

Cooley Lake Conservation Area

Ten-Year Area Management Plan

FY 2018-2027



Jed W. Porath

Wildlife Division Chief

6/11/2018

Date

Cooley Lake Conservation Area Management Plan Approval Page

PLANNING TEAM

Chris Blunk, Wildlife Management Biologist

Jake Allman, Fisheries Management Biologist

Wendy Sangster, Community Forester

Randy Keeran, Private Land Conservationist

Dan Schepis, Conservation Agent


Nathan Woodland, Outdoor Education Center Supervisor

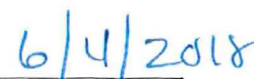
Larry Rizzo, Natural History Biologist

Pam Lanigan, Fisheries Regional Supervisor

KANSAS CITY REGION

RCT Chair


Signature


Date

WILDLIFE DIVISION

Wildlife Management Chief


Signature


Date

OVERVIEW

- **Official Area Name:** Cooley Lake Conservation Area, #7945
- **Year of Initial Acquisition:** 1979
- **Acreage:** 1,348 acres
- **County:** Clay
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

Manage for wildlife and aquatic resources while providing compatible public recreational opportunities.
 - B. Desired Future Condition**

The desired future condition of Cooley Lake Conservation Area (CA) is a functioning remnant oxbow lake system on the Missouri River with healthy woodland, grassland, and old field communities that include a diversity of habitat complexes.
 - C. Federal Aid Statement**

N/A

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
 - A. Priority Areas:** Missouri River Stream Reach Conservation Opportunity Area, Jackass Bend Wetlands Conservation Opportunity 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:** None
 - C. Springs:** None

- III. Existing Infrastructure**
 - Four parking lots (two Americans with Disabilities Act [ADA] accessible)
 - One concrete boat ramp at Cooley Lake (ADA accessible)
 - One privy/restroom (ADA accessible)
 - One viewing deck at Cooley Lake (ADA accessible)
 - One viewing deck on Ridge Road
 - One Quonset

- One camping area (no amenities provided)
- Cooley Lake – oxbow lake (335 acres)
- Hiking trail (2.5 miles)

IV. Area Restrictions or Limitations

A. Deed Restrictions or Ownership Considerations: None

A. Federal Interest: Federal funds were used in the development of this area, or a portion thereof. The Department must maintain the developed project throughout its useful life. 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.

B. Easements: Thirty-foot wide easement along the northerly right of way line of Ridge Road with Public Water Supply District No. 7; electric line easement granted to Missouri Public Service Company; easement to Tri-County Levee District for inspection and maintenance of flood protection levee

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

D. Endangered Species: None observed.

E. 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) Invasive sericea lespedeza, Johnson grass, tall fescue, shrub honeysuckle, Japanese honeysuckle, and garlic mustard are well established on the area and are a threat to native habitats. Fertile soils allow natural succession and invasive plants to advance at an increasing rate on the area. Cropping in these open lands is needed to help set back succession and impede the spread of invasive plant species. Cropping also provides food and brood-rearing areas for wildlife, as fields are rotated and left idle.
- 2) Grasslands and early successional fields provide food and cover for various wildlife species, including bobwhite quail, white-tailed deer, turkey, rabbits, and song birds. The conservation area has open fields that were planted with native grasses and forbs and converted to other early successional vegetation types. The forbs disappear from the open fields with time, making them less desirable for wildlife. Therefore, fields

- require management to increase plant diversity and promote forb growth. Managers can maximize quality habitat by managing for a mix of shrubs, forbs, and grasses. Management of these fields provides brood-rearing areas for ground-nesting birds, increased forage for white-tailed deer, and habitat for rabbits and other non-game species.
- 3) Prior to the Department's purchase, the oxbow was highly altered with a series of levees and water control structures. Although this riverine wetland is disconnected from its natural overbank flooding events, opportunities exist to restore some of its natural characteristics and create a manageable wetland complex that will support abundant wetland-dependent species.
 - 4) Management of the upland and bottomland forests is somewhat limited by the lack of accessibility to many of the forested areas. However, opportunities exist to maintain and enhance river bluff and bottomland forests through the use of sustainable forest management practices for optimum wildlife habitat and forest health.

