Weldon Spring Conservation Area

Ten-Year Area Management Plan

FY 2017-2026



Wildlife Division Chief

4 May 2017

Date

Weldon Spring Conservation Area Management Plan Approval Page

PLANNING TEAM

Raenhard Wesselschmidt, Wildlife Management Biologist

Kevin Meneau, Fisheries Management Biologist

Daniel Moncheski, Urban Forester

Andrea Schuhmann, Natural History Biologist

James Bolden, Conservation Agent

Bryant Hertel, Education Center Supervisor

Josh Ward, Private Land Conservationist

ST. LOUIS REGION

RCT Chair

Mickall You

Jarch 21, 2017

WILDLIFE DIVISION

Wildlife Management Chief

Signature

Date

OVERVIEW

• Official Area Name: Weldon Spring Conservation Area, #7404

• Year of Initial Acquisition: 1978

• Acreage: 8,398 acres • County: St. Charles

• Division with Administrative Responsibility: Wildlife

• Division with Maintenance Responsibility: Wildlife

Statements of Purpose:

A. Strategic Direction

Manage for floodplain, grassland, woodland, and aquatic resources while providing recreational opportunities compatible with natural resource management.

B. Desired Future Condition

The desired future condition of Weldon Spring Conservation Area (CA) is a mix of grassland, openland, woodland, and bottomland forest that promotes natural resource recreation.

C. Federal Aid Statement

This area, or a portion thereof, was acquired with an existing Emergency Wetland Reserve Program (EWRP) easement in place as part of the buy-out of eligible farmland affected by the 1993 Flood to provide wetland habitat.

GENERAL INFORMATION AND CONDITIONS

I. **Special Considerations**

- A. Priority Areas: Priority Forest Landscape
- **B.** Natural Areas: Weldon Spring Hollow Natural Area features 385 acres of upland and bottomland forest, and rugged riverbreaks topography. Other features include limestone cliffs and bluff escarpments.
- C. Other: The area has 10 miles of trail that is part of the Katy Trail State Park and Great Rivers Greenway trail networks. The area is also part of Audubon Missouri's Busch/Weldon/Howell Conservation Area Complex Important Bird Area.

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: Yes, records kept with Missouri Department of Conservation (Department) natural history biologist.

- **D.** Other: Weldon Spring CA is located within two ecological sections of Missouri, three subsections, and three landtype associations.
 - A portion of the area is within the Mississippi River Hills Subsection of the
 Central Dissected Till Plains Ecological Section of Missouri. The landtype
 association for this portion is the St. Charles County Prairie/Woodland Low Hills.
 The landtype association consists of loess-covered hills in the north that become
 more steep-sided near the Missouri River. Historically, prairie dominated the
 uplands and graded into oak savanna and woodland in the valleys. Currently, the
 area is highly urbanized with undeveloped areas consisting of cropland, old field,
 and second-growth timber.
 - Another portion of the area is within the Outer Ozark Border Subsection of the Ozark Highlands Ecological Section of Missouri. The specific landtype association for this portion is the Montgomery-Warren Oak Woodland/Forest Rugged Hills. The landtype association consists of narrow, loess-covered ridges that give way to steep slopes and deep, narrow valleys. Historically, oak woodland on uplands graded into oak and mixed-hardwood forests in the valleys. Currently, some of the ridges are cleared old field with some cropland. Steeper lands are timbered in second growth forest.
 - The final portion of the area is within the Missouri River Alluvial Plain Subsection of the Ozark Highlands Ecological Section of Missouri. The specific landtype association for this portion is the Lower Missouri River Alluvial Plain and is along the 6 mile stretch of the Missouri River that makes up the areas southern boundary. The landtype association consists of a river channel half of its former width and of a relatively narrow alluvial plain restricted by bluffs. Historically, shifting river channels created a variety of habitats, ranging from sandbars to riverfront forests of willow, eastern cottonwood, elm, hackberry, and silver maple mixed with wetland habitats. Currently, much of the area is in agriculture or early successional riverfront forest growth mixed with heavy sand deposits.

