

# Brush Creek Conservation Area

## Ten-Year Area Management Plan FY 2015-2024



Lisa B. Allen  
Forestry Division Chief

8-5-15  
Date

## Brush Creek Conservation Area Management Plan Approval Page

### PLANNING TEAM

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### SOUTHWEST REGION

RCT Chair

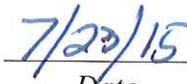
  
Signature

  
Date

### FORESTRY DIVISION

Forest Management Chief

  
Signature

  
Date

## OVERVIEW

- **Official Area Name:** Brush Creek Conservation Area, # 6531
- **Year of Initial Acquisition:** 1965
- **Acreage:** 158 acres
- **County:** Polk
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**

### A. Strategic Direction

Brush Creek Conservation Area (CA) was developed for the restoration, conservation, management and enhancement of natural communities; and to provide for public use of the area's resources. The area is managed to provide opportunities for private landowners to learn about active forest management and provide the public with opportunities to enjoy outdoor recreational activities.

### B. Desired Future Condition

The desired future condition of Brush Creek CA is a healthy, diverse and sustainable mosaic of forest and woodland natural communities, which provide habitat for a wide variety of plants and animals.

### 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.

## 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 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
- D. **Other:** Occurs in the Lower Sac River Oak Woodland Hills Landtype Association. This landtype consists of moderately rolling to rugged hills with steep slopes underlain by Pennsylvanian sandstones. Historically, sandstone

glades, savannas and woodlands interspersed with small prairie openings dominated the landscape. (Nigh & Schroeder, 2002).

### III. Existing Infrastructure

- 1 parking lot on the northwest corner of the area

### 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. 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:** Yes, perpetual roadway easement with Polk County
- D. Cultural Resources Findings:** No known cultural resources.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** Endangered Species are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities 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) Remove early infestations of invasive exotic plants currently found on the area (e.g., Japanese honeysuckle) and the threat of future invasive plant infestations.
- 2) Manage impacts of removal of wildfire and other natural disturbances from natural communities, e.g.,
  - Overstocked forest and woodlands (too many trees per acre);
  - Tree species composition shift from shade tolerant, fire intolerant species;
  - Major loss of diversity and abundance of ground layer herbaceous vegetation and tree regeneration.
- 3) Maintain healthy, sustainable and diverse forests and woodlands which are approaching biological maturity and are mostly even-aged.
- 4) Demonstrate to the public the benefits of important forest and woodland management practices (e.g., exotic invasive control, prescribed fire, thinning).

- 5) Enhance wildlife habitat by implementing various management techniques.

**Management Objective 1:** Improve and maintain natural communities.

**Strategy 1:** Conduct an initial forest inventory on the area to help guide proper management decisions going forward.

**Strategy 2:** Reduce exotic invasive species populations to levels which will have negligible impact to natural communities and can be kept in check via routine scouting and minor control efforts. Invasive species management will be completed using a combination of Missouri Department of Conservation (Department) staff and/or contractors. (Forestry)

**Strategy 3:** Reduce tree stocking in forests and woodlands to promote early successional habitat and to keep a pattern of natural disturbance within both natural communities. Various management practices (e.g., prescribed fire) will be completed using Department staff and/or contractors. (Forestry, Wildlife, Private Lands Services)

**Strategy 4:** Stimulate herbaceous vegetation in order to increase desirable regeneration in forests and woodlands. Various management practices (e.g., non-commercial thinning) will be implemented utilizing Department staff and/or contractors. (Forestry, Wildlife, Private Lands Services)

**Management Objective 2:** Provide forest/woodland management demonstration sites and interpretation that demonstrate to the public the benefits of proactive management activities.

**Strategy 1:** Strategically locate some of the projects described above in Objective 1, in areas which are visible to the public with good opportunities for interpretation (signage, programs, etc.). (Forestry)

## VI. Aquatic Resource Management Considerations

### **Challenges and Opportunities:**

A very small portion of Brush Creek flows through the area. Although this is a small area held in public trust, there is a great potential to lead and engage surrounding private landowners in actively managing and conserving their portion of the Brush Creek watershed.

**Management Objective 1:** Manage riparian areas in ways that maintain the integrity of streams and improve overall water quality.

**Strategy 1:** Encourage and maintain healthy riparian corridors and stream bank vegetation throughout the area. (Forestry, Fisheries)

**Strategy 2:** Department staff will address future accelerated stream bank erosion along the creek frontage. (Forestry, Fisheries)

**Strategy 3:** Management activities on the area will be done according to state forest management guidelines (Missouri Department of Conservation, 2009) and recommended protection practices for Missouri forests (Missouri Department of Conservation, 2014). (Forestry)

**Strategy 4:** Roadways will be managed according to appropriate best management practices to minimize runoff and sedimentation into stream resources. (Forestry, Design and Development)

## **VII. Public Use Management Considerations**

### **Challenges and Opportunities:**

Public use of the area is relatively high, especially during the opening weekend of firearms deer season.