Management Objective 1: Provide food and cover for wildlife, and maintain open fields for a variety of wildlife species.

Strategy 1: Use permittee farmers to plant crops/food plots annually. Crop rotation will be used for soil health and a portion of these acres will lie fallow each year to increase early successional habitat for wildlife. Ensure farming practices are conducted in accordance with the Soil and Water Conservation Plan for the area. (Wildlife)

Strategy 2: Manage early successional old fields and existing stands of planted native grasses and forbs to maintain diverse vegetative habitats. Rotate management units to provide adequate habitat during management activities. (Wildlife)

Strategy 3: Enhance edge habitat adjacent to agricultural fields. (Wildlife)

Strategy 4: Seek opportunities to convert some portions of current agricultural fields to pollinator habitat. (Wildlife)

Strategy 5: Control/suppress invasive species. (Wildlife)

Management Objective 2: Create a highly diverse wetland complex that can be managed to support abundant wetland-dependent species.

Strategy 1: Conduct a feasibility study to obtain the current condition of the entire complex that will help determine future construction decisions. (Design and Development, Wildlife)

Strategy 2: Through the capital improvement process, request a project that will implement the recommendations as determined by the feasibility study. (Design and Development)

Strategy 3: Strategically fluctuate water levels throughout the year to promote moist-soil, emergent, and submergent vegetation for a variety of wetland species. (Wildlife)

Strategy 4: Explore opportunities to establish wet bottomland prairie. (Wildlife)

Strategy 5: Control/suppress invasive species. (Wildlife)

Management Objective 3: On appropriate sites, manage the bottomland and river bluff forested areas to improve overall natural community health while improving habitat for wildlife.

Strategy 1: Complete forest inventories on an as-needed basis to monitor stand composition and assess forest health. Prescriptions for ecological and silvicultural treatment will be developed based on the inventories. (Forestry, Wildlife)

Strategy 2: Utilize sustainable forest management practices to promote healthy forest communities. Practices may include, but are not limited to, timber harvesting, forest thinning, tree planting, seeding, and prescribed burning. (Forestry, Wildlife)

Strategy 3: Control/suppress invasive species. (Forestry, Wildlife)

VI. Aquatic Resource Management Considerations:

Challenges and Opportunities:

- 1) Cooley Lake, a shallow ox-bow lake, with limited fishing potential and the Missouri River are the only aquatic resources on the area.
- 2) The Missouri River frontage south of Highway 210 has a boat ramp, parking lot, and some bank-fishing opportunities.

Management Objective 1: Protect and enhance Missouri River corridors to improve water quality, promote stable stream banks, provide flood abatement, and increase habitat diversity for wetland-dependent wildlife and spawning and nursery habitat for riverine fish species.

Strategy 1: Evaluate buffer widths and conditions and provide recommendations to the area manager. Repeat additional evaluations every five years to account for changes in land management and area boundaries. (Fisheries)

Strategy 2: Maintain and/or establish 100-foot or wider vegetated buffers, pursuant to Department guidelines (Missouri Department of Conservation, 2009), on both sides of permanent and intermittent streams, when possible, due to levee placement. Use a diversity of suitable tree and shrub species, where buffers need to be enhanced. Herbaceous vegetation is not suitable for buffers along the Missouri River. (Fisheries, Forestry, Wildlife)

Management Objective 2: Improve bank-fishing opportunities along the river.

