Maple Leaf Lake Conservation Area

Ten Year Area Management Plan

FY 2013-2022

Lisa M. Allen
Forestry Division Chief

2-18-14
Date

Maple Leaf Lake Conservation Area Management Plan Approval Page

PLANNING TEAM

Paul Whitsell, Resource Forester

Blake Stephens, Fisheries Specialist

Rich Meade, Fisheries Training Coordinator

Cynthia Green, Education Consultant

Steve Hoel, Private Land Conservationist

Lance Moore, Conservation Agent

Steve Cooper, Wildlife Management Biologist

KANSAS CITY REGION

RCT Chair _____ *Signature* 11/05/2013 *Date*

FORESTRY DIVISION

Unit Chief John Tuttle *Signature* 2-12-14 *Date*

OVERVIEW

- **Official Area Name:** Maple Leaf Lake Conservation Area (CA), # 8926
- **Year of Initial Acquisition:** 1989 with the addition of a one acre tract in 1990
- **Acreage:** 826 acres
- **County:** Lafayette
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Wildlife Division with assistance from the Forestry Division
- **Statements of Purpose:**
  - **A. Strategic Direction**
    The primary purpose of Maple Leaf Lake CA is to provide an inviting place for the public to enjoy fishing and hunting opportunities. The natural resource management focus is on maintaining aquatic ecosystems that support healthy fish and waterfowl populations and maintaining terrestrial habitats targeting early successional game species.
  - **B. Desired Future Condition**
    The desired future condition of Maple Leaf Lake CA is a healthy lake and small wetland surrounded by early successional habitat (re-established prairie plantings, old fields, and crop fields) and forest communities that provide deer and turkey habitat.
  - **C. Federal Aid Statement**
    N/A

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 known to exist on 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

- Three parking lots; one small pull-off
- Boat ramp
- Two disabled-accessible privies
- Disabled-accessible facility: fishing jetty, fishing platforms, covered fishing dock
- Four water control structures: a main screw gate, bypass screw gate, drop log structure screw gate (wooden boards), and an agri-drain drawdown structure
- Dams: a dam on each silt basin, and dams on the ponds (three ponds are larger than one acre). There is an Emergency Action Plan for the lake dam located in the area manager's office file cabinet at Burr Oak Woods Conservation Nature Center.

IV. Area Restrictions or Limitations

A. Deed restrictions or ownership considerations: There is a fencing agreement made in 2004 between the Department and an adjacent landowner on 1,080 feet of fence along the western boundary line in the southwest corner of the area. Maintenance of this fence shall be the responsibility of the Department for materials and the adjoining landowner for repairs, and the fence shall be maintained in a reasonable condition at all times. The agreement expires in March 2014. Before any major fence maintenance occurs on the area, the office files should be checked as there is an expired fencing agreement which has a clause for the possibility of renewal.

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: There is an agreement made in 1990 with an adjacent landowner that resulted in a service road to be constructed along the southeastern boundary of the area for the purpose of ingress and egress to their property.

D. Cultural resources findings: No known cultural resources

E. Hazards and hazardous materials: None observed

F. Endangered species: None observed

G. Boundary Issues: None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

1) Maintain and expand ground nesting bird habitat – both nesting and brood-rearing. Grassland sites contain a mix of warm-season plantings and cool-season (fescue dominated) grasses. Many old-field sites are dominated by fescue and woody invasive plants are present. Fescue renovation should continue to be a high priority on these sites.
2) There are currently two small wetland units with water manipulation capabilities. The larger pool has a long history of cocklebur infestation and most recently has been treated for Reed's canary grass. Current management strategy has been to dewater in mid-Spring to increase desirable moist-soil response and flood prior to the statewide waterfowl season opener. The smaller unit has a good mix of annual smartweed, millet, Spanish needle and sedges. Primrose is present and may warrant control in the future. Current plan is to maintain this unit as an emergent wetland.
3) The presence of fescue and the desire to control this invasive has been noted elsewhere in this plan. Other invasive species of note include: serecia lespedeza, musk thistle and Johnson grass. An invasive species control plan needs to be developed to reduce current population levels and control the spread of these species.
4) There is approximately 62 acres of forest at Maple Leaf Lake CA which provide wildlife food and cover. There are a few patches of wooded areas, and there have been trees and shrubs planted around the area in 1991, 1993, and 2002 in groups for shrubby cover, in dense rows for wildlife travel lanes, and along the forest edge. Trees were also planted in windbreak patterns around the lake site, and cedars were planted near the lake for fish attractors and cover. The planting plans can be found in the area manager's records.