**Management Objective 1:** Ensure proper use of the area by all users.

**Strategy 1:** The Protection Division will periodically patrol the area to ensure compliance with area regulations. (Protection)

**Management Objective 2:** Maintain the area in a way that invites the public to use the property.

**Strategy 1:** Mark and maintain boundary lines using the best means possible. (Forestry)

**Strategy 2:** Maintain parking lot on the area for cleanliness and to allow for proper ingress and egress. (Forestry)

## **VIII. Administrative Management Considerations**

### **Challenges and Opportunities:**

Survey existing un-surveyed boundaries on Brush Creek CA.

**Management Objective 1:** Maintain accurate boundaries in order to minimize unauthorized use of public land and to minimize potential conflicts with neighbors.

**Strategy 1:** Request a boundary survey and seek resolution if any issues arise with neighboring landowners. (Forestry)

**Lands Proposed for Acquisition:**

When available, adjacent lands 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 (Forestry).

**MANAGEMENT TIMETABLE**

Strategies are considered ongoing unless listed in the following table:

	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
<b>Terrestrial Resources Management</b>										
<i>Objective 1</i>										
Strategy 1	X									
Strategy 3	X		X		X		X			
Strategy 4				X		X		X		X
<i>Objective 2</i>										
Strategy 1		X				X				

## APPENDICES

### Area Background:

Brush Creek CA was purchased and developed in 1965 using Wildlife Restoration funds to provide for the enhancement of wildlife habitat and outdoor recreational activities. The area is located 2 miles west of Humansville on Route N, and 0.8 miles north on Farm Road 57 (Figure 1).

### Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Forest/Woodland	158		100
<b>Total</b>	<b>158</b>		<b>100</b>
Stream Frontage		265	

### Public Input Summary:

The draft Brush Creek Conservation Area Management Plan was available for a public comment period April 1-30, 2015. The Missouri Department of Conservation received no comments during this time period.

### References:

- Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.
- Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, Missouri: Missouri Department of Conservation.
- Missouri Department of Conservation. (2014). *Missouri watershed protection practice recommended practices for Missouri: 2014 management guidelines for maintaining forested watersheds to protect streams*. Jefferson City, Missouri: The Conservation Commission of the State of Missouri.

### Maps:

- Figure 1: Area Map
- Figure 2: Aerial Map
- Figure 3: Topographic Map
- Figure 4: Current Vegetation Map

