

DRAFT

Settle's Ford

Conservation Area

Ten Year Area Management Plan

FY 2017-2026



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OVERVIEW

- **Official Area Name:** Settle's Ford Conservation Area, #8515
- **Year of Initial Acquisition:** 1985
- **Acreage:** 6,766 acres
- **County:** Bates, Cass
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

Settle's Ford Conservation Area (CA) is primarily managed for its wetlands which will be enhanced or expanded as feasible. The area is also managed to provide public recreation to the extent compatible with area resources for Missourians, particularly those within close proximity to Kansas City.
 - B. Desired Future Condition**

The desired future condition of Settle's Ford CA is healthy natural communities that include mature forest, woodlands, upland, and wetland complexes.
 - C. Federal Aid Statement**
 - This area, or a portion thereof, was acquired with Pittman-Robertson Wildlife Restoration funds to restore and manage wildlife, conserve and restore suitable wildlife habitat and provide public access for hunting or other wildlife-oriented recreation.
 - This area, or a portion thereof, was developed with North American Wetlands Conservation Act funds to conserve and restore wetland habitats.

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations:**
 - A. Priority Areas:** None
 - B. Natural Areas:** None

- II. Important Natural Features and Resources**
 - A. Species of Conservation Concern:** Species of conservation concern are 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. Existing Infrastructure

- 14 parking lots (1 Americans with Disabilities Act [ADA] accessible)
- 1 gravel boat ramp
- 1 staffed office
- 2 shop buildings
- 2 well houses
- 1 privy (ADA accessible)
- 2 Agri-Drain style-stop log structures
- 5 sluice/slide/weir style structures
- 14 stop-log style concrete water structures
- 1 grain bin
- 1 Quonset building
- 1 waterfowl blind (ADA accessible)
- 1 chemical shed
- 6 fishing lakes/ponds (total of 13.6 acres) 16 fishless ponds (total of 14 acres)
- Hiking trail (3.4 miles)

IV. Area Restrictions or Limitations

A. Deed Restrictions or Ownership Considerations: None

B. Federal Interest:

Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. This land must be used to conserve and restore wetlands. The federal funds made available under the North American Wetlands Conservation Act may not be used for fish and wildlife mitigation purposes under the Fish and Wildlife Coordination Act or the Water Resources Development Act of 1986. 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.

C. Easements: Numerous easements exist on the CA including:

- The South Grand River Drainage District holds an easement on the channelized portion of the South Grand River and several drainage laterals including Peter Creek, Elk Fork, and Lick Creek.
- One access easement granted to Dale Cumpton on the south side of County Road 15524.
- Kansas City Power and Light has a high transmission power line easement that runs across the eastern portion of the area.

- Bates County has two right of way easements at the bridges that cross Peter Creek and the South Grand River on the east side of the area.
- A utility easement that runs along McCulloh Road to the area headquarters.

D. Cultural Resources Findings: Yes, records kept with the Department environmental compliance specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.

E. Endangered Species: None observed.

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

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) The South Grand River Drainage District controls the rights and the property bordering the South Grand River from 100 feet from center to each side. They also control portions of Elk Fork, Peter Creek, Lick Creek, and several drainage laterals in Unit 1 from 50 feet from center to each side.
- 2) Invasive plants continue to be a threat to the area. Invasive species such as sericea lespedeza, reed canary grass, Johnson grass, perennial smartweed, tall fescue, teasel, and musk thistle are well established. Small populations of invasive plants, such as shrub honeysuckle, Japanese honeysuckle, tree of heaven, common reed, and autumn olive, have been located on or very close to the area.
- 3) Settle's Ford CA has a significant amount of productive bottomland. Under the Department's management, many of the bottom acres that were historically used for row crops have been converted to forest through tree planting and natural regeneration. Additional conversion of these bottom acres to forest communities will provide more diverse wildlife habitat and improve riparian corridor function and stream health.
- 4) The mix of bottomland and upland fertile soils allows natural succession and invasive plants to advance at an increased rate. Cropping in these open lands is useful in helping to set back succession and assist in the fight against invasive plants, while providing both food and brood-rearing areas, as fields are rotated and left idle. Many of these fields also present opportunities for dove management.
- 5) Early successional fields present a unique opportunity for various wildlife species including bobwhite quail, white-tail deer, turkey, rabbits, and grassland birds.