Management Objective 1: Develop and expand habitat for ground nesting birds.

Strategy 1: Use available management tools such as: prescribed burning, herbicides, mechanical methods and the Ag Crop system to remove fescue and maintain early successional upland conditions.

Management Objective 2: Enhance wetland habitat.

Strategy 1: Use management tools such as: mechanical methods, prescribed fire, herbicides and water manipulation to provide habitat for the wetland dependent suite of birds.

Management Objective 3: Reduce existing populations and control spread of exotic invasive species.

Strategy 1: Use tools such as prescribed fire and herbicides to reduce existing populations.

Strategy 2: Visually evaluate fields and lake edge annually for invasive species and develop a brief plan that maps and prioritizes control of new threats and/or establishing colonies.

Strategy 3: Coordinate with Fisheries staff to control establishment/spread of exotics along shorelines, riparian zones and wetlands.

Management Objective 4: Enhance wildlife habitat by creating healthy forest natural communities.

Strategy 1: Inventory stands every other year as work priorities allow to access forest health before any management activities are performed.

Strategy 2: Use thinning methods as necessary the year after each stand inventory to enhance wildlife habitat.

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

Maple Leaf Lake Conservation Area was purchased to construct a lake and provide fishing opportunities in Lafayette County, close to Kansas City. The 140-acre Maple Leaf Lake was completed in 1991 and opened to fishing in January, 1995. A five-year lake management plan was written in 1992 that covers much of the lake history and status at that time. Other fishable ponds on the area include a 5.8-acre silt basin west of the lake, a 5-acre pond near the main lake spillway and a 1-acre pond just west of the entrance road to the area. A 3.7-acre silt basin lies just above the east arm of the lake, but shallow water and excessive vegetation limit angling opportunities and preclude effective fisheries management. Several smaller ponds exist on the area and are used for wildlife watering. Drawdown structures are present in the lake and the two silt basins, providing additional fish and wildlife management options.

Management Objective 1: Maintain high water quality in the 140-acre lake and other fishable impoundments.

Strategy 1: Manage the surrounding watershed of Maple Leaf Lake in a manner that minimizes adverse effects of nutrient and soil runoff to the lake through proper agricultural practices and buffers.
Strategy 2: Monitor native aquatic vegetation in the lake and along the shoreline and maintain at levels conducive to high water quality.
Strategy 3: Contact adjoining landowners to encourage land use practices that minimize nutrient and soil runoff to the watershed of Maple Leaf Lake.
Strategy 4: Evaluate restroom facilities to ensure that waste products are not leaching to the waters of the lake, and if so, repair or replace.

Management Objective 2: Maintain healthy aquatic habitat in area impoundments.
Strategy 1: Control invasive species such as American lotus and phragmites (common reed) at levels that allow diverse aquatic plant communities to exist.
Strategy 2: Improve diversity of native aquatic plants by establishing beneficial plants in areas where they are lacking.
Strategy 3: Improve and maintain the cedar tree nursery east of the lake for future use in fish attractor structures.

Management Objective 3: Maintain high quality angling opportunities in fishable area impoundments for area users.
Strategy 1: Monitor fish populations in area impoundments as needed.
Strategy 2: Adjust fishing regulations as needed to maintain fish populations at desirable levels.
Strategy 3: Maintain area infrastructure as appropriate to allow easy and safe public access to area impoundments.
Strategies 4: Control aquatic vegetation as needed to maintain public access to the fishery.

Management Objective 4: Work with area personnel to manage selected small ponds as fishless ponds to benefit select wildlife species.
Strategy 1: Chemically eradicate low-quality fish populations from some shallow ponds to benefit reptiles and amphibians.

VII. <u>Public Use Management Considerations</u>

Challenges and Opportunities:

1) This area provides a variety of fishing, hunting, and wildlife viewing opportunities year round (including fishing, waterfowl, dove, deer, rabbit, and quail), and receives adequate pressure from hunters and anglers during every season. Fishing pressure is highest during the summer months but is prevalent year round. The

high number of users coupled with multiple interests occurring simultaneously on the area makes it an invaluable place that serves our stakeholders.