Strategy 1: Determine the feasibility of a fishing trail upstream and/or downstream of the boat ramp. (Wildlife, Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Management opportunities exist for a diversity of habitats and wildlife species to provide opportunities for hunting, fishing, camping, trapping, and wildlife-viewing near a major metropolitan area.
- 2) Area infrastructure, such as water control structures and levees, are in poor condition, limiting the management and use potential of the area.
- 3) The area provides a unique river oxbow wetland type ecosystem and access to the Missouri River. These provide opportunities for public use activities that are limited in the Kansas City metropolitan area.
- 4) Opportunities exist for school and civic groups to fish, hunt, and camp through the special use permitting guidelines.
- 5) Area management staff is not located on-site, making routine inspections and area maintenance tasks more difficult and less timely. Staffing needs should be reviewed periodically.

Management Objective 1: Maintain a diversity of terrestrial and aquatic habitats to provide public users with quality hunting, fishing, trapping, and wildlife-viewing opportunities.

Strategy 1: Implement annual management activities targeting a sustainable population of terrestrial wildlife. Terrestrial and wetland management activities should provide opportunities for hunting and viewing a variety of species, including deer, turkeys, water birds, song birds, squirrels, rabbits, and Missouri species of conservation concern. (Wildlife)

Strategy 2: Manage the area's aquatic resources to provide access to and opportunity for quality fishing experiences. Where feasible, maintain, evaluate, and improve public access to the Missouri River. (Wildlife, Fisheries)

Strategy 3: Maintain adequate access to area habitats through existing network of parking lots, levees, and service roads. (Wildlife)

Strategy 4: Continue to allow trapping on the area, as appropriate, through the special use permitting guidelines. (Wildlife)

Management Objective 2: Improve and maintain public access and opportunities for managed waterfowl hunting and wildlife observation.

Strategy 1: Conduct periodic inspections of area viewing/hunting blinds and make repairs as needed. (Wildlife)

Strategy 2: Improve viewing opportunities if feasible through the placement of additional viewing blinds/platforms and supporting structures, including a portion of those allowing access for persons with mobility impairments. (Wildlife, Design and Development)

Strategy 3: Evaluate and improve area signage to better communicate the purposes of blinds and platforms and to inform area users about managed hunts and other use opportunities. (Wildlife)

Strategy 4: Provide educational opportunities for the public to learn about the life cycle of Missouri River oxbow lakes. (Fisheries)

Management Objective 3: Continue regular and periodic evaluation, maintenance, and improvements of the Missouri River boat access ramp to maintain it in a usable condition that will meet the demands of area users.

Strategy 1: Remove silt deposits and log jams in a timely manner, especially during times of peak use. (Wildlife, Design and Development)

Management Objective 4: Promote school and civic group use of the area.

Strategy 1: Allow group use requests that do not interfere with area management priorities. (Wildlife)

Strategy 2: Promote educational opportunities and school field trips as area resources and staffing allow. (Wildlife, Outreach and Education)

Management Objective 5: Maintain designated areas for recreational uses such as hiking and camping.

Strategy 1: Conduct regular maintenance of area trails and improve trail signage as resources allow. (Wildlife)

Strategy 2: Designate a limited number of specific primitive camping sites within the designated camping area and provide signage to communicate the locations of these sites to area users. (Wildlife)

Strategy 3: Provide clarification on area signage and brochures to show area users where such designated activities are allowed. (Wildlife)

Strategy 4: Explore opportunities to create partnerships with not-for-profit organizations that could assist with maintenance of trails and camping areas. (Wildlife)

APPENDICES

Area Background:

