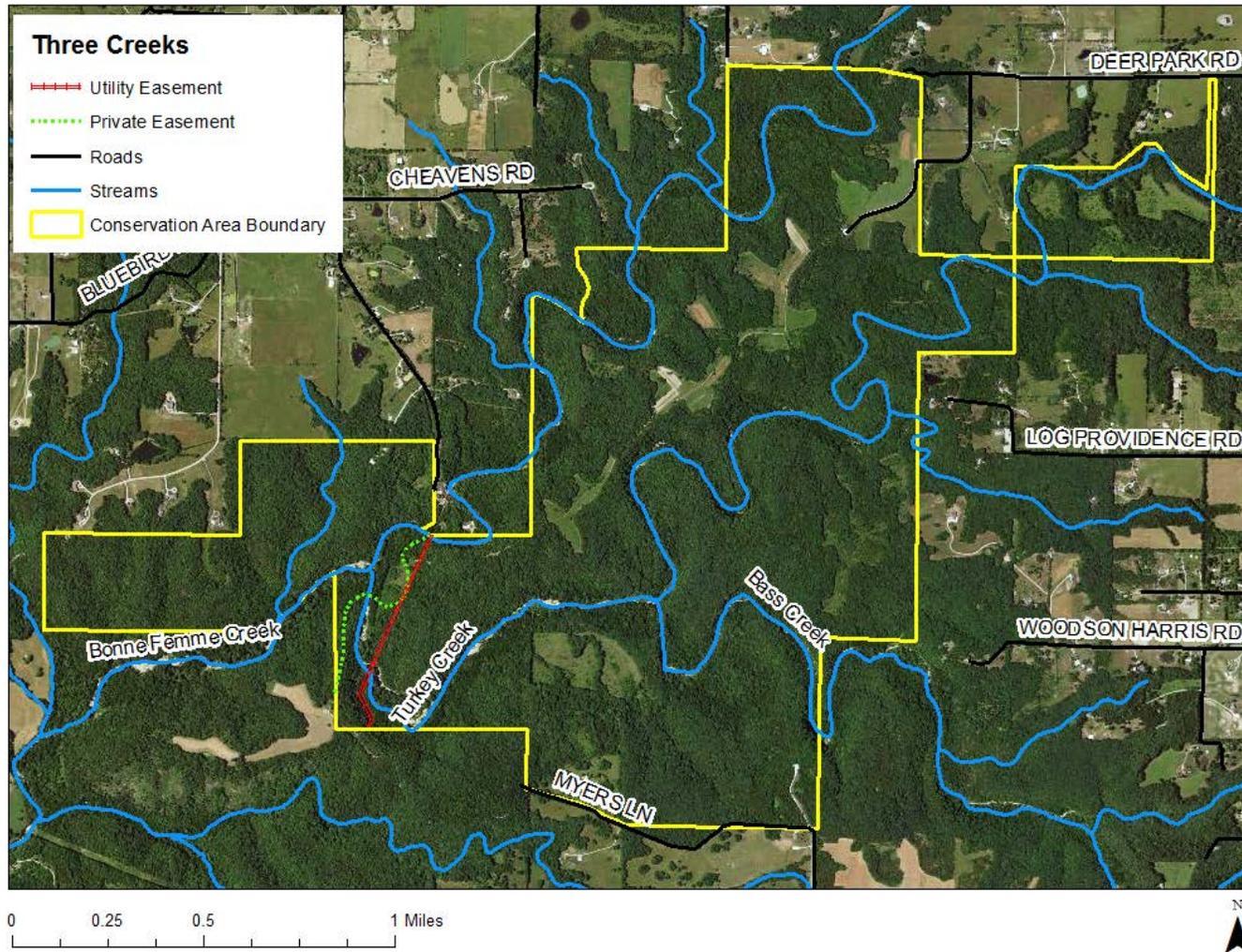


Figure 5: Easement Map



Appendix A: Three Creeks Conservation Area Management Plan Public Comments

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

<p>That bottom trail has been closed for years now, and it's a main connector between sides of the park. I wish it could ever be fixed</p>
<p>Make areas of creek water easier to access and a map of trails at the parking lot and online.</p>
<p>This area for a long time has not been maintained very well .Half of the horse trails are shut down due to bad maintenance practice.Most of the rest are not supposed by horses for some reason I cannot fathom.If someone is willing to listen I am more than prepared to offer my assessment of what can be done to make it more horse and people friendly</p>
<p>Eastern section is overgrown with redcedars and some autumn olive and bush honeysuckle. I've never seen anyone providing trail patrol as I do in Rock Bridge Memorial Park. I don't believe hiking and horses are compatible. You should have separate trails for horse back riding. Horses smell, cause trail eroison, and are intimidating to hikers. Apparently there is no enforcement of motorized vehicle entry into the CA. I suggest you contact groups such as Missouri Master Naturalists and others to enlist their help with invasive species and trail patrol. i live on an unnamed tributary of Turkey Creek and see a lot of forest damage from deer. I believe the deer population in Three Creeks should be more aggressively managed.</p>
<p>The Osage Group of the Sierra Club supports the draft Three Creek Conservation Area plan's emphasis on protecting caves, protecting bats and other species of concern, protecting streams, springs and riparian corridors, monitoring and mitigating damage related to horseback riding, managing invasive species and cooperating with neighboring landowners to promote compatible practices.</p>
<p>We support Public Use Management Objective 1, Strategy 2 “Continue exploring options to reopen a closed portion of the multi-use trail.” Completing the loop in an environmentally sound way might deter horseback riders from using the hiking trail.</p>
<p>We have the following concerns:</p>
<p>One of the glades just upstream from the confluence of Bass and Turkey Creeks is not shown on the Cover Type map and should be added. Perhaps a management objective or strategy could also be added regarding glade management?</p>
<p>Public Use Management Objective 1, Strategy 3 – We recommend you include the Sierra Club and other hiking groups when you are reaching out to local horseback riders about changes to the trail system.</p>
<p>Terrestrial Resource Management Objective 2 , Strategy 1 - If grazing were used to manage</p>

grasslands, how would the animals be kept out of the woods and streams?

Terrestrial Resource Management Objective 1, Strategy 2 - We request that if significant tree removal was ever planned to manage disease or insect issues, there would be public notice and a chance to comment.

Thank you for the chance to comment on this plan.

Sincerely,

Osage Group of the Sierra Club

We appreciate the opportunity to ride horseback on designated use trails. Thank you for allowing us this privilege.