2) Because this area attracts a high number of visitors, Maple Leaf Lake CA should be maintained at area maintenance level 2 meaning that maintenance should be done with enough frequency to make the area safe and inviting to the public.
3) Maple Leaf Lake has many opportunities for outreach and education. The area offers easy bank fishing access from the main parking lot and has the potential for fishing clinics for young/inexperienced anglers.
4) Continue to promote dove hunting opportunities, including youth hunts.

Management Objective 1: Maintain healthy wildlife populations and habitat on the area to ensure hunting opportunities.

Strategy 1: Provide adequate food and cover for target species as required to maintain a healthy sustainable population of wildlife on the area.

Management Objective 2: Improve facilities where needed and ensure infrastructure is maintained and kept clean and presentable to encourage public use and cooperation.

Strategy 1: Maintain all signs, roads, roadsides, fishing structures, parking lots, and privies in a well groomed and well maintained manner.

Management Objective 3: Encourage the use of Maple Leaf Lake as a site for outreach and education classes/clinics.

Strategy 1: Host a variety of hunting and fishing clinics on the area to serve the community and encourage public involvement in outdoor activities.

Management Objective 4: Provide dove hunting opportunities including youth hunts.

Strategy 1: Provide dove foods as stated above and set up youth dove hunt annually.

VIII. <u>Administrative Considerations</u>

Challenges and Opportunities:

1) As noted, Maple Leaf Lake CA is categorized at area maintenance level 2 and needs to be maintained to those standards. Historically, the finish mowing has been done by both the Design & Development (D&D) and Wildlife Divisions. The trash pickup and minor infrastructure maintenance has been shared with the Wildlife Division in the Central Region and the Blue Springs Forestry work team. Major infrastructure repairs will be coordinated between the Forestry Division Area Manager and the D&D Regional Supervisor.

2) With the high public use, the area's facilities and infrastructure sustain wear over time. The privies have been a problem since they were constructed and should be replaced. There is a heavy trash load on Maple Leaf Lake CA. There are currently no trash cans on the area as the trash cans have produced more trash dumped onto the area in the past. As a result, some trash is thrown in the privies, which is very expensive to remove, and some trash is thrown in the grass around the parking lots. There has been a recent trash contract administered by the Wildlife Division that has been helpful with keeping the trash down. The fishing dock is showing excessive wear and should be replaced soon. There are cracks in the parking lot that need to be addressed.

Management Objective 1: Maintain area at area maintenance level 2.

Strategy 1: Consider having a budget line item to keep a contractor to pick up trash, and consider installing trash cans appropriate for the area.

Management Objective 2: Address major infrastructure maintenance/replacement needs annually.

Strategy 1: Coordinate as needed with D&D Regional Supervisor on the status of the privy on the Repair and Renovation List.

Strategy 2: Annually access the maintenance needs for the fishing docks, jetty, and platforms, parking lot, dams, and service roads.

Management Objective 3: Acquisition of land

Strategy 1: 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:

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Terrestrial Resources Management										
Objective 4										
Strategy 1		X		X		X		X		X
Strategy 2			X		X		X		X	
Aquatic Resource Management										
Objective 1										
Strategy 2	X		X		X		X		X	
Strategy 3		X								
Strategy 4		X								
Objective 2										
Strategy 2			X		X		X		X	
Strategy 3		X						X		
Objective 3										
Strategy 1	X		X		X		X		X	
Strategy 2					X					
Objective 4										
Strategy 1	X									
Public Use Management										
Objective 3										
Strategy 1		X		X		X		X		X
Administrative										
Objective 2										
Strategy 1	X									

APPENDICES

Area Background:

This 826-acre area is named for the 140-acre fishing lake that is in the shape of a maple leaf. The dam for the lake was completed in 1991. The lake was stocked with channel catfish, bluegill, redear sunfish, and black bass in 1992. Two small wetlands totaling 12 acres provide waterfowl habitat south of the lake dam.

When the area was purchased, there were 542 acres of pasture, 129 acres of cropland, 102 acres of timber, and 53 acres of existing lakes and ponds.

The open fields and wooded draws surrounding the lake are managed for deer, turkey, rabbit, quail, and songbirds through edge feathering, prescribed burning, strip disking, and fescue conversion to small grain and native grasses.