Settle's Ford CA has many open fields that were planted to native grasses, forbs, and converted to other early successional vegetation types. These fields become void of the forb component over time, making them less desirable for wildlife.

Management Objective 1: Maximize wetland productivity and potential by maintaining most pools in early successional habitat, while providing emergent vegetation for nesting species.

Strategy 1: Manipulate water levels to encourage early successional growth of desirable wetland plants like millet and smartweed. (Wildlife)

Strategy 2: Utilize, add, and enhance existing infrastructure to add additional managed wetland acres when feasible. (Wildlife)

Strategy 3: Monitor wetlands for invasive species. Eradicate invasive species using chemical or mechanical treatments, as needed. (Wildlife)

Strategy 4: Utilize permittee farmers to plant, treat, and disturb large areas of wetlands in an efficient manner to maximize potential impacts to early successional habitat. (Wildlife)

Management Objective 2: On appropriate sites, manage forest and woodland communities to provide healthy and diverse habitats for forest/woodland-dependent wildlife.

Strategy 1: Conduct inventories on forest/woodland compartments according to the inventory schedule to develop prescriptions for ecological and silvicultural treatments. (Forestry)

Strategy 2: Monitor for the presence of invasive forest pests and plants. (Wildlife & Forestry)

Strategy 3: Utilize a variety of sustainable forest management techniques to promote healthy forest and woodland communities including, but not limited to, timber harvesting, timber stand improvement, firewood cutting, salvage cuttings, tree planting, seeding and prescribed burning. (Wildlife & Forestry)

Strategy 4: Maintain a diversity of tree age classes that will provide both a diversity of wildlife habitat as well as resiliency to living and non-living (fire, weather, and climate) damaging agents. (Forestry)

Strategy 5: Utilize Best Management Practices during harvest as described in the Department's manuals: *Missouri Watershed Protection Practice* manual (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 3: Re-establish and maintain bottomland hardwood habitat.

Strategy 1: Identify locations of marginal bottomland cropland to convert to forest. (Wildlife, Forestry)

Strategy 2: Establish mast-producing tree species that will benefit wildlife. Use tree planting or direct seeding. (Wildlife)

Management Objective 4: Provide food and cover for wildlife, and maintain early successional vegetation for a variety of wildlife species.

Strategy 1: Use permittee farmers in conjunction with Department staff to plant crops/food plots annually. Rotate crops to improve soil health. Fallow a portion of these acres each year to increase early successional habitat acres for wildlife. Ensure farming practices are conducted in accordance with the Department's Agricultural Land Use Policy and Procedures Manual. (Wildlife)

Strategy 2: Utilize appropriate crop fields for dove management. (Wildlife)

Strategy 3: Manage old fields and native plantings for diversity. Use mechanical, chemical, and prescribed fire methods to set back succession and control invasive species. (Wildlife)

Strategy 4: Continue to use grazing as a management tool to provide better plant structure which is favorable to a variety of wildlife, and look for opportunities to expand grazing areas. (Wildlife)

VI. Aquatic Resource Management Considerations:

Challenges and Opportunities:

- 1) The area encompasses approximately 5 miles (both banks) of the South Grand River. In this area, the South Grand River has been extensively channelized and levied. Over the past 10 years, there has been severe bank erosion within the conservation area. The stream resources on the area are degraded due to past land use practices and large-scale channelization. This is evident by the incised stream channels and numerous past head-cuts in smaller drainages leading to the mainstream channels. These factors limit the amount of quality river habitat within the area.
- 2) Several grazing units on the area contain intermittent tributaries to the South Grand River. Grazing must be monitored and best management practices implemented to avoid negatively impacting aquatic habitat and life.
- 3) There are 22 ponds located on Settle's Ford CA. Six of the ponds will be actively managed for fishing. The others will be managed for wildlife watering and fishless amphibian ponds.
- 4) There are bank- fishing opportunities in the South Grand River and the Old South Grand River Channel.

Management Objective 1: Protect and enhance stream corridors to improve water quality, stabilize stream banks, provide flood abatement, and increase habitat diversity.