Cooley Lake was once the main channel of the Missouri River as it flowed along the north side of the river bottom. When the river changed course, a deep oxbow lake resulted. As siltation occurred over the years, the oxbow became a shallow marshy lake. The area was known as an outstanding waterfowl hunting area and around the turn of the century, a group of waterfowl hunters from Kansas City purchased the lake and surrounding land for a private hunting area. In 1971, the Kansas City Gun Club sold the property. Under the new ownership, the land was extensively farmed and the oxbow was used as a waterfowl hunting area and fishing lake. A drainage ditch and levee complex was constructed to gain additional farm acres. This system reduced the integrity of the oxbow by creating seven individual units with only one remaining in near natural oxbow vegetation. On Oct. 23, 1979, The Missouri Department of Conservation purchased 867 acres of land including the oxbow lake. Since that time, an additional 481 acres have been purchased to make up what is now 1,348 acres of public land. Much of the expansion took place along the Missouri River, providing public access to the Missouri River.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Wetland	568		42
Forest	475		35
Open Land	257		19
Old Field	40		3
Grassland	8		1
Total	1,348		100
Missouri River Frontage		1.5	

Public Input Summary:

The draft Cooley Lake Conservation Area Management Plan was available for a public comment period June 1–30, 2017. The Missouri Department of Conservation received comments from one respondent (Appendix A). The Cooley Lake 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 Cooley Lake Conservation Area Management Plan public comment period.

Wonders if there is a way to make fishing along the Missouri River safer for young anglers.

It is very difficult to have structures along the river due to frequent high water. The area does not lend itself to installation of any type of fishing platform or dock that would make fishing safer for young anglers. Any type of improvement would be short-lived.

Concerned about unlawful visitors. Suggests more frequent patrols on area.

Unlawful visitors are always a concern on conservation areas. Local staff and Department conservation agents routinely patrol the area. Clay County Sheriff's Department also routinely has a presence. Area users are encouraged to call the local Department office, conservation agents, or Clay County Sheriff's Department to report illegal activity.

Suggests improving oxbow for fishing and increasing accessibility for children and anglers with disabilities.

Oxbow lakes are a challenge to manage for fishing. They silt in gradually and any deepening or dredging would be undone in only a few flood events. Oxbow lakes usually have very small watersheds due to being in a floodplain. Small watersheds mean the lakes are dependent on the adjacent river for water. Pumping is often necessary (and expensive) to maintain water levels in oxbow lakes that still have sufficient depth as their water level is often the same as the adjacent river. During drought years the lakes often go completely dry. We do not manage the oxbow for fishing due to the water depth being insufficient throughout the lake. While some fish come in from the river during high water events, we do not stock the lake for fishing.

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.

Maps:

Figure 1: Area Map

Figure 2: Aerial and Easement Map

Figure 3: Topographic Map

Figure 4: Current Vegetation

Additional Appendices:

Appendix A: Cooley Lake Conservation Area Management Plan Public Comments

Figure 1: Area Map

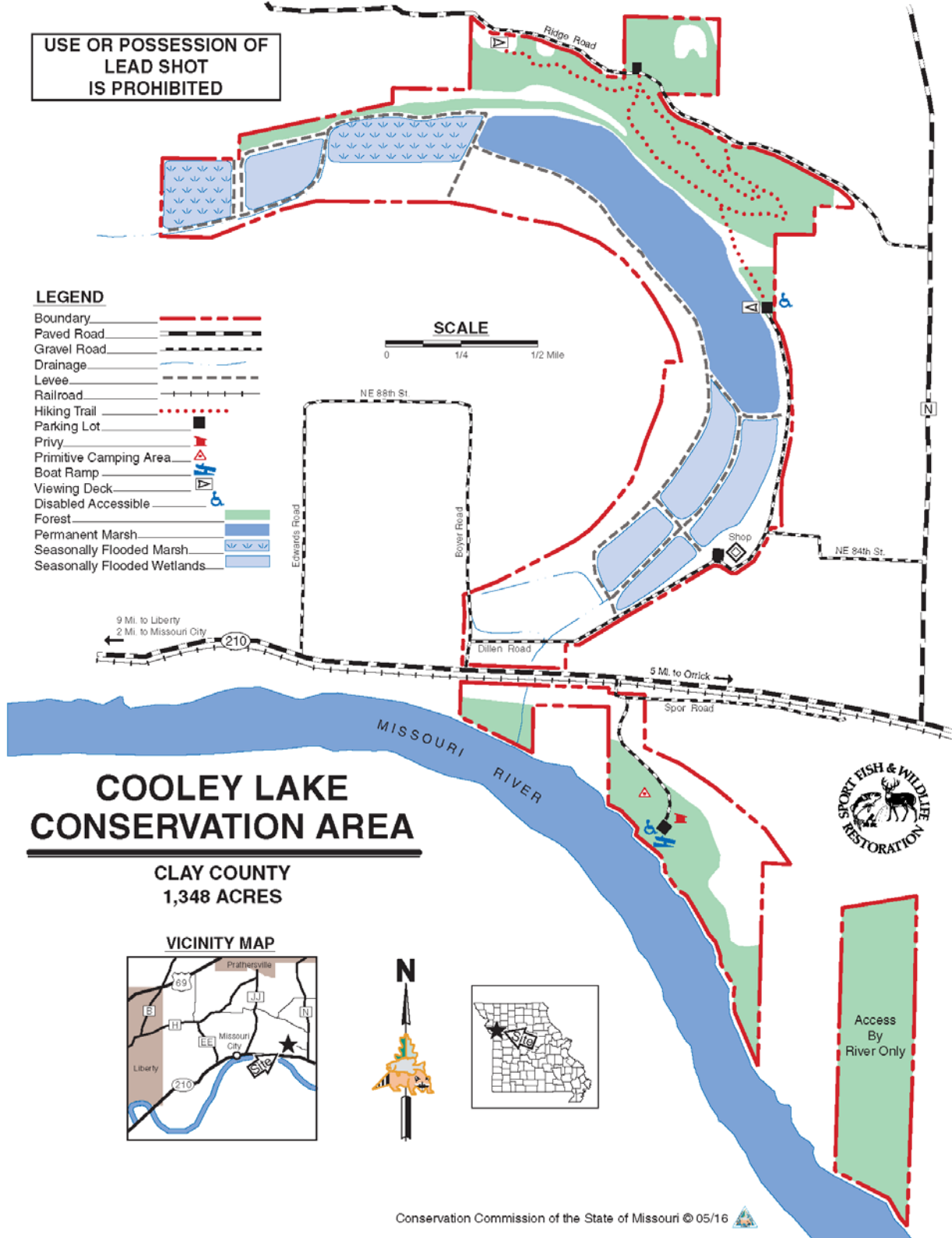


Figure 2: Aerial and Easement Map

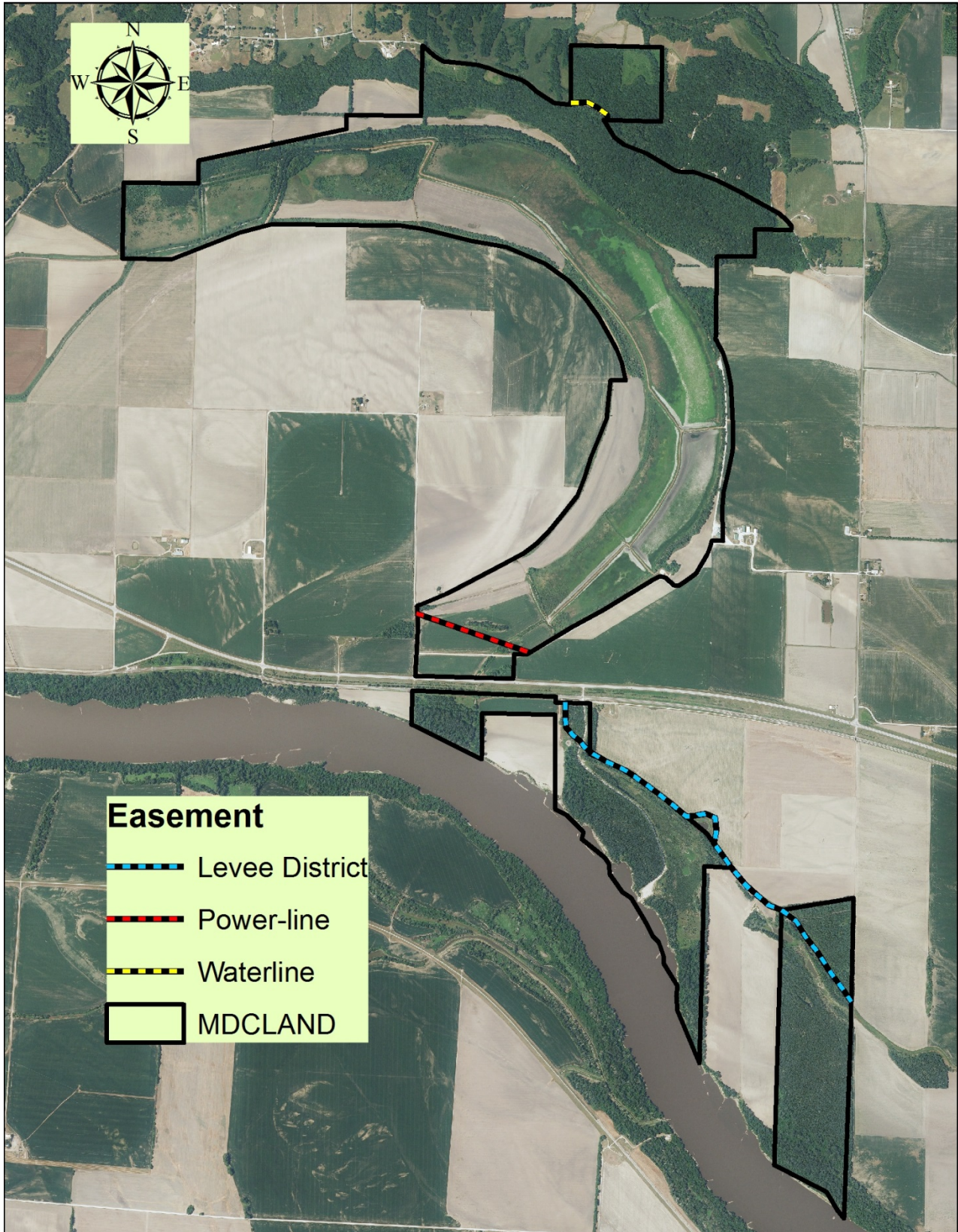