Current Land and Water Types

Land/Water Type	Acres	Feet	% of Area
Old Fields/Upland Fields	439		53
Impounded Water	156		19
Warm Season Grass Fields	87		10
Cropland/Hay Land	65		8
Upland Forest	34		4
Bottomland/Riparian Forest	33		4
Wetland/Marsh	12		2
Total	**826**		**100**
Stream Frontage		0	

Public Input Summary:

The draft Maple Leaf Lake Conservation Area Management Plan was available for a public comment period September 1 – September 30, 2013. The Missouri Department of Conservation received comments from four respondents (Appendix A). The Maple Leaf 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.

Public Input Summary

After the Maple Leaf Lake Conservation Area (MLLCA) Plan Draft was written, there was a 30 day public comment period from September 1-30, 2013. A comment flyer directing stakeholders to the MDC website was posted at each bulletin board on the area, and the area manager visited with many of the neighboring landowners to discuss the draft area plan.

<u>MDC responses to themes and issues identified through Maple Leaf Lake public comment period</u>

Concern about low numbers of quail and increasing fescue on Maple Leaf Lake CA.
We receive mostly positive comments regarding the quail population at MLLCA. The area has held quail each year in spite of hunting pressure. Most quail hunters that the conservation agent has checked with, say they have been satisfied with the number of birds they have seen and are more than happy to only take a few after working their dogs. The planning team does agree that improving quail populations on the area is a priority and will continue to manage for such wildlife.

One of the main terrestrial objectives at MLLCA is to expand ground nesting habitat and early successional habitats. Each year, many of the grasslands are prescribed burned (295 acres in fiscal year 2013, 30 acres in fiscal year 2012, 310 acres in fiscal year 2011). Strip disking is often performed around these burn units for the dual purpose of providing fire breaks and to create early successional habitat. The larger shrub thickets and larger trees that invade these grasslands are set back annually through the use of a tree shredder, tree clipper, and a brush mower. The planning team agrees that the fields that contain fescue should be monitored and efforts should be made to make sure the native grassland communities aren't threatened by encroaching fescue.

Appreciate how the area is managed (especially for rabbit hunting with Beagles).
Besides cover and brood rearing habitat that quail find at Maple Leaf Lake, there are 80 acres of crop fields rotating between corn, soybeans/wheat or sunflowers, and idle which provide a great food supplement for other small game wildlife.

Concern about musk thistle control not working.
Much of the management that occurs at MLLCA involves exotic invasive species control. Every year, staff battles the following exotic invasive species: sericea lespedeza, Johnson grass, thistle, and fescue. The following acres were sprayed in the past 3 fiscal years: 2013: 67 acres, 2012: 303 acres, 2011: 178 acres. The fields are all mapped on the conservation area, and the spraying is prioritized based on need and staff availability. There are times, however, when we have not controlled a particular invasive species, but we do have a plan in place to do so and intend to keep these populations at acceptable levels for natural community health.

Would it be possible to add a fish cleaning station?
While the area planning team sees the opportunity of adding a fish cleaning station on the area as a benefit to area users, the major challenge will be to keep the cleaning station maintained and clean. Since there are no employees that work on site, it would be hard to keep the station regularly clean and inviting to the public. The Missouri Department of Conservation completed an infrastructure reduction in 2009 with the downturn of the economy, and is carefully reviewing any infrastructure additions. The area manager may reconsider adding a fish cleaning station in the future if staff conditions change.

Concern that fencing agreements have a sunset provision.
The MDC Fencing Agreement does list an agreed upon sunset date on item #7, but also says that "the agreement shall be renewable for subsequent terms by either party hereto upon request being given at any time to the other party". The area manager is willing to work with neighbors on any fence issues and will work with adjoining landowners to determine reasonable solutions.

Concern about hunters parking on private property.
The area planning team agrees that if the public are parking on private property, the landowner may call the local conservation agent or the sheriff's department to handle the trespass complaint. People are, however, able to park along the right-a-way of the public roads as long as they are not blocking traffic or blocking an entrance (either to public or private).

References:
Maple Leaf Lake Conservation Area Historic Files. 1989-2012. Burr Oak Woods CNC.
Emergency Action Plan for Maple Leaf Lake Dam. 2011. Burr Oak Woods CNC Files.
FY93-97 Lake Management Plan for Maple Leaf Lake. 1992. Burr Oak Woods CNC Files.