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

You should allow ATV's, of any width on conservation grounds, especially the retired and handicap, during the hunting seasons. No racing or fast ATV's allowed.

Excellent plan. We are delighted to be your neighbors. I am writing on Sunday, December 17, 2017, at our home on Kari Lane, Lat. 38.847355 N, Long. 92.295975 W. (USGS 1983 Datum, measured by iPhone.)

Your limitation on maintenance resources, doubtless financial, is not to be deplored, but welcomed, as too much maintenance might interfere with natural processes which operate to restore the land and streams to a condition approximating the wildness that existed before the 1860s. Keep essential maintenance simple and cheap.

The use of firearms for hunting in this immediate area should continue to be restricted. Unimpeded wayward bullets from high velocity weapons can travel considerable distances.

We, my wife and I, are adjacent landowners bordering Bonne Femme Creek, at the foot of Kari Lane. We have some acres of trees, maybe as many as ten, on a south-facing slope leading down to this creek, and will seek your advice as to how better to manage our acreage.

The CA is not just about bats or human visitors. We have had the remarkable evening visit of a Royal Moth, a startling creature, to our kitchen window. We had to turn off the lights to set it

free. I do not know whether it is an endangered species, but it could be. From time to time we have likewise had Luna Moths visit us, and tree frogs and lizards. A couple of times copperhead snakes have come into our garage. (They didn't find much to eat, and left of their own volition.) We have counted as many as 27 turkeys nibbling away simultaneously on our lawn, and, of course, plenty of deer. Our lawn is left-over fescue, which might be replaced if we knew what to do. My wife plants butterfly bush and other such plants available from the wildflower nursery south of Jefferson City. We don't use pesticides. We don't own a horse, and would not even if we might, as we also have property in Michigan to tend to. Keeping horses requires more effort than I wish to expend, and is apt to limit my own mobility, as having a horse is something that requires close personal attention.

Give us a holler, if you think we can do anything useful. 573-442-4119 is our telephone.

I do not want to sell any of our property to the Commission, as I do not fully trust government, even in its most gracious and beneficial aspects, consistently to abide by its better intentions - viz the actions of the Trump Administration, which I consider an insult to the intelligence of the American people.

While I did not know the late Leo Drey personally, I understood that his creation of the L-A-D Foundation and conveyance to it of some 220 square miles of Ozark forest, was motivated in part by some mistrust of how political winds might shift. He might have given the land to the State, but carefully did not. The fact that the existence of the Commission as currently organized had to be ratified by a second statewide vote shortly after its creation in 1936, because of the actions of those who wanted unrestrained private enterprise, should not be forgotten. No bad political idea is ever completely dead.