Figure 3: Topographic Map

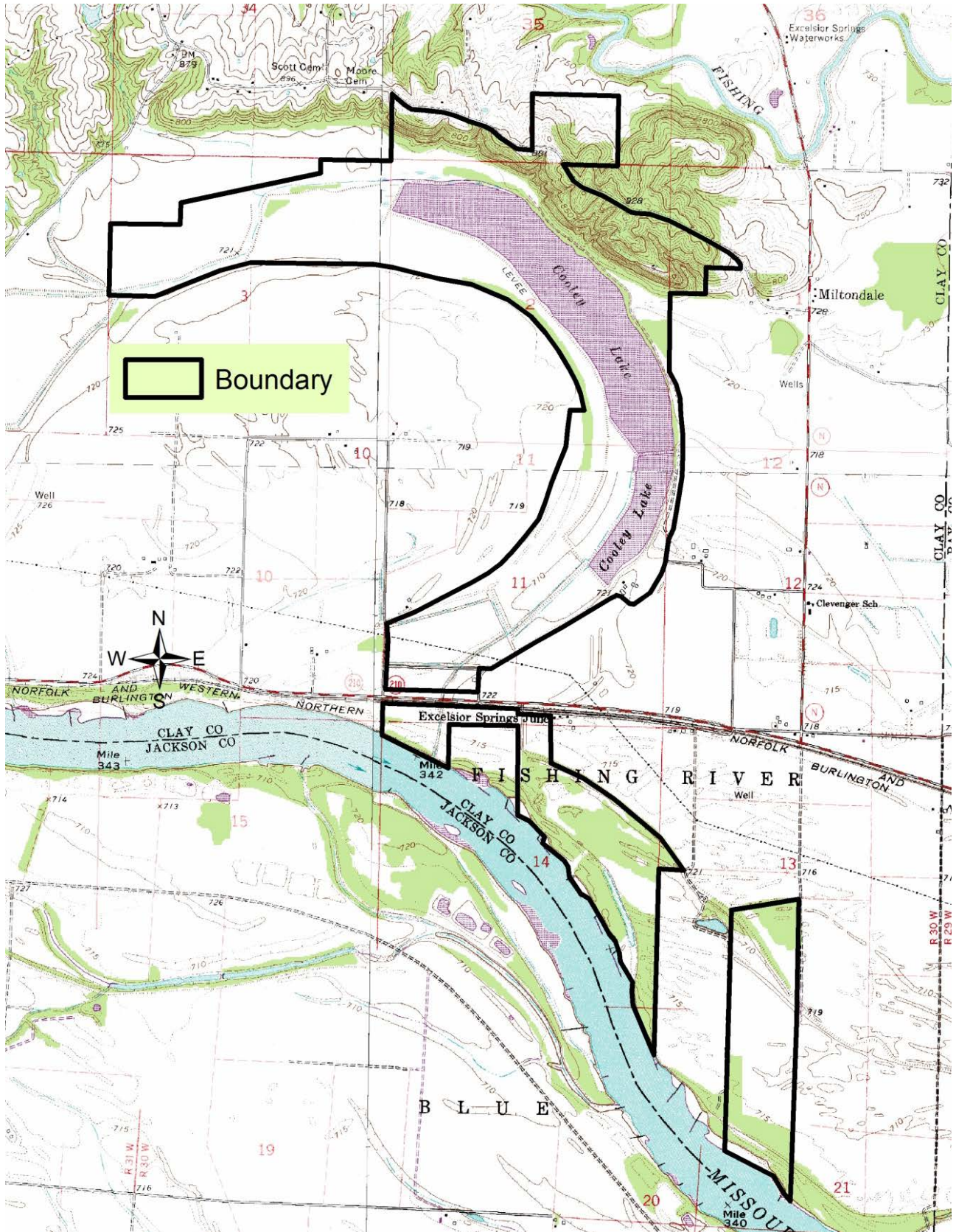
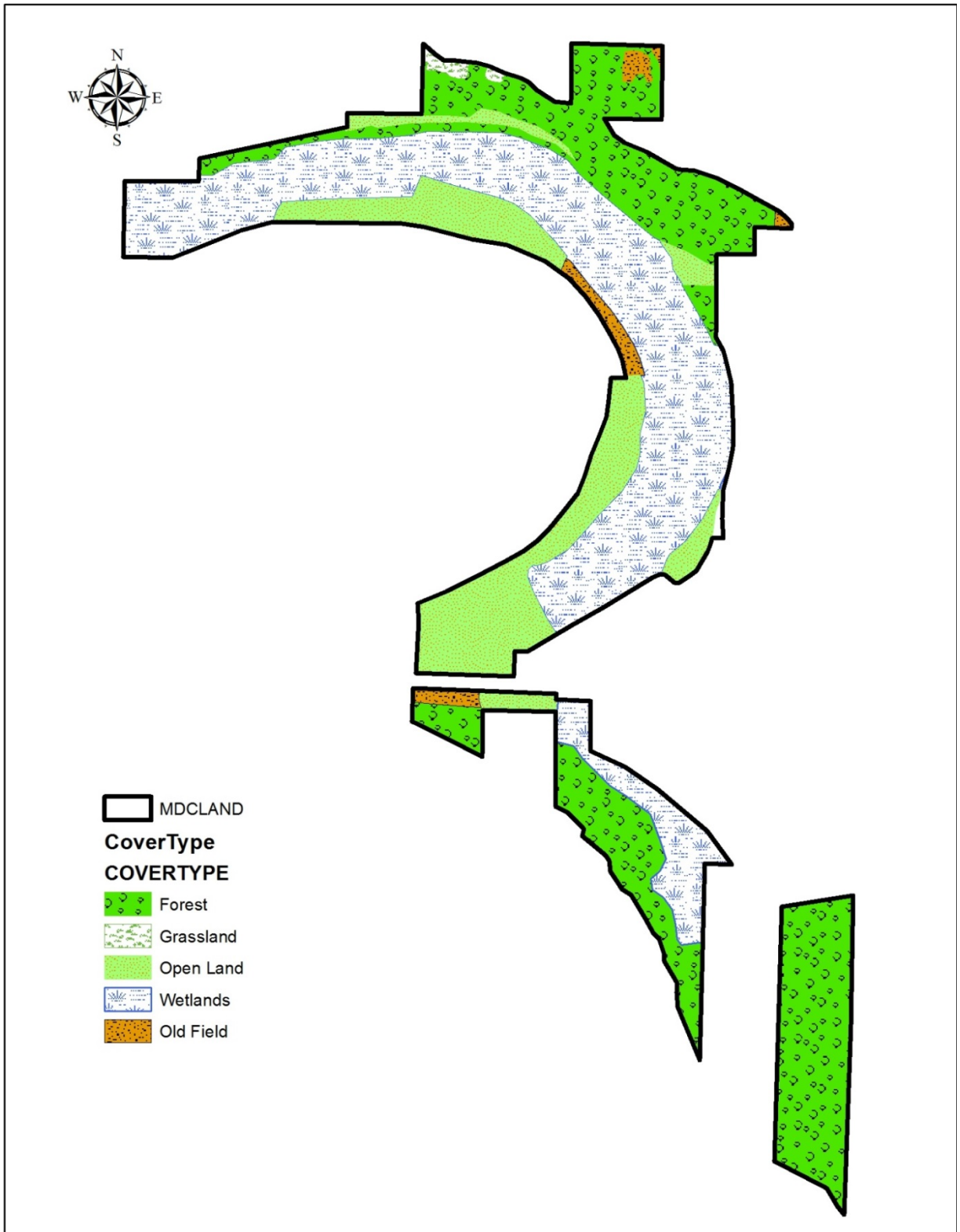