Additional Appendices:
Appendix A: Draft Maple Leaf Lake Area Plan Public Comments

Maps:
Figure 1: Area Map
Figure 2: Topographic Map
Figure 3: Current Land and Water Types Map
Figure 4: Soils Map

Appendix A. Draft Maple Leaf Lake Area Plan Public Comments
Received during public comment period (September 1-30, 2013)

I feel the area has great access getting in and out and the lake always looks inviting even from the Interstate. My concern is that I like to quail hunt the area but, it just seems the area is not to the potential that it has. The fescue is really taking over making it hard for me to walk let alone a quail to move around. I have found quail there with my dog but have never harvested any as the covey's were less than 10 birds. Wish we could get more quail on this land and all over the state.
The "plan" to control noxious weeds (primarily musk thistle) is either not in place or not working...would be good at least close to us! I also see the fence responsibilities have a sunset provision? Also, any way to prevent hunter parking at the edge of my property...the very farthest section of the land type map...on the bend of old stage rod. It is still a problem for my wife and I, being at the corner of our lawn. Otherwise...glad to have Maple leaf behind us....and bordering both our properties and land we rent to farm.
YOU ARE DOING AN EXCELLENT JOB ON THIS LAND,THE ONLY THING I WOULD LIKE TO SUGGEST IS A FISH CLEANING STATION. THANK YOU FOR THE GREAT JOB YOUR DOING !!!!!
This area has been very valuable in the starting of puppy beagles into rabbit hunting. The habitat feathering of field to timbered areas and brush piles along with the remaning fences in the brushy areas have lent themselves wonderfully in the introduction of hunting to my puppies. Using a more traditional way as opposed to the use of a starting pen. I will say "wonderful job" from this sportsman to the MDC. thank you. A Favorite location for my wife and I.

