Worth County Community Lake

Ten Year Area Management Plan

FY 2015-2024

Wildlife Division Chief

7/9/15
Date

Worth County Community Lake Area Management Plan Approval Page

PLANNING TEAM

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OVERVIEW

- **Official Area Name:** Worth County Community Lake, #5512
- **Year of Initial Acquisition:** 1955
- **Acreage:** 57 acres
- **County:** Worth
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statement of Purpose:**
  - **A. Strategic Direction**
    The primary purpose of the Worth County Community Lake is to provide high-quality angling for largemouth bass and channel catfish.
  - **B. Desired Future Condition**
    Worth County Community Lake provides a "close–to-home" location for area residents to enjoy high-quality fishing, hiking and wildlife viewing opportunities. The desired future condition is to maintain this quality fishery, and restore desired habitat for small game, wildlife and native grassland species.

GENERAL INFORMATION AND CONDITIONS

I. <u>Special Considerations</u>

A. Priority Areas: None

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

III. <u>Existing Infrastructure</u>

- 2 gravel parking lots
- 1 privy
- 1 concrete boat ramp
- 6 grass fishing jetties
- approximately 1 mile of field access trails
- 20-acre fishing lake

IV. Area Restrictions and 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: No known easements.

D. Cultural Resources: No known cultural resources.

E. Hazards and Hazardous Materials: None observed.

F. Endangered Species: Endangered Species are not known from this site, but are found in the surrounding area. Area Managers should consult annually with the Natural History Biologist.

G. 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) The uplands around the lake were once dominated by native herbaceous vegetation. Tall fescue and undesirable woody vegetation, such as honey locust, autumn olive, black locust and Osage orange, have encroached into this once open area.
2) The remaining 5 acres of woodland contain many undesirable tree species and are in a degraded condition.

Management Objective 1: Improve upland habitat for small game and grassland birds.

Strategy 1: Decrease undesirable herbaceous and woody cover.

Management Objective 2: Monitor condition of forest land periodically during other routine site visits.

Strategy 1: Once every five years "cruise" the timber and note any significant changes or issues that need to be addressed.

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

1) The Missouri Department of Conservation (the Department) currently owns 19 percent of the 293 acres in the lake watershed (Figure 2).

2) Shallow depths in the upper arm of the lake and occasional algae blooms suggest sedimentation and nutrient inputs have been significant in the past. Although most of the watershed (71%) is currently grassland (cool-season pasture), untimely runoff of fertilizer or conversion of pasture to cropland could have negative impacts on the fishery.
3) The sportfish community has historically been managed for quality-sized panfish including bluegill, crappie and redear sunfish. Quality panfishing depends, in part, on high predation rates by largemouth bass. Therefore, regulations must promote an abundant and slow-growing bass population.
4) Channel catfish have likely been the most sought-after species in the fishery. Maintenance of this popular component of the fishery requires regular stocking with larger-sized fish to avoid high rates of predation by bass.
5) Large investments to improve the fishery (i.e., deepening the lake, renovating the fish community, and improving facilities) are not warranted until a larger portion of the watershed has long-term management practices that minimize sediment inputs and promote better water quality in the lake.
6) The size of the watershed is desirable for this size of lake. As a result, lake levels will generally be maintained with minimal fluctuations and fewer flushing overflows. These conditions promote stable and productive shoreline areas, and lower rates of sedimentation, when land uses in the watershed are also beneficial for the lake.
7) Concerns with the fishery include harm caused from common carp (reduced water quality, loss of beneficial aquatic vegetation); and sedimentation that has resulted in decreased fish habitat and growth of nuisance aquatic plants.

Management Objective 1: As opportunities arise, minimize soil loss and chemical/nutrient runoff to the lake from agricultural sources in the watershed.

Strategy 1: Promote soil conservation practices with landowners in the watershed.

Management Objective 2: Use appropriate fisheries management tools to maintain and improve the quality of fishing.

Strategy 1: Continue regular “put-n-take” stocking with channel catfish. The current stocking is conducted every two years at a rate of 15 fish per acre.

Strategy 2: Continue the 15-inch minimum length regulation for largemouth bass to maintain higher densities of bass and promote better growth rates for panfish.

Strategy 3: Promote better catch rates with periodic placements of brush piles or artificial fish attractors that help concentrate sportfish and focus anglers.

