

Prairie Home Conservation Area

Ten Year Area Management Plan

FY 2014-2023




Wildlife Division Chief

7/9/14
Date

Prairie Home Conservation Area Management Plan Approval Page

PLANNING TEAM

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RCT Chair

6/25/2014
Signature Date

WILDLIFE DIVISION

Unit Chief

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Signature Date

OVERVIEW

- **Official Area Name:** Prairie Home Conservation Area, #6404
- **Year of Initial Acquisition:** 1963. The original purchase of 212 acres from Arthur and Lucille Bodamer and Leo and Marie Meyer was made in 1963. This tract was located at the northwest corner of the area. Subsequent purchases occurred through 1979.
- **Acreage:** 1,461 Acres
- **County:** Cooper and Moniteau Counties. The area lies within Cooper occupying sections 31, 32, 33 in T47N and R15W, sections 4, 5, 6, and 8 in T46N and R15W, and in Moniteau County - sections 4 and 9 in T46N and R15 W
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statement of Primary Purpose:**

A. Strategic Direction

Prairie Home was purchased to provide upland, public land in Cooper and Moniteau Counties. It provides the public with pond fishing, multi-use trails, hiking trails, hunting opportunities, and other activities.

- Manage open land habitats for early successional wildlife species.
- Restore woodland, glade, and prairie remnant natural communities.
- Maintain limited cropping and haying.
- Promote public use and recreation. Invite recreation and enjoyment of existing hiking, multi-use trails, fishing lakes, and encourage broader use of mixed open land and woodland habitats the area has to offer.

B. Desired Future Condition

The desired future condition of Prairie Home Conservation Area (CA) is a landscape composed of woodland, glade, and remnant prairie natural communities with early successional grasslands, old fields and scattered crop fields.

Federal Aid Statement

This area 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.

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- A. **Priority Areas:** None
- B. **Natural Area:** There are no designated natural areas on Prairie Home CA.
- C. **Other:** The area lies within a watershed designated important for Topeka Shiners.

II. Important Natural Features and Resources

- A. **Species of Conservation Concern:** None known.
- B. **Caves:** None
- C. **Springs:** None
- D. **Other:** Two limestone glades and a dry limestone/dolomite woodland are present on the area. Limestone glades are considered S2, “Imperiled” in Missouri. Dry limestone/dolomite woodlands are listed as S3, “Vulnerable.” Main threats to both limestone glades and dry limestone/dolomite woodlands are encroachment from red cedar, and invasive species. Restoration management includes removal of invading woody vegetation and prescribed fire.

III. Existing Infrastructure

- 3 pond dams
- 9 gravel parking lots
- 1 handicapped, concrete parking area at Johnson Lake
- 1 handicapped, floating dock and walkway at Johnson Lake
- 1 privy at Johnson Lake
- 4 Designated camp sites
- 7 mile hiking and 5.5 mile multi-use trail open to equestrian use; segments of trails occur on county roads

IV. Area Restrictions or Limitations

- A. **Deed Restrictions:** None
- B. **Federal Interest:** Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. 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:** Ameren UE transmission line passes north/south on the east side of the area (~7730 ft). Co-Mo Electric lines cross the area at two locations (~4050 ft total). A buried Pipeline passes through the northwest corner of the area (~1350ft) (Figures 2).
- D. **Cultural Resources:** Yes, records kept with MDC Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the MDC Resource Policy Manual.
- E. **Hazards and Hazardous wastes:** None observed.
- F. **Endangered Species:** None observed. Schaaf Creek is a tributary within the Moniteau Creek Watershed where Topeka Shiner monitoring occurs. No monitoring sites are present on the area.

G. Boundary Issues: None.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities

- 1) Manage open lands to reduce invasive plants and maintain early and mid-succession habitat conditions.
- 2) Manage to reduce undesirable cedar and advanced woody invasion in old field and woody habitats.
- 3) Promote restoration of prairie remnant, glade, savanna and woodland communities.

Management Objective 1: Provide annual disturbance to maintain early to mid-succession old field habitats; emphasize reduction of fescue, invasive plants, and woody invasion.

Strategy 1: Monitor old fields for undesirable invasive species and take appropriate management action as needed.

Strategy 2: Remove undesirable woody species using district and region labor sources, or contracted services.

Strategy 3: Farm or otherwise disturb and control woody and invasive plants, setback succession, create bare ground, and prep fields to establish forbs and wildlife friendly grasses.

Management Objective 2: Reduce eastern red cedar on 130 acres of glades, woodlands, and open areas.

Strategy 1: Utilize MDC staff and contracting to reduce cedar and encourage natural community plant restoration. If necessary consider over-seeding native forbs to supplement natural community plant response.

Management Objective 3: Manage cropland annually for wildlife benefit.

Strategy 1: Manage cropland acres through permittee farmers and area staff and manage idle acres and legumes to establish food and cover for wildlife.

Strategy 2: Expand dove management and small game, turkey and deer hunting opportunities with wheat, sunflowers, millet, and green browse.

Strategy 3: Convert erosion prone or less productive crop fields to idle edges or wildlife friendly grasses.

Management Objective 4: Restore and manage 50 acres of grassland and prairie remnant habitats.

Strategy 1: Manage grassland habitats for wildlife habitat.

Strategy 2: Renovate or reclaim warm season grass plantings to control fescue invasion, and to reduce woody invasion. Maintain existing productive stands of warm season grasses.

Strategy 3: Convert 10% of cropfields to forbs and wildlife friendly grasses.

Management Objective 5: Manage the 725 acres of glade, woodlands and forests, and monitor overall forest health.

Strategy 1: Apply stand prescriptions recommended from the most recent inventory (to be completed in 2015) by harvesting and Timber Stand Improvement (TSI) as prescribed.

Strategy 2: Remain up-to-date on the inventory schedule to reassess forest and woodland conditions.