Figure 1: Area Map

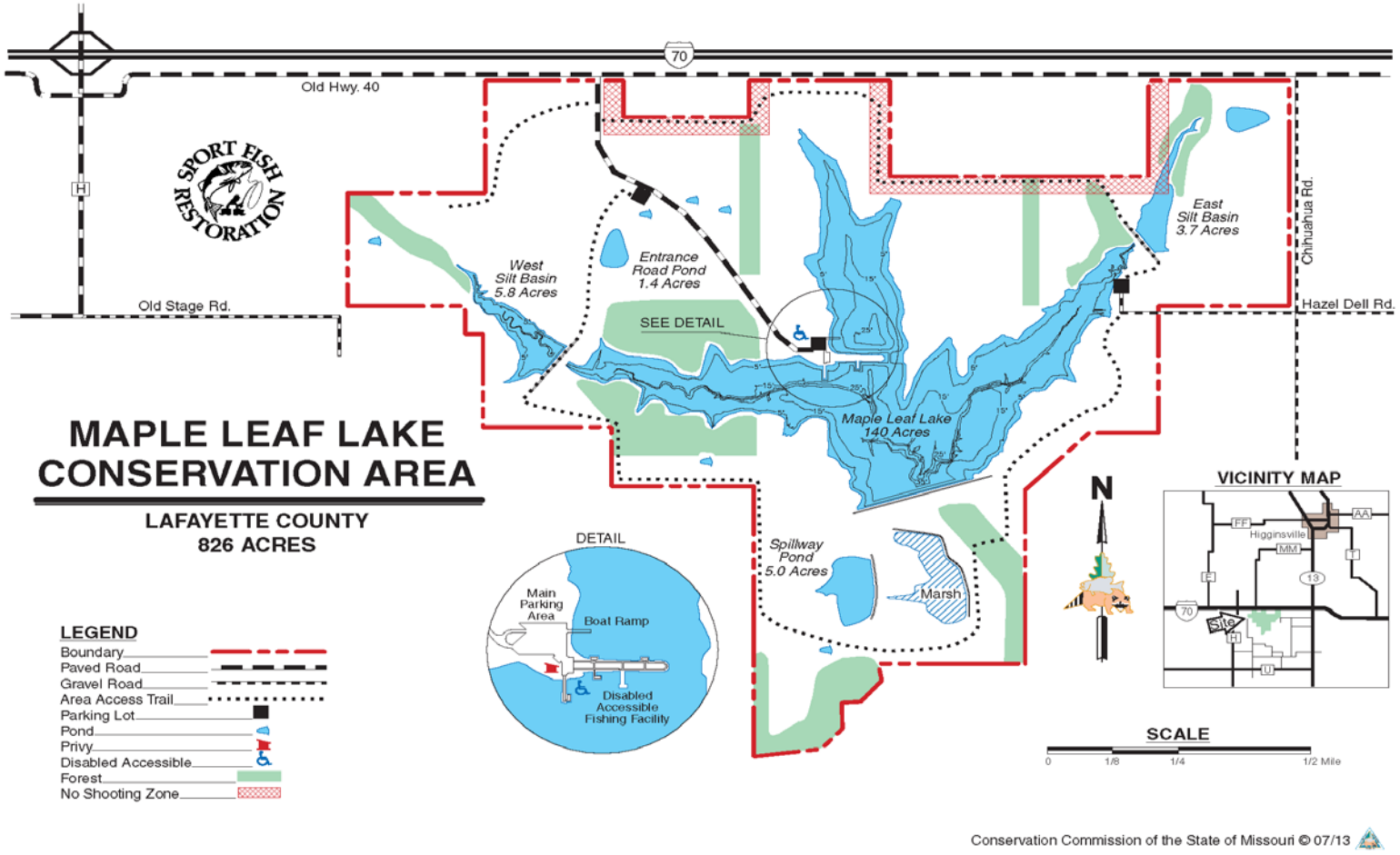

Figure 2: Topographic Map