Figure 1: Area Map

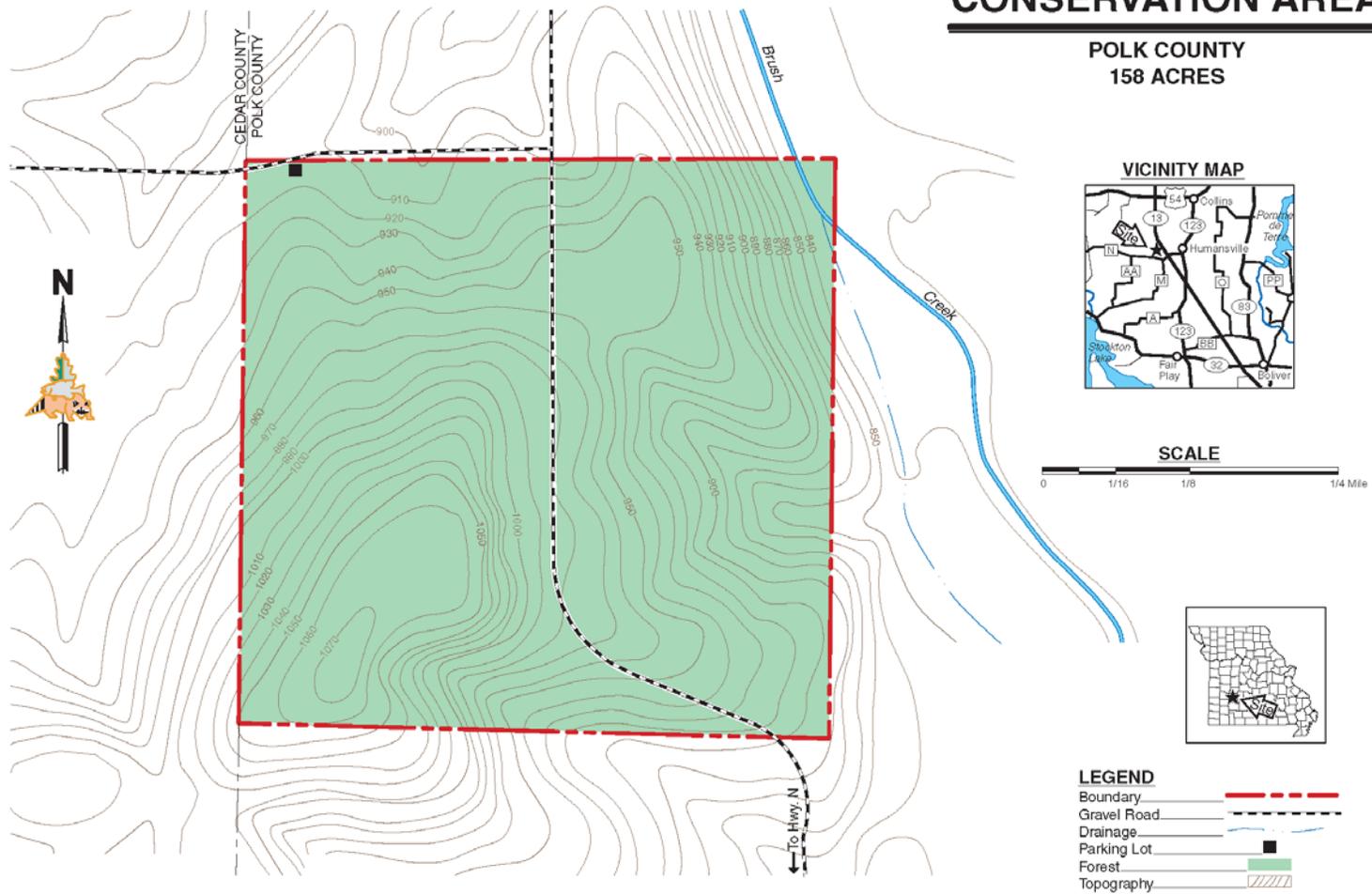


Figure 2: Aerial Map



Figure 3: Topographic Map

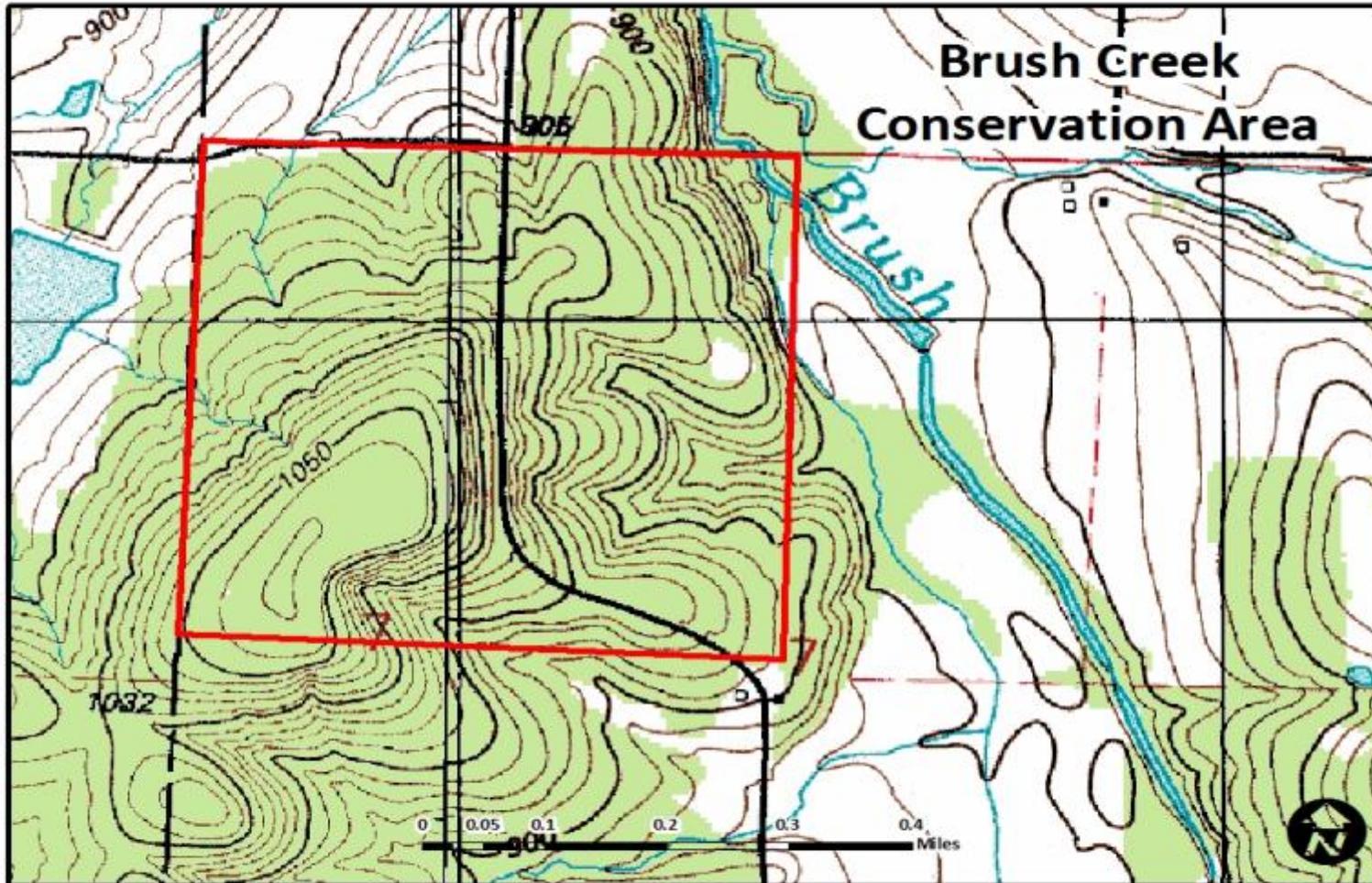


Figure 4: Current Vegetation Map