Strategy 3: Continually monitor the overall health of the forest to address any insect, disease or abiotic factors that may arise.

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Manage fish populations in Johnson, Cattail, and Church lakes.
- 2) Maintain other area ponds for wildlife watering and semi-aquatic wildlife use.
- 3) Nuisance aquatic plants in ponds designated for fishing
- 4) Protect water quality in ponds and streams

Management Objective 1: Manage fish populations and provide public fishing opportunities in ponds large enough to support fishing.

Strategy 1: Use periodic (~ every 3 years) electrofishing surveys to assess the fish population in Johnson, Cattail, and Church lakes.

Strategy 2: Maintain fish habitat structures in fishing ponds to enhance the fishery and fishing.

Strategy 3: Maintain public access to fishing ponds through terrestrial vegetation management around ponds.

Strategy 4: Provide annual maintenance stocking of channel catfish in Johnson Lake and periodic stocking in Cattail and Church lakes to maintain the channel catfish populations.

Management Objective 2: Treat nuisance aquatic plants in fishing ponds as needed.

Strategy 1: Apply herbicide or use other techniques during growing season.

Management Objective 4: Evaluate riparian corridors on entire area.

Strategy 1: Assess riparian corridor widths and develop a plan to address deficiencies.

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Maintain hiking and multiple-use trails.
- 2) Promote multiple-use opportunities.
- 3) Maintain disabled accessible facilities.
- 4) Apply proper signage and work with Protection Division to prevent unauthorized off-road vehicle and equestrian use.

Management Objective 1: Provide hiking and multiple-use trails for recreation and access to area users.

Strategy 1: Maintain trail conditions through the year, and schedule periodic work days to clear downed limbs, repair erosion or trail hazards, and inspect signage. Invite scouts or other organizations to adopt-a-trail, or be involved with trail maintenance and signing.

Strategy 2: Monitor trail use and document multi-use, off trail routes, or conflicts with area use. Consider options when feasible to minimize and resolve potential conflicts with timing and seasonal considerations, and/or by special use permit.

Management Objective 2: Provide area users compatible and inviting multiple use opportunities for recreation, education, and information.

Strategy 1: Maintain accurate area information and regulations through the Atlas Database, area brochures, posted information, and staff contacts with area users.

Strategy 2: Promote compatible and safe opportunities for hunting, fishing, birding, hiking, horseback riding, camping, and nature photography.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Terrestrial Resources Management										
Objective 1	Managed Oldfield Succession, Woody Invasion, and Invasive Plants									
Saw/Clip/Bullhog		X		X		X		X		X
Rx Burn	X		X		X		X		X	
Cedar sale		X	X			X	X			
Objective 2	Reduce cedar abundance in Oldfields, Glades, and Woodlands									
Mechanical		X		X		X		X		X
RxBurn	X	X		X	X		X	X		X
Objective 3	Manage Cropland through farming									
Permittee	X		X	X	X		X	X	X	
Objective 4	Manage Grassland through haying, and reclaiming woody invaded grasslands									
Permittee		X		X		X		X		X
Staff	X		X		X		X		X	
Objective 5	Manage Glades, Woodlands, and Forest									
Inventory	X									
TSI / Harvest		X	X	X						
RxBurn		X		X		X		X		X
Aquatic Resource Management										
Objective 1	Manage fish populations for public fishing									
Shock		X			X			X		
Structure	as needed									
Access	as needed									
Objective 2	Treat nuisance aquatic plants									
Herbicide	as needed									
Public Use Management Considerations										
Objective 2	Provide area users multiple use opportunities									
Promote		X			X			X		

APPENDICES

Area Background:

Prairie Home Conservation Area is located about 4 miles southwest of the town of Prairie Home off Cooper County Highway W. The first 212 acre parcel of land was acquired from the Bodamer and Meyer families in 1963 with funding from the Pittman-Robertson Federal Excise Tax on sporting arms and ammunition. Eight additional acquisitions occurred through 1979 resulting in current area size of 1,461 acres.

Early acquisition aerial photos show open areas as terraced farm fields and pasture. Early area management focused was on upland small game management. Early manager notes describe options for grazing bluegrass and clover, haying clover and lespedeza, row cropping better soiled sites, needs for brush control, planting trailing bean foodplots, and establishing cover plantings.

Mid-1960s aerial photos depict roughly 525 acres as timber and 936 acres in open lands. 1981 management alternatives identified warm season grass plantings, cool season grass plantings, shrub plantings, cropping, and areas to succeed to timber (Figure 10). The timber inventory used in this 2013 area plan lists 82 stands with 741 acres. The increase in timber acres is primarily advanced succession resulting from abandoning pasture or cropland.

Management to improve quality habitat for wildlife will include cropping and haying by local farmers; foodplot, grass and legume plantings by area staff; invasive plant control; prescribed burning; edge feathering; cedar removal; and periodic timber harvest. Restoration of glade, woodland, and prairie remnant natural communities will benefit from cedar removal, prescribed burning and timber stand improvement.

Trails – The hiking trail named Buckhorn Trail was built as a Boy Scout hiking trail in 1973 and 1974. The 8 mile loop trail was designed to connect conservation area parking areas. A horse trail approximately 5 miles in length was later added. Scout Troop 120 has voluntarily conducted maintenance hikes over the years. In 2007 an Eagle Scout Project was completed to GPS map the hiking and horse trails. The area map depicts hiking and multiple-use trails based on the GPS data. Hiking and multiple use trails are combined on some trail segments, and portions of the trail system includes county roads.

Donation - Allen and Wilda Johnson donated funds earmarked for resource management on the Prairie Home Area. In 1993 three lakes were constructed with their donation. The lakes range in size from three to 11 acres and are named Johnson Lake, Cattail Lake and Church Lake. The lakes add important recreational and resource value to the area. Johnson Lake has disability accessible parking, a privy, and a floating fishing dock.