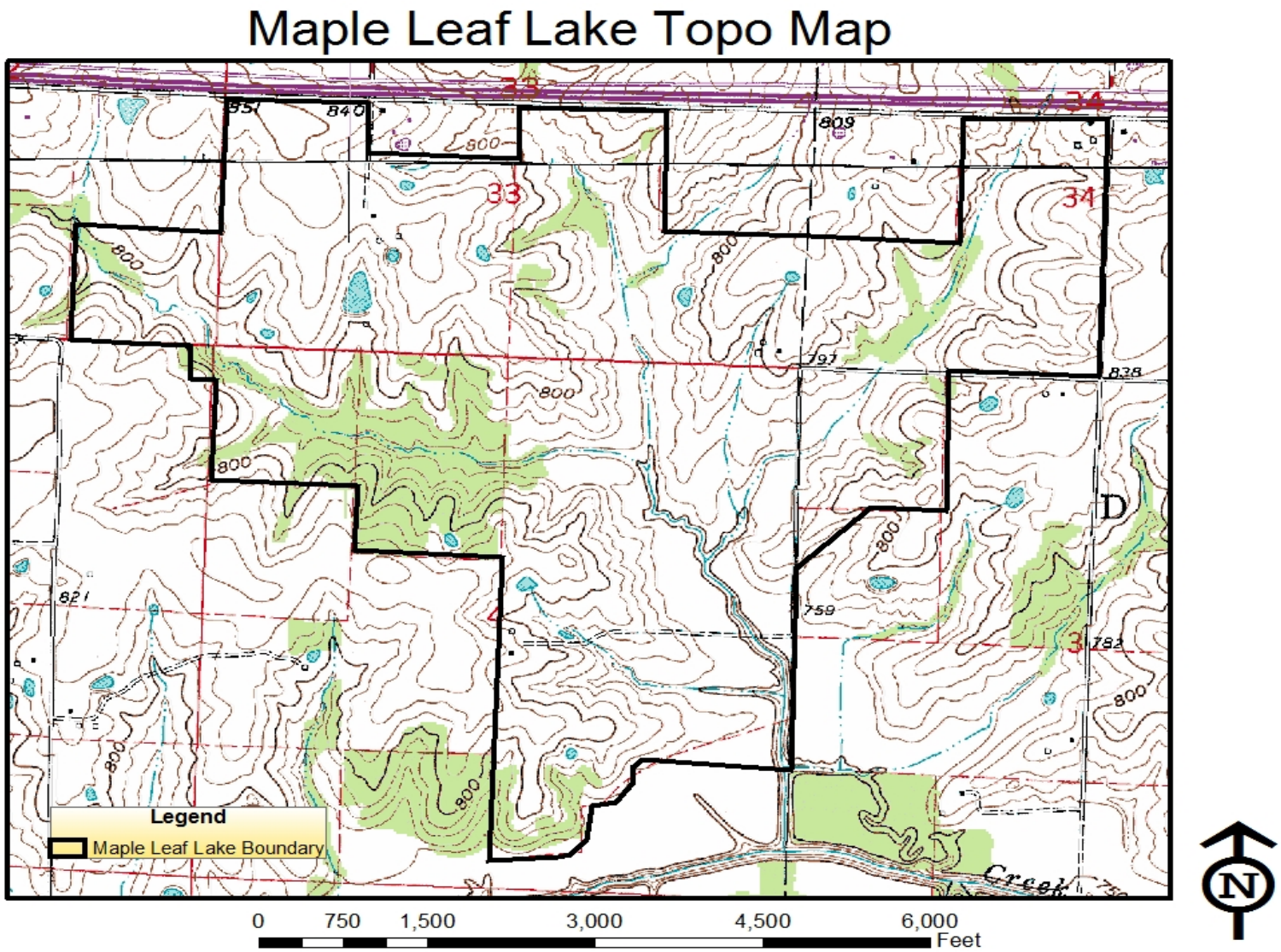

Figure 3: Current Land Type Map