The trail riding public sincerely appreciates the Department's providing this recreational opportunity in this Central Missouri Area which is home to a large number of equines; Manager A.J. Campbell and the staff are a pleasure to work with. An evidence of this appreciation is the cooperation between MDC, Heartland Chapter of BCHMO, and, by extension, Cedar Valley Riders Saddle Club to maintain and improve the trails.

The existing eight miles of open trail do not provide a quality day riding experience; the lack of adequate trail length contributes to the problem of horses and bikes using undesignated trails. I applaud the efforts to reopen the closed trail; I encourage the Department to utilize the knowledge and expertise available through Heartland Chapter and CVRSC to reroute the trail segment to a safe and environmentally sensitive stream crossing location or to eliminate the stream crossing entirely. I encourage the Department to ensure compliance with RSMO 8.890 by posting a written statement at trailheads stating the cause and estimated duration of the closure. The aforementioned consultation resources are also available to determine appropriate remediation for the erosion problems mentioned in Public Use Management Considerations,

Objective 1, Strategy 1.

To reduce user conflicts and reduce incidence of riding off designated trails I request consideration of creating more miles of designated trails. One good addition would be connecting the south trailhead with the trail to the west by a trail through the woods, eliminating the need to ride on the public road. A more ambitious proposal would be to put in a trail south of Turkey Creek that would connect the existing trail along Bass Creek with the north trailhead creating a loop entirely around the Turkey Cr. interpretive hiking trail. This would greatly reduce the "temptation" for equestrians and bikers to use the Turkey Creek Trail.

Lastly, a better description in Section III, Existing Infrastructure would be "Two equestrian mounting blocks" rather than horse blocks.

Thank you for the opportunity to comment.

I've been hiking 3 Creeks for almost 20 years and I'm not sure there isn't an acre there that I haven't hiked or seen. In my opinion this conservation area is not a large enough tract to allow for horseback riding even if the horses are separated from the hiking trails. They cause way too much damage to the ecosystem esp when crossing the creeks and in low areas where their weight causes soil compaction and then water drainage issues. I'd also like to see no hunting throughout this conservation area. Many times I go to hike and see the south area is closed for turkey hunting in the spring and deer in the fall. While there is an area for no hunting, it would be nice to preserve this conservation area and not thin out the wildlife on a yearly basis. As Columbia encroaches on this beauty, anything to preserve vs just conserving it would be appreciated by all nature lovers.

Please keep all horse trails open!!!!

It looks like the plan is to continue keeping the Area as beautiful and available to the public as it has been. I heartily approve of maintaining the area as it is and with this draft as I understand it. I live about 5 miles from this area and use it for hiking and water play 3-4 times every year. I love coming to Three Creeks and hope to continue doing so far into the future. Thank you for the opportunity to provide this input.

I would like to see better marked trails for hiking, biking and riding. It is difficult to navigate the area trails without a map that must be downloaded from a website and not available at the trail heads. I understand this will take additional funds to accomplish, but the nominal cost might save a life of someone lost as evening approaches in cold weather.

I would suggest opening the Interpretative Trail to biking. Cyclists should have some trail system separate from horseback use. Also, post signs requesting that trails not be used by equestrians and cyclists under wet conditions or have a number people can call in advance to find out if trails are open to cyclist and equestrians. Use the one for Rock Bridge. People familiar with the park don't regularly read the brochure and may not think about not using the

trails under wet conditions.

The area on the east side of the park where the cedars have grown over was a grassland before they took over.

My 2 year old daughter and I were playing in the creek bottom when two pit-bulls charged us. The owners were not close enough to prevent a very tense situation. We were circled by the dogs, as I tried to hold my daughter out of reach. When confronted, the owners claimed that there is no leash requirement.

If that's true, my input is that there needs to be a leash requirement at this park.

I live within 5 minutes of this area with my wife and two year old son. We enjoy hiking and deer hunting. The limiting factor in this area i would like to be the focus is creating quality deer bedding, food and cover. Through the use of food plots and thick woodland openings deer opportunity would increase. Opportunity and safety would increase if this was made into an archery only area as well.

I appreciate that the plan acknowledges the need to control invasive plant species, and that there are no timber harvests planned. I am offering the following comments.

Glades: It would be good to have glade management as part of the plan. I know of a an area I would consider to be a glade that does not appear on the land cover map. It is along Bass Creek a few hundred yards upstream of the confluence of Bass and Turkey Creeks (on the left side of Bass when facing downstream).

Multi-use trail loop: The plan discusses the inability to connect this trail to form a loop, as it was in years past. The plan talks about flood damage and the creek crossing having problems. I am having a hard time understanding what the problem is.