Strategy 1: Evaluate buffer widths and conditions of stream corridors to provide recommendations for management activities. Additional evaluations should be repeated every five years to account for changes in land management and area boundaries. (Fisheries)

Strategy 2: Maintain and/or establish appropriately wide vegetated riparian corridors, as outlined in *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009). Use a diversity of suitable tree and shrub species will be planted where buffers need to be established or increased. Herbaceous vegetation is suitable for buffers along streams with channels that are not deeply incised. (Wildlife, Fisheries)

Strategy 3: Install and maintain riparian corridor fencing within grazing tracts. Conduct annual pre- and post-grazing site visits to assess stream, riparian corridor, and stream crossing conditions. Make adjustments to fencing and rock armoring, as needed. (Wildlife, Fisheries)

Management Objective 2: Manage fishing ponds for self-sustaining largemouth bass, bluegill, and red-ear sunfish populations.

Strategy 1: Sample the six fishing ponds, as needed. (Fisheries)

Strategy 2: Stock fishing ponds with supplemental channel catfish as needed. (Fisheries)

Strategy 3: Manage aquatic vegetation at levels beneficial to fish populations and in a manner that will permit shoreline fishing. (Wildlife, Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Provide opportunities for hunting, fishing, trapping, and wildlife viewing near a major metropolitan area through the management of diverse habitat and wildlife.
- 2) Provide school and civic groups with opportunities to fish, hunt, and camp through the special use permitting guidelines.
- 3) Continue to build relationships with neighboring landowners.

Management Objective 1: Maintain a diversity of terrestrial habitats to provide public users with quality hunting, trapping, wildlife viewing opportunities, and other compatible recreational activities.

Strategy 1: Maintain parking lots, trails, and roads to aid area users in accessing food plot plantings and natural communities to provide recreational opportunities throughout the area. (Wildlife)

Strategy 2: Conduct annual management activities that will provide habitat for a diversity of species. (Wildlife)

Strategy 3: Allow trapping on area, as appropriate, through the special use permitting guidelines. (Wildlife)

Strategy 4: Manage dove fields at current levels. (Wildlife)

Management Objective 2: Manage the area's aquatic resources to provide access and opportunity to quality fishing experiences.

Strategy 1: Maintain or improve public access to the South Grand River and area ponds, as is feasible. (Wildlife)

Strategy 2: Conduct a periodic review of the area ponds for the suitability of stocking to provide additional fishing opportunities as resources allow. (Fisheries)

Strategy 3: Enforce statewide fishing regulations at the area. (Protection)

Management Objective 3: Improve educational and interpretive opportunities.

Strategy 1: Provide up-to-date maps and information for the public. (Wildlife)

Strategy 2: Communicate to teachers and other youth leaders the possibilities for educational programs on the areas. (Wildlife)

Strategy 3: Maintain the area's facilities for non-governmental organization meetings and hunter education classes. (Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Continue to manage and maintain the area for public use and enjoyment.
- 2) Consider acquisition of land, when available.

Management Objective 1: Maintain area infrastructure at current levels.

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

Management Objective 2: Maintain good relationships with neighboring landowners.

Strategy 1: Work with neighbors to minimize boundary or trespass issues. (Wildlife, Protection)

Strategy 2: Assist with wildlife damage issues and offer expertise on land management. (Wildlife, Private Land Services)

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:

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Terrestrial Resource Management Considerations										
<i>Objective 2</i>										
Strategy 1		X								
Aquatic Resource Management Considerations										
<i>Objective 1</i>										
Strategy 1					X					X

APPENDICES

Area Background:

Settle's Ford Conservation Area (CA) is a 6,766-acre area that is located on both sides of the South Grand River in southeast Cass and northeast Bates counties. The area was purchased from willing sellers, primarily using U. S. Army Corps of Engineers funds, provided as compensation for the Trimble Wildlife Area, which was inundated by the Smithville Reservoir. Acquisition began in 1985 and continued for the next 10 years. Because the Trimble Wildlife Area had been a wetland area, the major emphasis on Settle's Ford is wetland management.