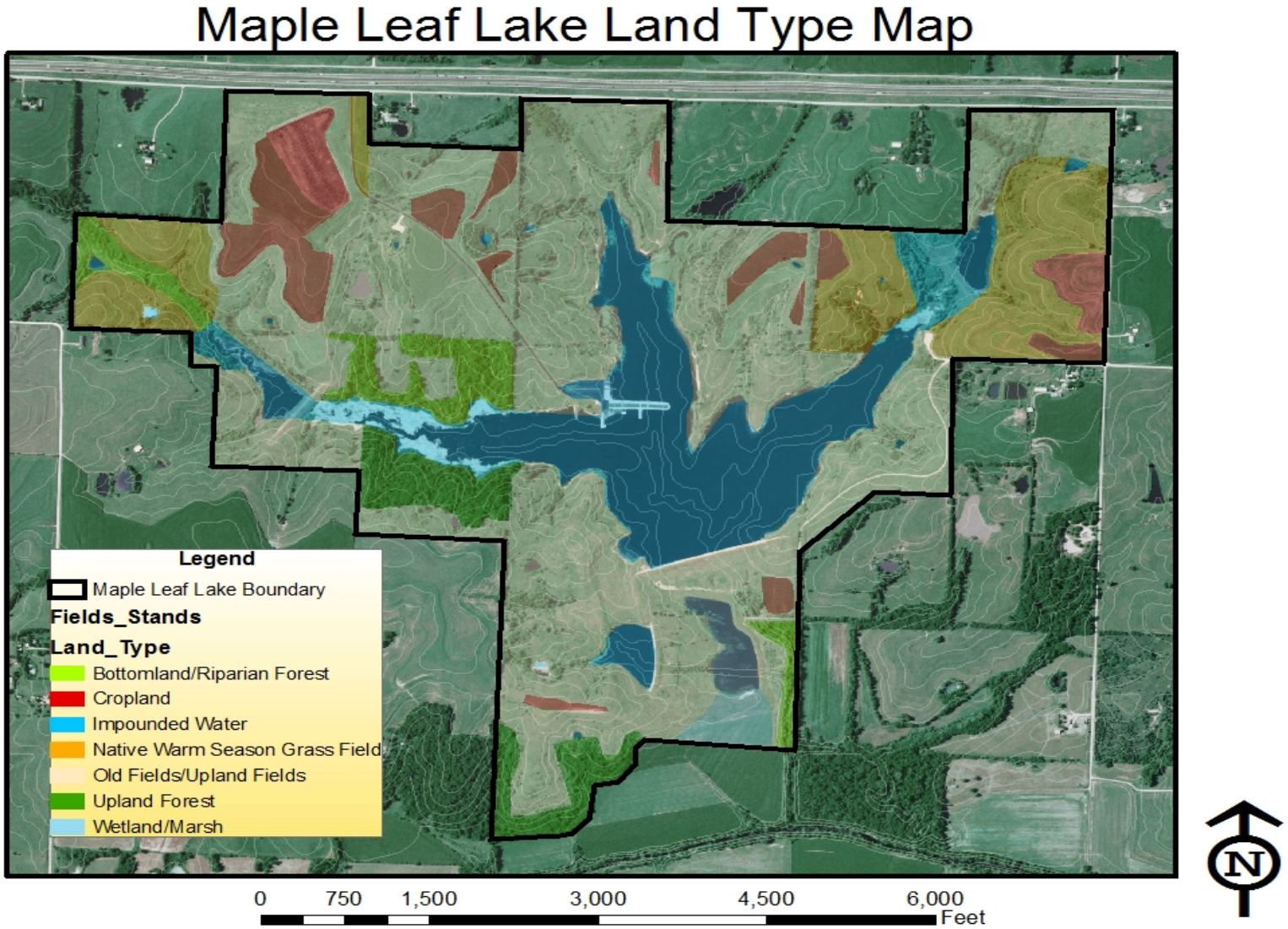
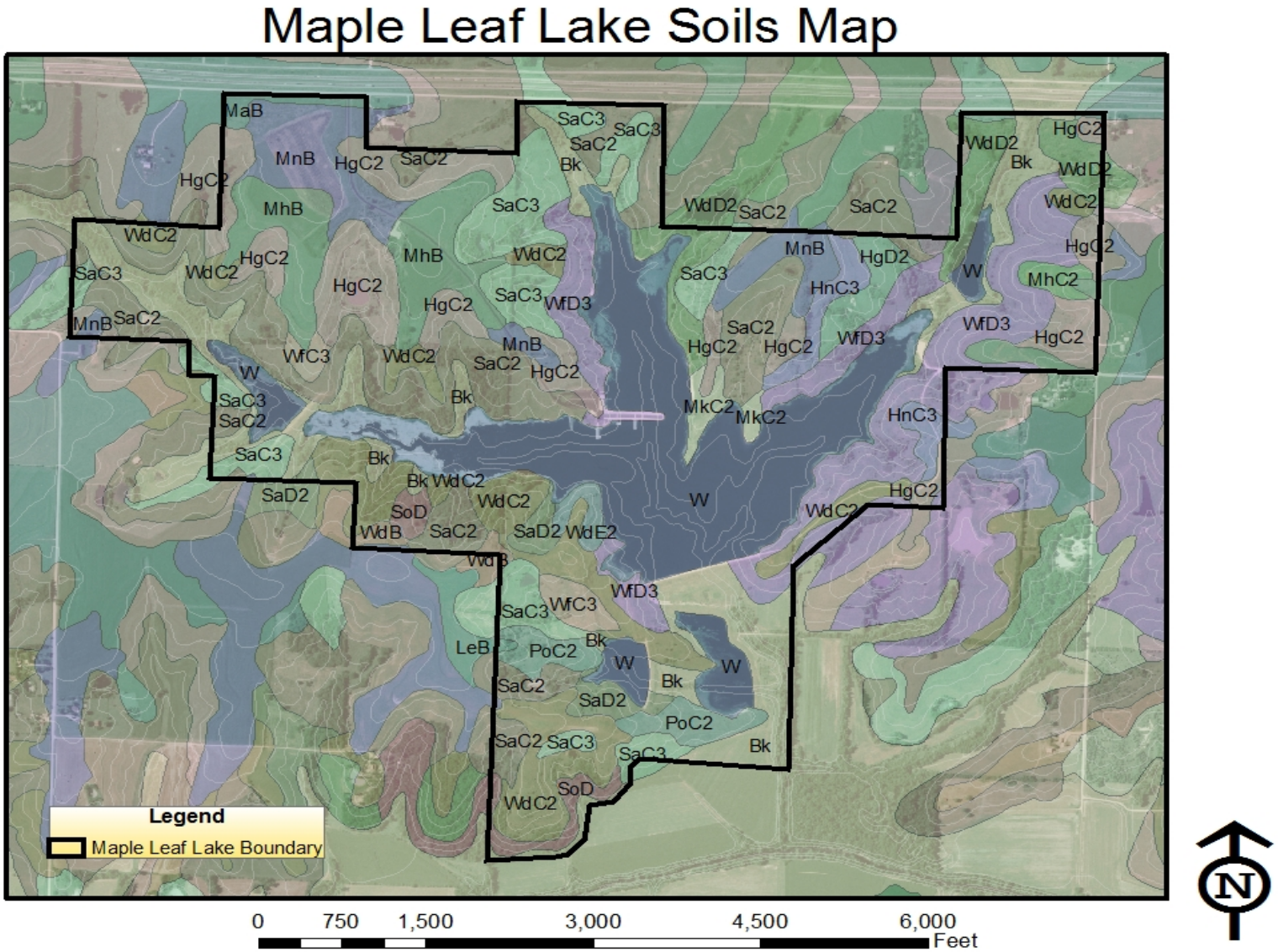
Figure 4: Soils Map