VII. Public Use Management Considerations

Challenges and Opportunities:

1) Trash is an occasional problem in the parking lots and along the shore where anglers concentrate.
2) A grass trail has been maintained around the lake to provide multiple access sites for shore anglers and easy access to the jetties. Maintenance of this trail and jetties requires regular mowing.
3) Regular efforts are needed to remove trees and shrubs which grow on the sides of the fishing jetties and discourage use by anglers.

Management Objective 1: Keep the area well-maintained.

Strategy 1: Continue to regularly mow the high-use areas near the parking lot, boat ramp, dam, trail and jetties.

Strategy 2: Pick up trash prior to each mowing.

Strategy 3: Maintain signs and reasonable enforcement efforts that effectively discourage littering.

Management Objective 2: Maintain a grass trail around the lake that invites regular use by anglers, wildlife viewers and recreational users.

Strategy 1: Maintain a trail width of at least 10 feet with mowing and other controls on woody vegetation.

Strategy 2: Address chronic wet/muddy areas of the trail with rock and culvert placements.

Management Objective 3: Promote use of the fishing jetties.

Strategy 1: In conjunction with trail mowing, mow the jetties at least two times per year.

Strategy 2: Cut and apply herbicide to stumps of trees and shrubs growing along the sides of the jetties. Apply rock rip-rap to minimize re-growth and prevent wave erosion.

VIII. Administrative Considerations

Challenges and Opportunities:

Boundary fence is shared with three adjoining landowners. No fencing agreements exist. During the past 10 years, approximately 3,700 feet of the total 6,700 feet of boundary fence has been improved in cooperation with neighboring landowners (Figure 3).

Management Objective 1: Work with neighboring landowners, as need arises, to ensure the maintenance of adequate boundary fencing.

Management Objective 2: Work with county authorities, as need arises, to maintain county right-of-ways bordering Department areas.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Terrestrial Resources Management										
Objective 2										
Strategy 1					X					X
Aquatic Resources Management										
Objective 2										
Strategy 1	X		X		X		X		X	
Strategy 2		X		X		X		X		X
Public Use Management										
Objective 3										
Strategy 2		X								

APPENDICES

Area Background:
Worth County Community Lake is located in the southwest corner of Worth County, in the headwaters of Indian Creek, a small tributary to the West Fork Grand River. The lake covers 20 acres; the Department owns 57 acres. The lake dam was built in 1957 with a designed lake depth of 18 feet at full pool. Initial fish stocking was also completed in 1957; stocking included largemouth bass, bluegill and channel catfish fingerlings. The lake was opened to fishing in May 1959. Since that time, other species have been stocked in the lake including redear sunfish and threadfin shad (1971), gizzard shad (1972), grass carp (1983), brown bullhead (1990) and black bullhead (1992). Improvements for angler access have included the addition of a concrete boat ramp in 1984 and six fishing jetties in the early 1990s.

Current Land and Water Types:

Land/Water Type	Acres	% of Area
Old Field	32	56
Impoundments	20	35
Woodland	5	9
Total	**57**	**100**

Public Input Summary:
The draft Worth County Community Lake Area Management Plan was available for a public comment period October 1-31, 2014. The Missouri Department of Conservation received comments from one respondent (Appendix A). The Worth County Community Lake 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.

<u>MDC responses to themes and issues identified through Worth County Community Lake Area Management Plan public comment period</u>

Suggests allowing camping.
Camping is not allowed at Worth County Community Lake primarily due to the likelihood of increased unauthorized activities given the remote location. However, the area planning team is open to proposing a change to area regulations allowing camping if enough local support existed in the form of an “adopt-an-area” group that could help with area maintenance activities during peak use times.

Maps:

Figure 1: Area Map
Figure 2: Land Uses in the Watershed
Figure 3: Fencing Improvements

Additional Appendices:

Appendix A: Worth County Community Lake Area Management Plan Public Comments

Figure 1: Area Map

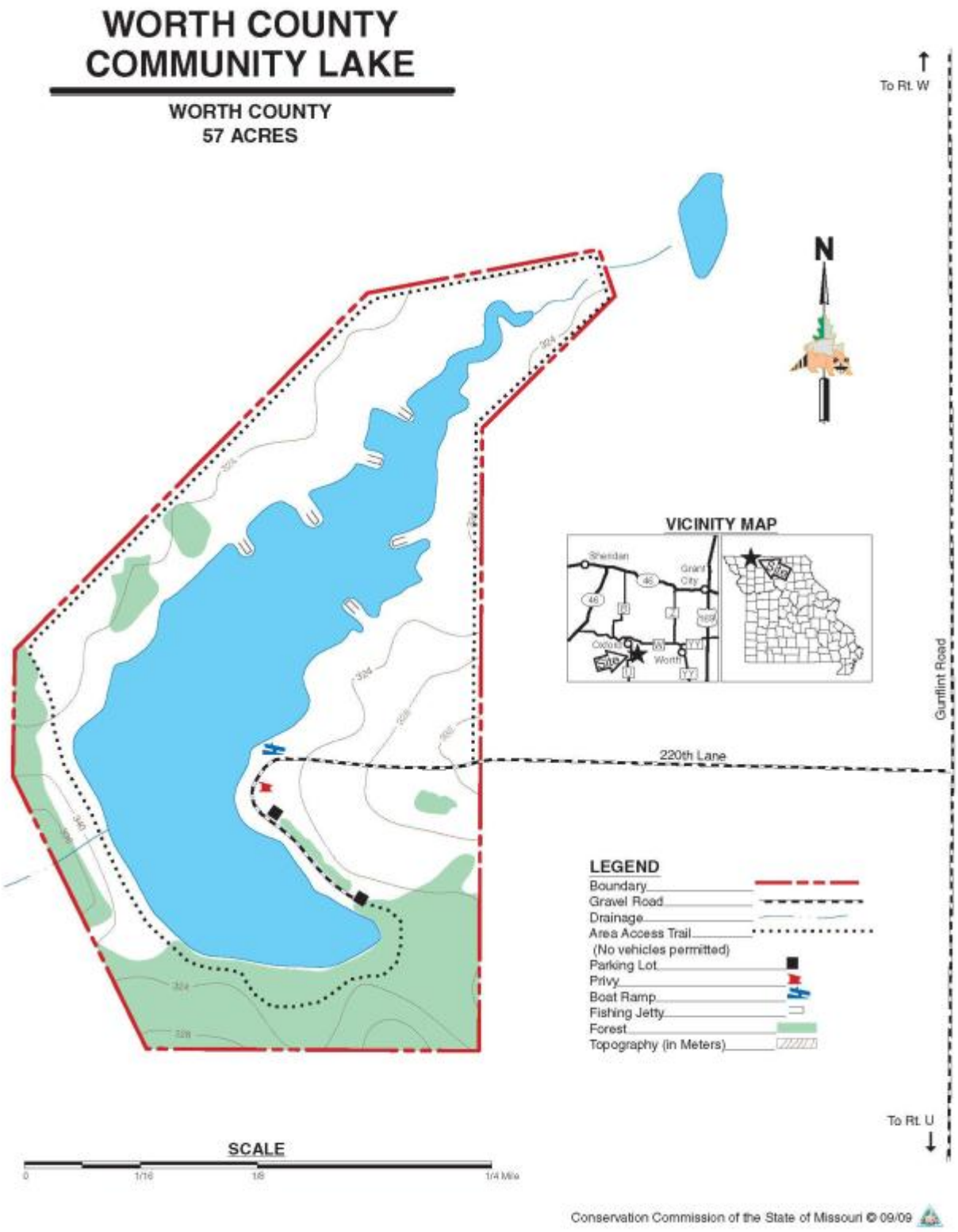

Figure 2: Land Uses in the Watershed

Legend

- Streams
- MDC Land
- Lake Watershed
- Impervious
- Cropland
- Grassland
- Deciduous Forest
- Deciduous Woody/Herbaceous
- Open Water

Worth County Community Lake

Lake = 20 acres
Watershed = 293
W:L = 15:1
MDC Owns 19%

LULC_CODE1	PERCENT	ACRES
Impervious	0	0.67
Cropland	15	32.01
Grassland	71	156.05
Deciduous Forest	4	8
Deciduous Woody/Herbaceous	2	3.78
Open Water	9	20.23

Figure 3: Fencing Improvements

Appendix A: Worth County Community Lake Area Management Plan Public Comments

Received during public comment period (October 1-31, 2014)

Why is camping not allowed? Thought that was part of the original agreement when property was donated/purchased for the building of the lake.