Settle's Ford CA consists of approximately 3,700 acres of uplands which is dominated by old fields. The remaining 3,000 acres consists of bottomlands which are located in the floodplain of the South Grand River Basin. Numerous privately owned wetlands and wetland reserve program tracts are located within a close proximity to the area and are managed intensively for waterfowl. The majority of the privately owned land within the floodplain adjacent to Settle's Ford is farmed in row crops.

Southern Cass and Bates counties were hotbeds of border violence before and during the Civil War. Eventually, all residents were evacuated by federal troops under General Ewing's infamous Order No. 11. The area received its name from the Settles family, who, shortly after resettlement, operated a grist mill and ford near the center of the current conservation area. The mill was destroyed at least twice by floodwaters and no evidence of it remains on the ground.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Old Field	1,972		29
Bottomland Timber	1,362		20
Crop Fields	1,200		18
Wetlands	873		13
Upland Timber	780		12
Grassland	500		7
Scrub/Shrub	50		1
Roads/Structures	15		<1
Ponds	22		<1
Total	6,766		100
South Grand River Frontage		5	

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. (n.d.) *Agricultural land use*. Jefferson City, MO: Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Aerial and Easement Map

Figure 3: Topographic Map

Figure 4: Grazing Map

Figure 5: Vegetation Map

Figure 2: Aerial and Easement Map

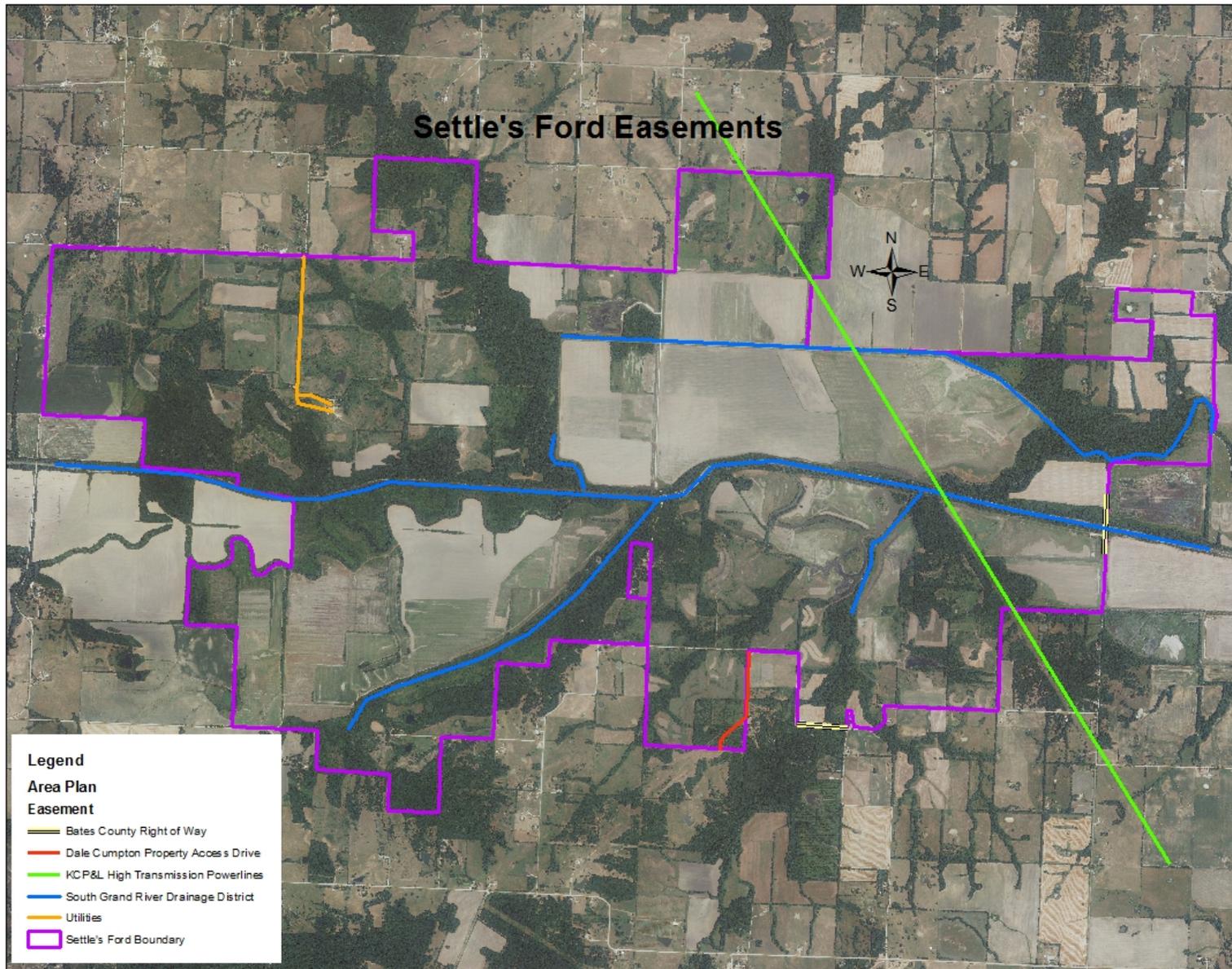


Figure 3: Topographic Map

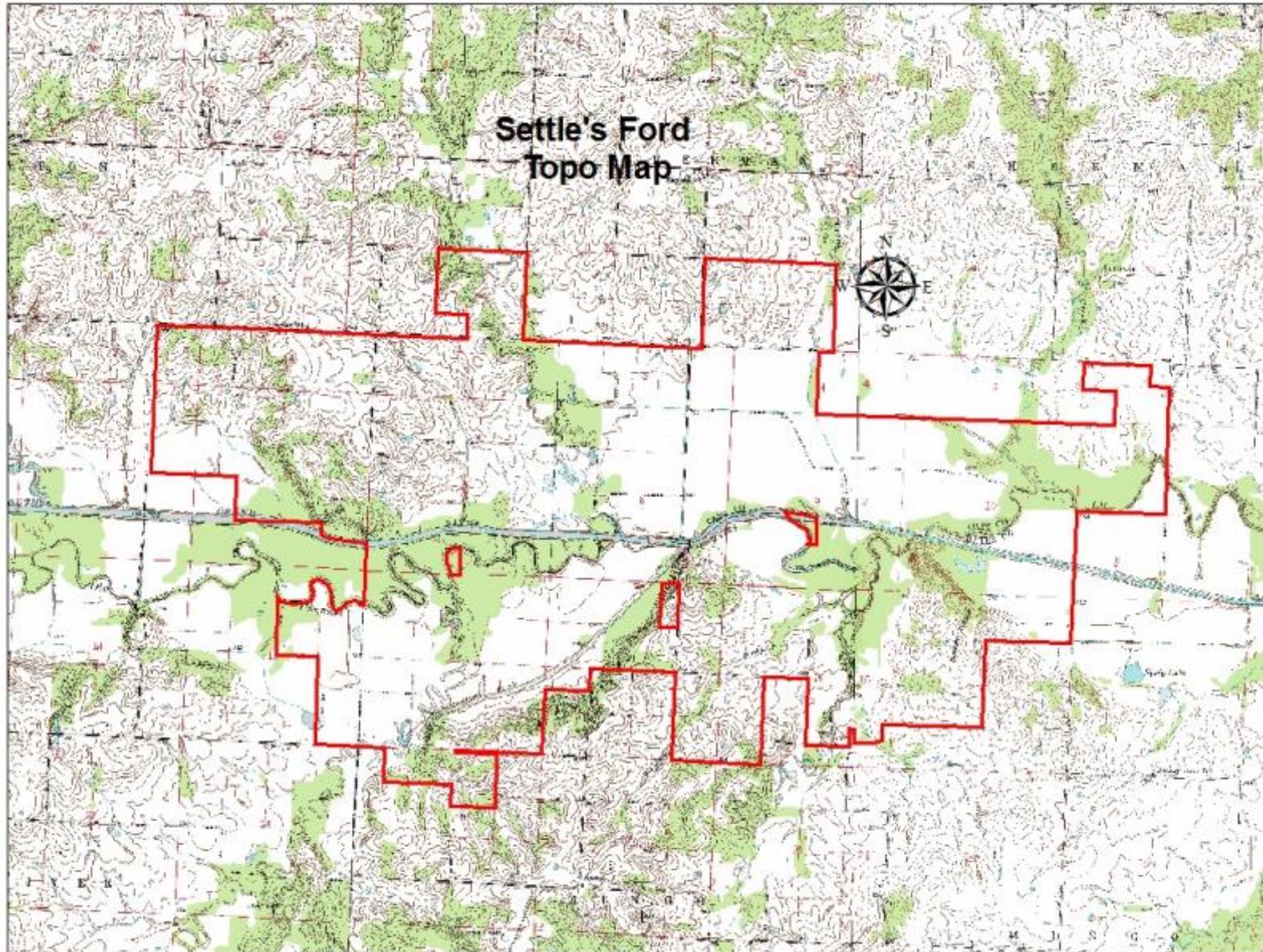


Figure 4: Grazing Map

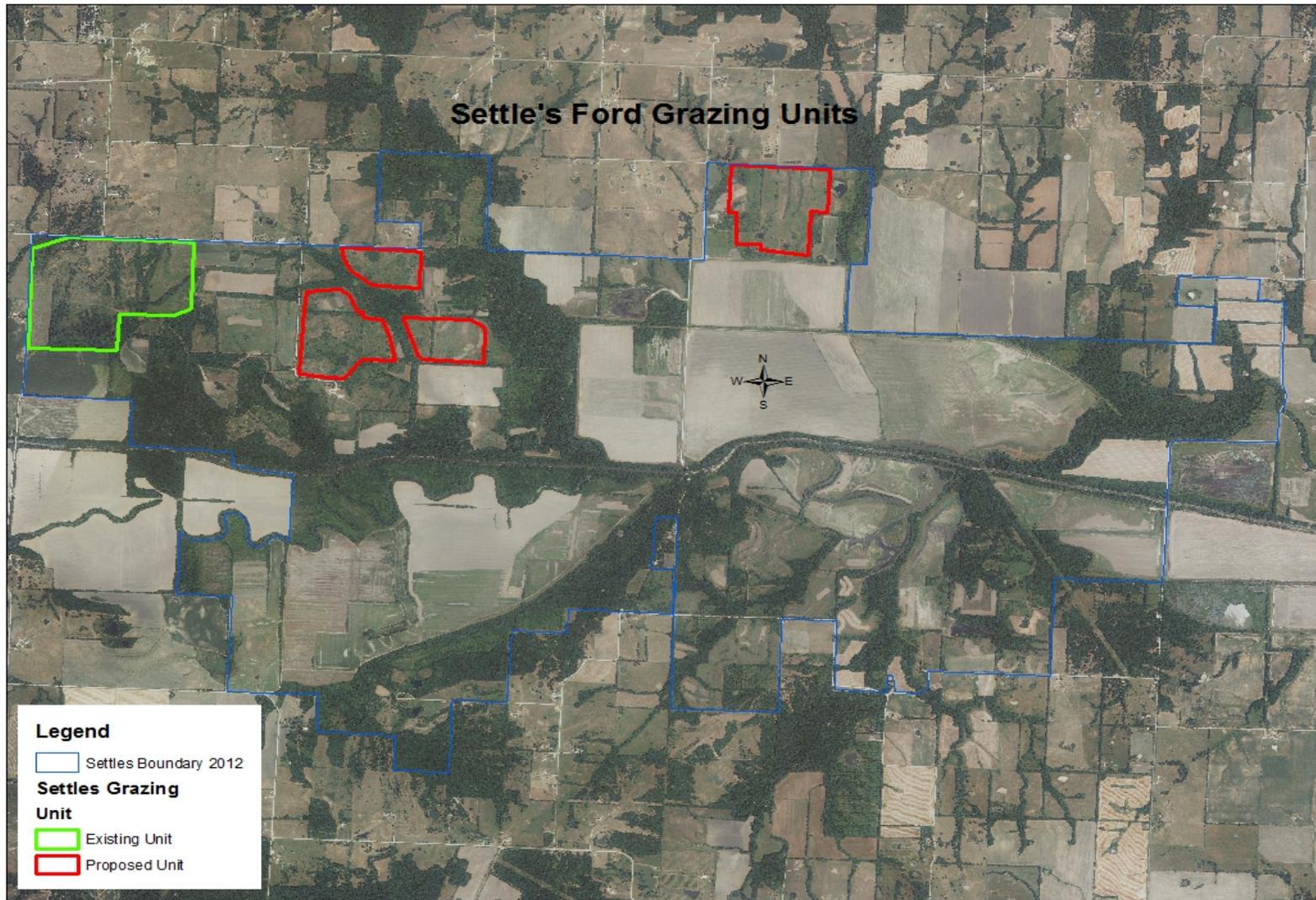
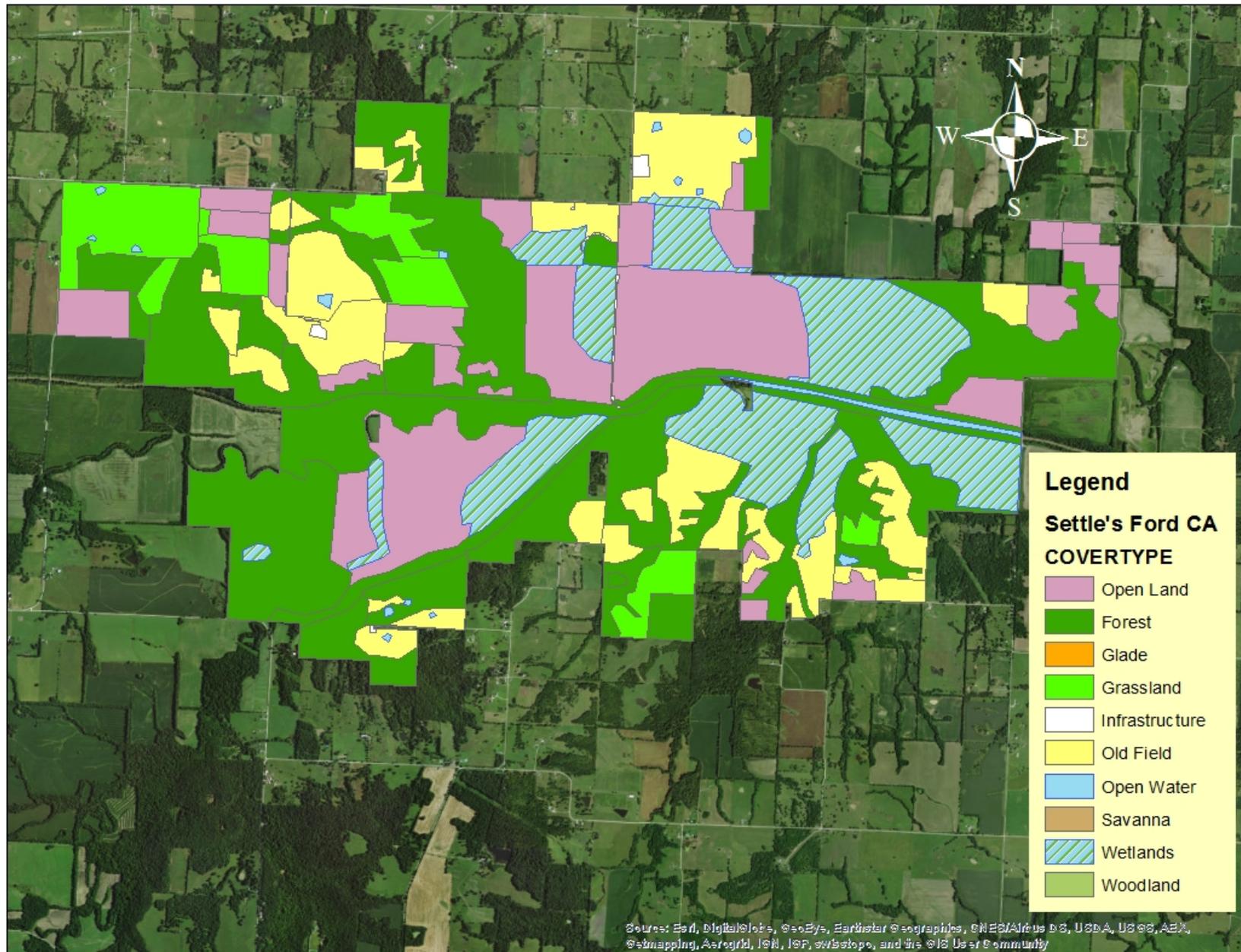


Figure 5: Vegetation Map



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