Figure 4: Current Vegetation



Appendix A: Cooley Lake Conservation Area Management Plan Public Comments

Received during public comment period (June 1–30, 2017):

I've hunted and fished this area since 1992. On one hand I want to say, "It's about time" on the other I want to say, "just leave it as it is". It is a great place to take kids fishing and hiking but at the same time I cringe when I see parents turn their kids loose around the banks of the Missouri River. I've often thought it would be great if more were done to enhance a safe fishing area for kids. But then I see the destruction from high water and wonder if spending the time and money would be in vain. Another area that is touched on is patrolling the area. In all the years I've bank fished, hunted and boated the area I've never seen, much less been approached, by an officer. Every now and then we'll have crazies show up to see how many rounds of ammunition they can shoot up in ten minutes or less and many unlawful fires (as in, let's just light the whole dead tree on fire). It would be great if some modification could be made at the oxbow area for some "deeper water" fish species. Just a few hundred feet maybe 30 feet wide with fishing access for kids and disabled would be awesome. Unfortunately the only way that would work is to pump water up out of the ground or from the river, as this area north of 210 dries up when it doesn't rain. I don't see how you can possibly "manage" a wetland that is not wet all the time. If you're going to invite people to the lake, they will at least want to see a lake when they arrive. Other than that, I totally agree with all the conservation ideas..... just so everyone is aware that one flood is all it takes to ruin a lot of good work or at least cause you to start over again. Maybe it would be better to improve Burr Oaks with another lake or two than attempt to improve a flood plain.