Current Land and Water Types

Land/Water Type	Acres	Feet	% of Area
Woodland	635		43
Old Field	520		36
Cropland	116		8
Forest	91		6
Grassland/ Prairie Remnant	41		3
Glade	35		2
Lakes and Ponds	23		2
Total	1461		100
Stream Frontage (Schaaf Creek)		12,910	

Public Input Summary:

The draft Prairie Home Conservation Area Management Plan was available for a public comment period March 1 – 31, 2014. The Missouri Department of Conservation received comments from three respondents (Appendix A). The Prairie Home 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.

MDC responses to themes and issues identified through Prairie Home Conservation Area public comment period**Suggests converting cropland to native plants.**

This suggestion is addressed in Terrestrial Management Objective 3, Strategy 3, and Terrestrial Management Objective 4, Strategy 3 that identify cropland conversion to idle edges, forbs, or wildlife friendly grasses.

Suggests improvements to dove management.

This suggestion is addressed in Terrestrial Management Objective 3, Strategy 2 with plans to expand dove management opportunities on the area. Small crop field size and marginal soil productivity limit local farming interest on the area. Farm related management will occur to the extent possible through MDC staff, permittee farming, and contracted farm services.

Suggests developing a 20-acre wetland complex and placing wood duck nest boxes around area.

A Wetland and Floodplain Survey completed in September 2013 identified topographic and terrain features along Schaaf Creek and tributary streams. Wetland development on the area is not compatible with narrow floodplain widths, relatively steep stream gradient, rocky soils, and flashy nature of flood events within the watershed on the area. Wetland viewing and hunting opportunity is available on 23 acres of existing lakes and ponds. Natural cavities are probably adequate for wood duck nesting , but wood duck nesting boxes could be added to increase nesting opportunity.

Appreciates area management plan.

Thank you on behalf of the planning team.

Maps:

Figure 1: Area Map

Figure 2: Infrastructure

Figure 3: Habitat

Figure 4: Timber Stand Inventory

Figure 5: Timber Management Challenges and Opportunities

Figure 6: Management Units

Figure 7: Burn Units

Figure 8: 1981 Management History

Additional Appendices:

Appendix A: Draft Prairie Home Conservation Area Management Plan Public Comments

Figure 1: Area Map

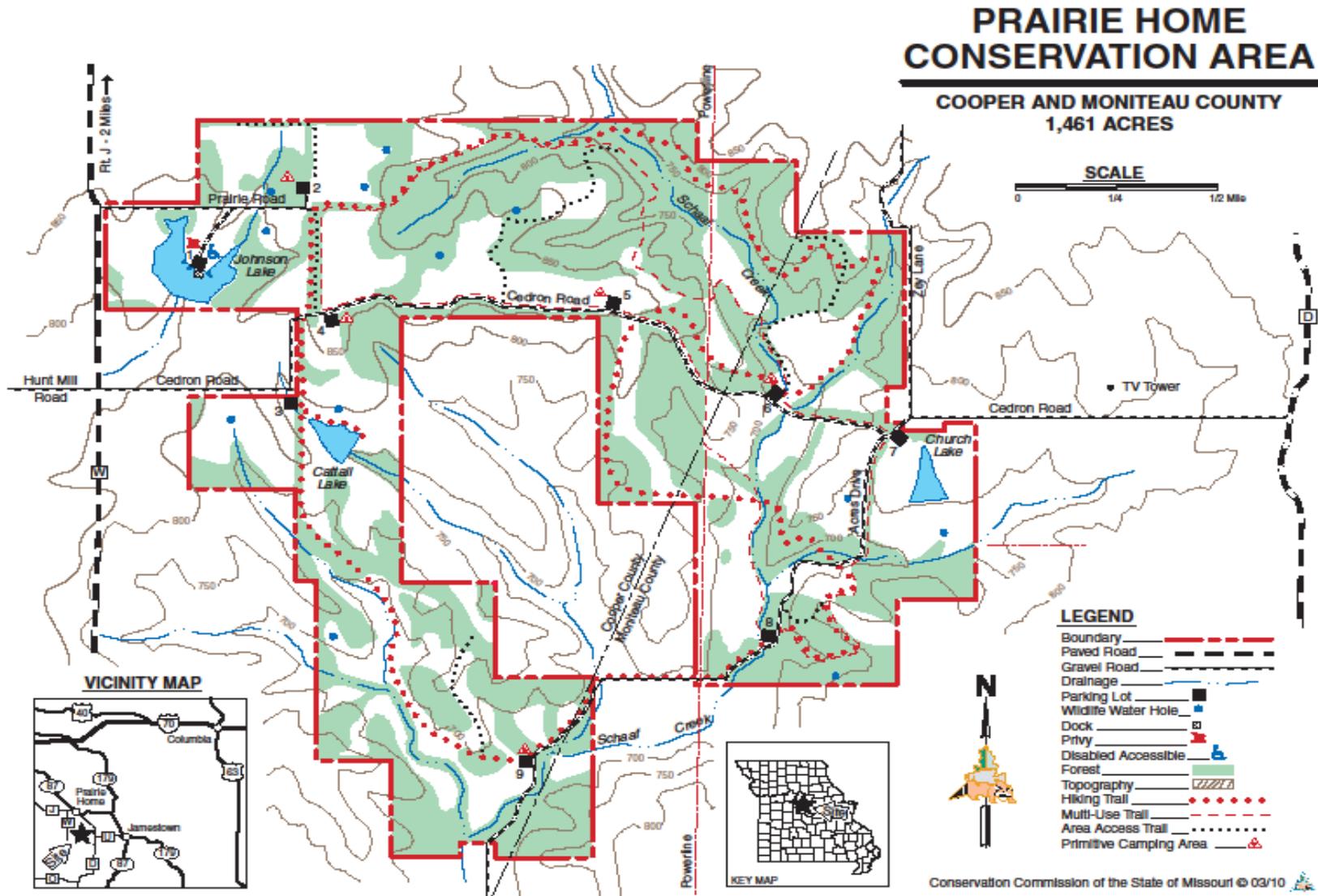


Figure 2: Infrastructure

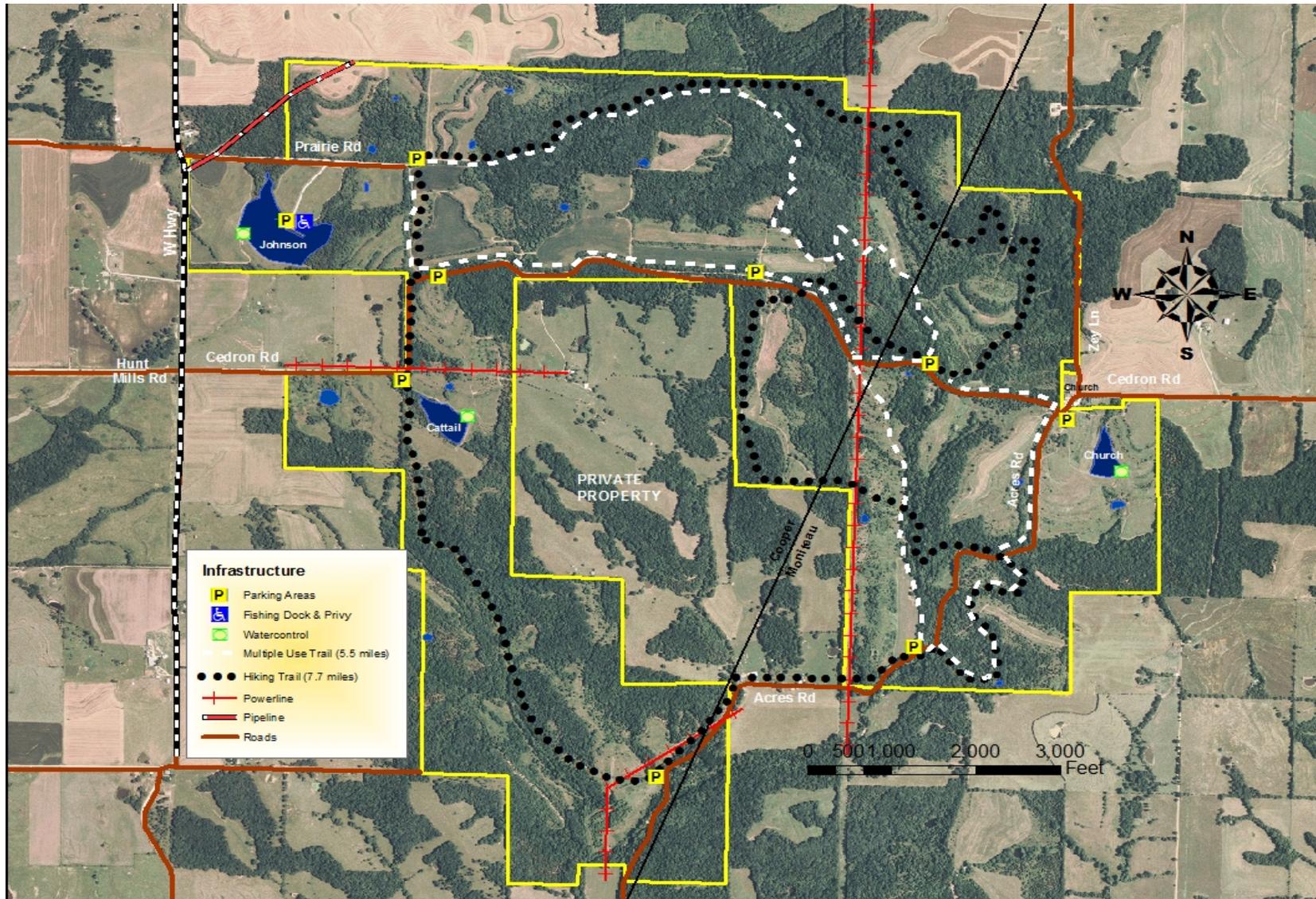


Figure 3: Habitat

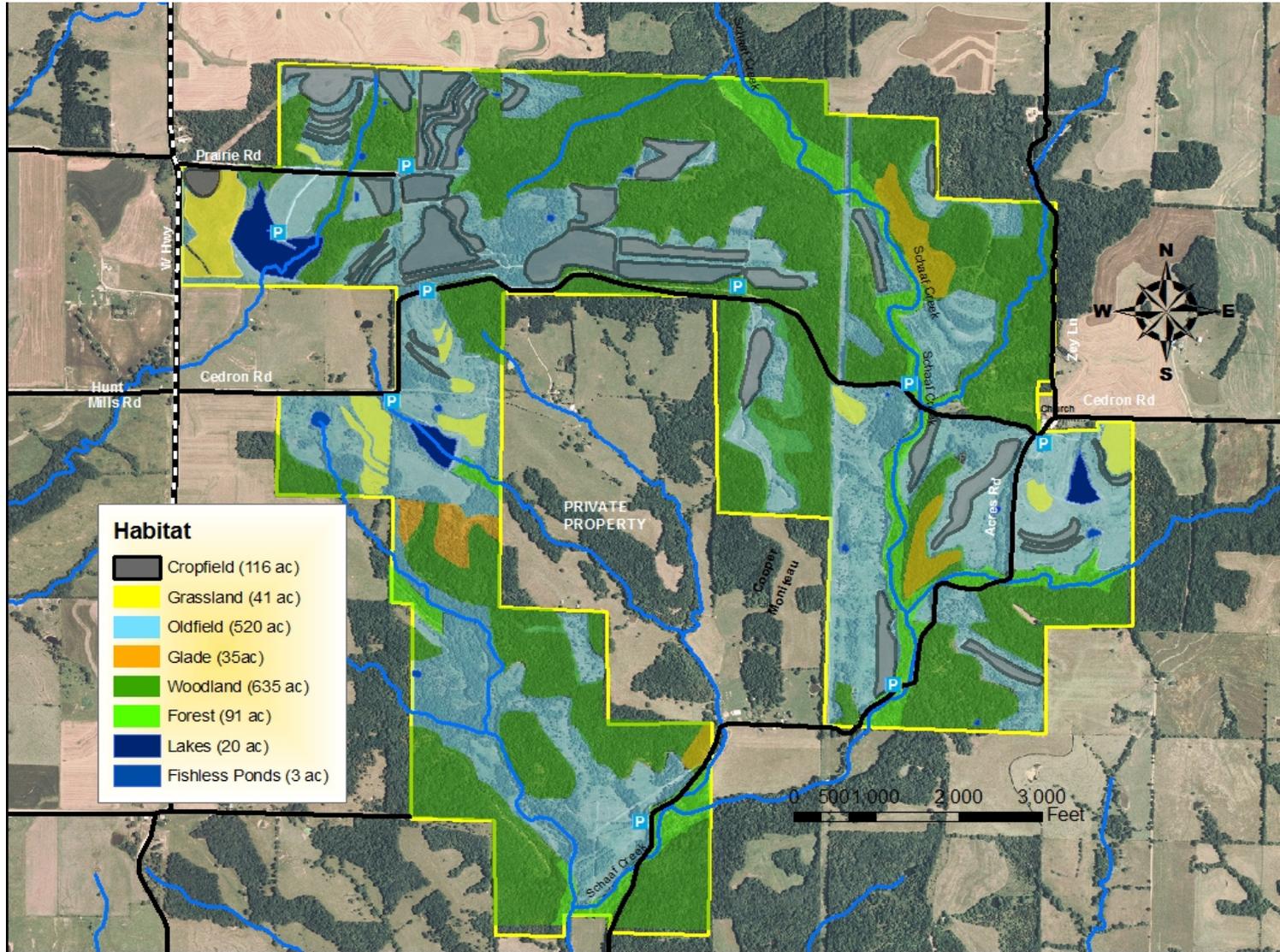


Figure 4: Timber Inventory Stands

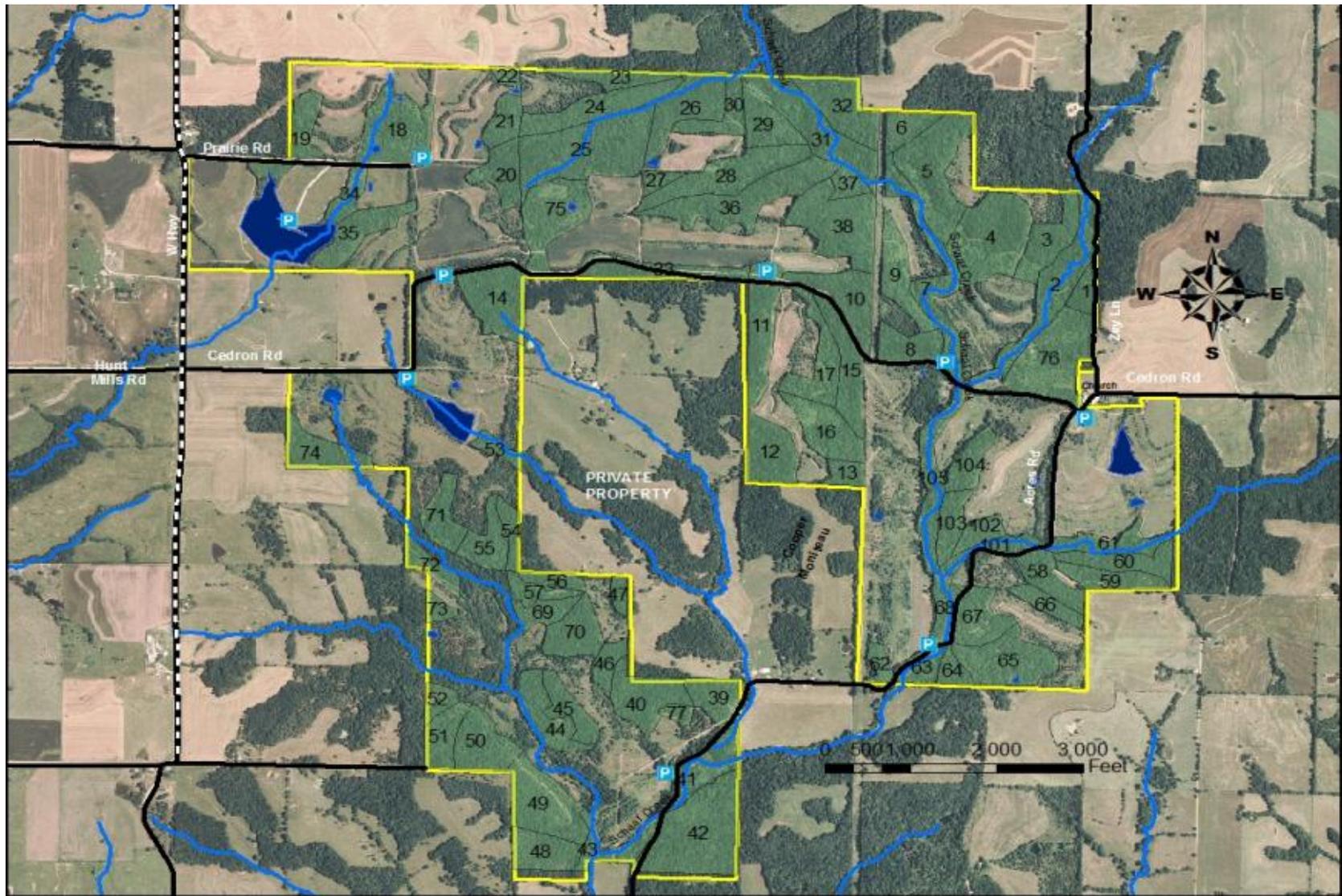


Figure 5: Timber Management Challenges and Opportunities

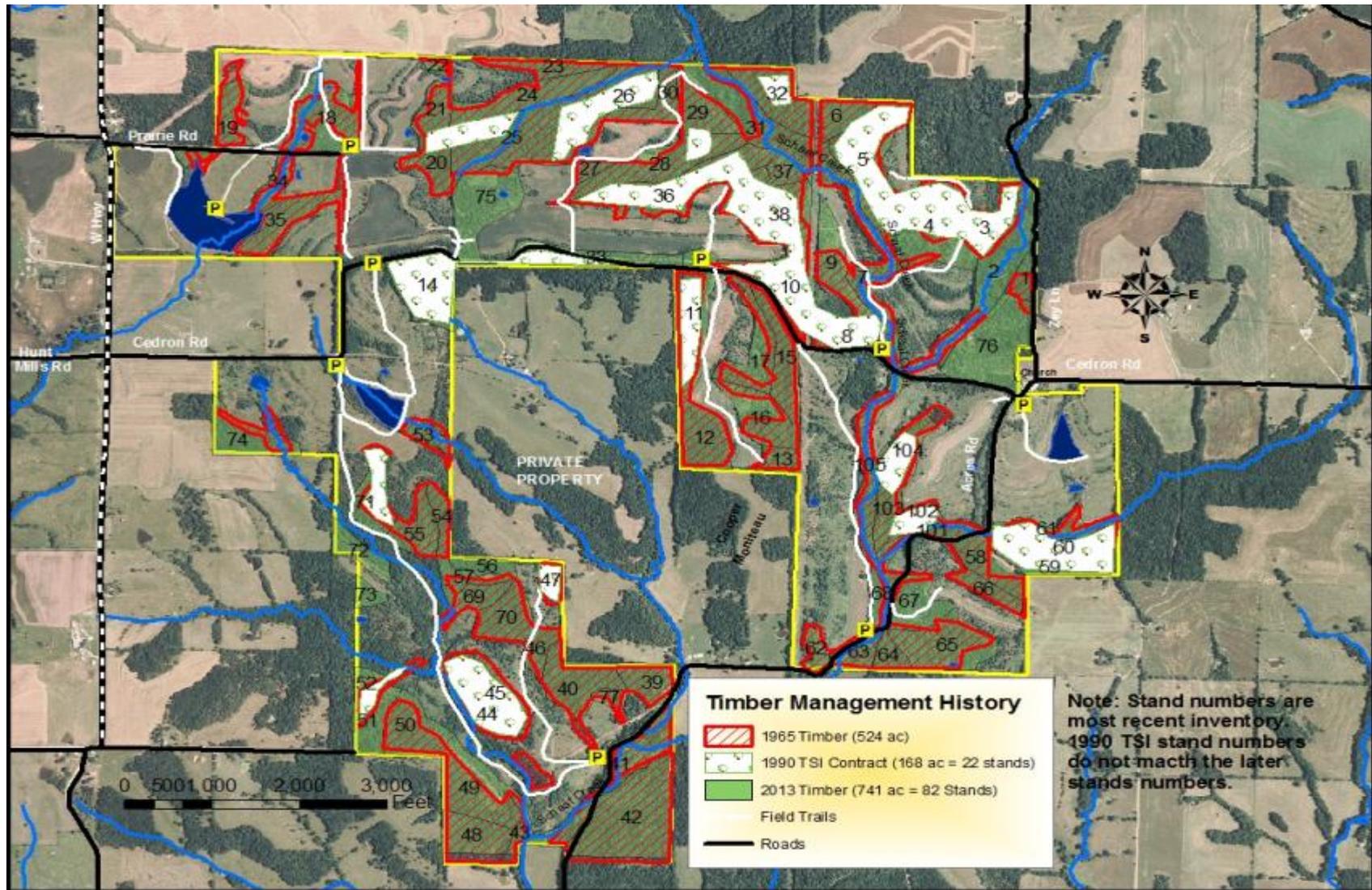


Figure 6: Management Units

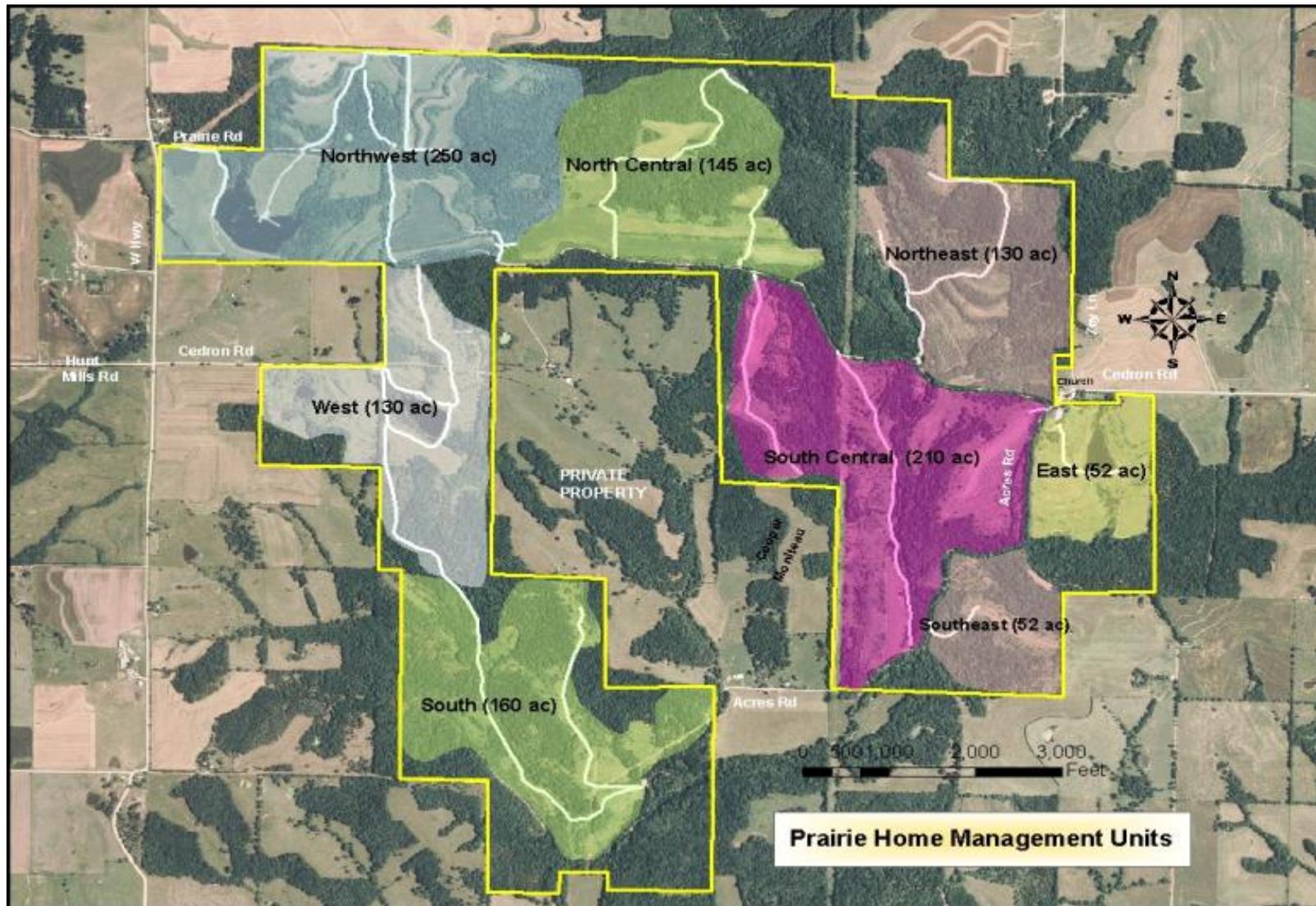


Figure 7: Burn Units

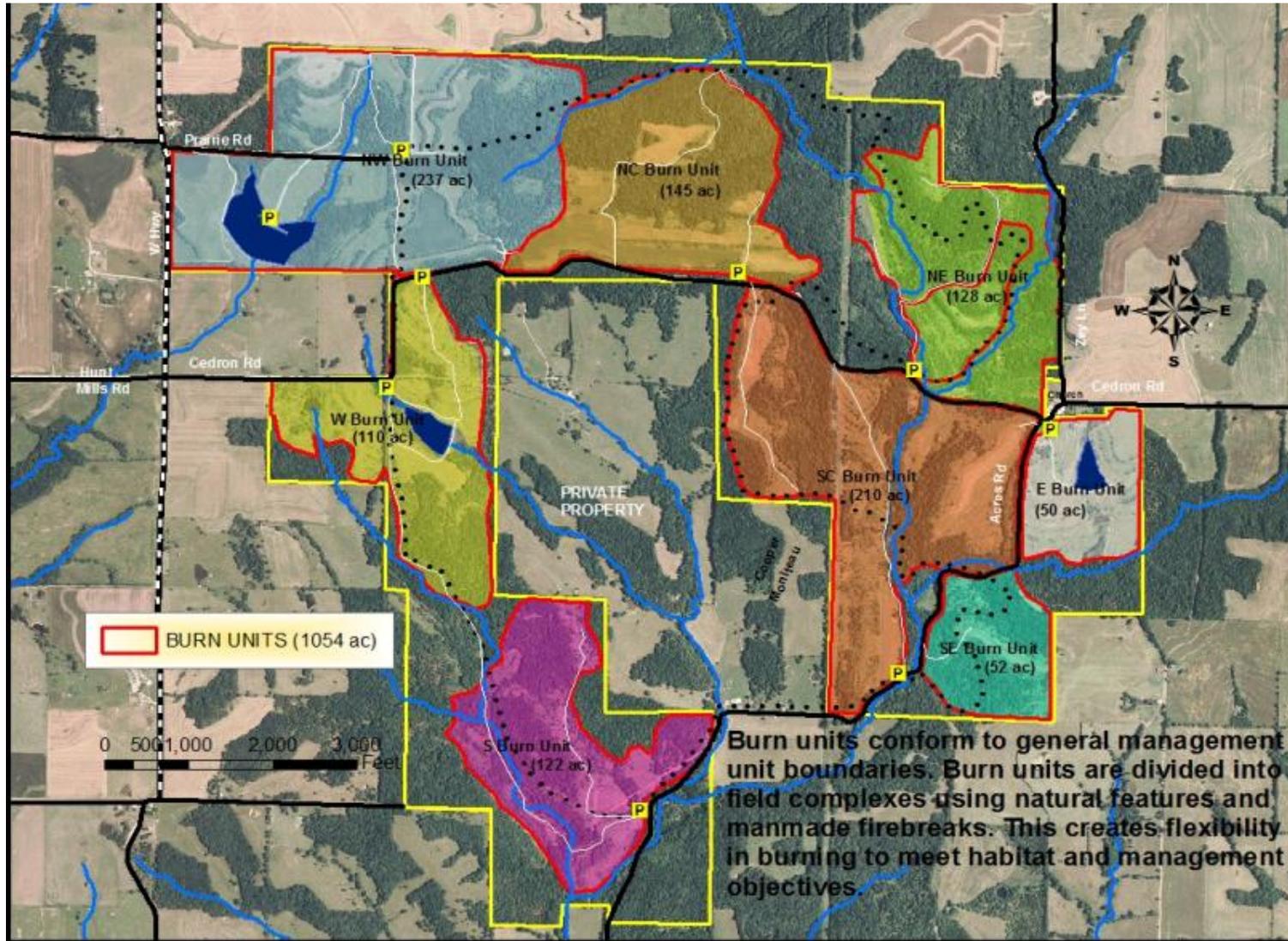
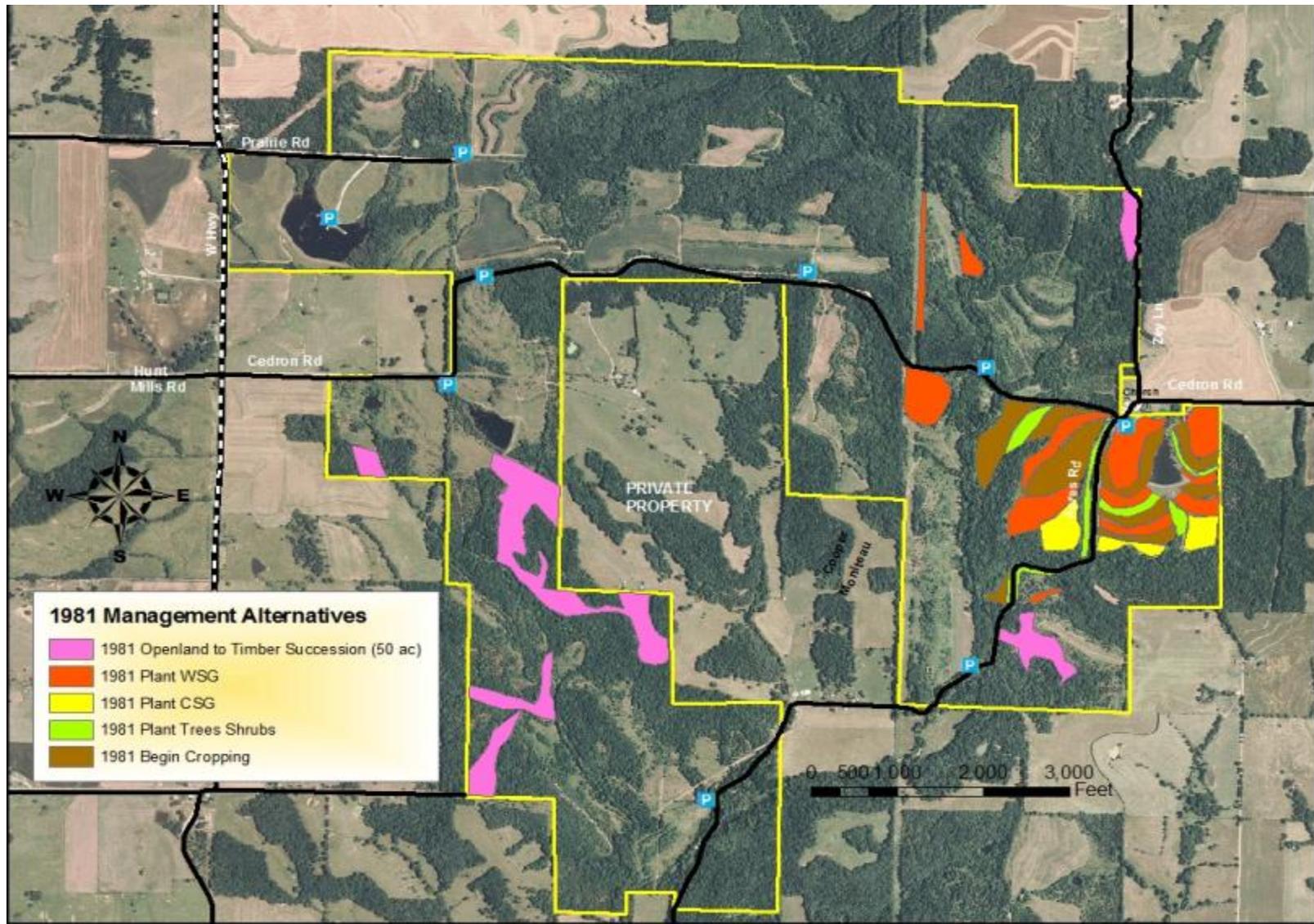


Figure 8: 1981 Management History



Appendix A. Draft Prairie Home Conservation Area Management Plan Public Comments

Received during public comment period (March 1 – 31, 2014)

Strongly urge having a permittee responsible for timely planting of at least 40 acres of sunflowers. If planting is not timely the permittee should forfeit a portion of their crop to use for doves.

These should be planted in no more than 3 locations with a minimum size of 10 acres and preferably larger. One of these should be easily accessible for hunters but at least one should be farther from parking to encourage distribution of hunting. Ideally, these should be open only one half day or on alternate days to extend the usage by doves. Fields should be mowed or disced at least 10 days prior to the season.

also the area should be surveyed for possible sites for a wetland complex of approx 20 acres for shorebirds, etc. Wood duck boxes should be placed in appropriate locations around the area.

This appears a very comprehensive and ambitious long range plan. For this, I thank the MDC. As a pre-Design for Conservation acquisition, this precious property has continue to grow and flourish under sound management plans.

The implementation of the proposed plan, will only add to a brighter shine of this wildlife gem.

MDC makes us proud !

Convert all cropland acreage to native plants. Preservation should have priority over any management consideration and decisions especially within conservation areas .