III. Existing Infrastructure

- Nine parking lots
- One concrete boat ramp
- Wildlife maintenance shop
- Clark Trail (5.3 mile, natural surface, hiking only)
- Lewis Trail (8.2 mile, natural surface, hiking only)
- Lost Valley Trail (11 mile, gravel and natural surface, hiking and biking)
- Hamburg Trail (6 mile, gravel and asphalt surface, hiking and biking)
- Busch Greenway Trail (4.5 mile, asphalt surface, hiking and biking)
- Square Pond (4.1-acre fishing pond)

- Fire Lake (4-acre fishing pond)
- Prairie Lake (24-acre fishing lake)
- 12 fishless ponds (3 acres total)

IV. Area Restrictions or Limitations

A. Deed Restrictions or Ownership Considerations: Missouri Department of Natural Resources groundwater well drilling restrictions. There are U.S. Department of Energy/U.S. Army Corps of Engineers groundwater contamination and well drilling restrictions at the conservation area.

B. Federal Interest:

- Federal funds were used in the development of this area, or a portion thereof. The Department must maintain the developed project throughout its useful life. 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.
- The wetland conservation easements permanently prohibit use of the affected land as cropland and require permanent maintenance of the wetland conditions, except in the case of natural disaster. After the easement has been perfected, no change will be made in the easement without a written request by the participant and the written consent of the Natural Resources Conservation Service Chief. 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.
- 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:

- The Explorer Pipeline Company has an easement across the Darst Bottom Tract and Weldon Springs CA for an underground fuel transport pipeline.
- Enbridge has an easement across Weldon Spring CA for an underground fuel transport pipeline.
- Public Water Supply District #2 has easements for powerline rights of way and wells in the Weldon Spring Bottom.
- Ameren UE has easements for powerlines that run to the Missouri State Highway Patrol radio tower, the Wildlife maintenance shop and along Highway 94.
- Missouri State Highway Patrol has an easement for a radio tower and ingress/egress.

- The University of Missouri Research Park has an easement for a trail connection between them and the Katy Trail.
- AT&T has an easement for telephone service to the Wildlife maintenance shop.
- The Department of Natural Resources has a groundwater restriction easement on a portion of the Weldon Spring CA.
- The U.S. Department of Energy and U.S. Army Corps of Engineers have easements for numerous groundwater monitoring wells throughout the Weldon Spring CA.
- The Missouri Department of Transportation has a right of way easement for Highway 94.
- Hamburg Hike and Bike Trail has a special-use agreement.
- **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 Policy Manual.
- **E. 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.
- **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) Manage impact of invasive plant species (bush honeysuckle, Japanese honeysuckle, garlic mustard, fescue, sericea lespedeza, and others) to different habitats.
- 2) Use of fire for natural community management.
- 3) Overstocked woodlands have reduced understory herbaceous vegetation.
- 4) Expand prairie/grassland habitat and maintain adequate plant diversity in prairie stands.
- 5) Manage Agricultural Crop Program/open fields and the potential for loss of permittee interest in the future.
- 6) Demonstrate to the public the benefits of important habitat management practices such as invasive species control, open field management, prescribed fire, woodland thinning, small game management, etc.
- 7) Expand the Weldon Spring Hollow Natural Area to include an additional 100-plus acres.

Strategy 1: Reduce invasive plant species to levels that will have negligible impact to natural communities, and work to keep invasive plants from invading new areas. Extensive control and follow-up treatment are needed on substantial acreage. This work will be completed using a combination of Department staff, volunteers, and contractors. Aerial spraying of bush honeysuckle will also be used as a means to control bush honeysuckle more efficiently. (Wildlife)

Strategy 2: Utilize prescribed fire to manage herbaceous vegetation in prairies and woodlands, to increase oak regeneration in woodlands, and to control bush honeysuckle and other invasive plants. Write area burn plans to include larger burn units that contain multiple habitat types. In addition, design burn units to include areas where bush honeysuckle populations are young or have been previously treated to help prevent re-establishment. (Wildlife)

Strategy 3: Control invasive species (e.g., bush honeysuckle, garlic mustard, etc.) on the Darst Bottom tract and use management techniques such as prescribed fire and woody removal to maintain open areas. (Wildlife)

Management Objective 2: Expand prairie/grassland habitat located in the northeast part of the area by approximately 100 acres and maintain adequate plant diversity in prairie stands.

Strategy 1: Remove agriculture from 10 to 20 acres of open land, adjacent to the existing complex, and establish prairie grasses and forbs in the area. (Wildlife)

Strategy 2: Remove or thin tree rows between prairie fields and agricultural fields to allow establishment of sufficient herbaceous vegetation that will allow prescribed fire to burn through tree stands. (Wildlife)

Strategy 3: Periodically evaluate restored prairie fields for forb diversity and prevalence. In the event that warm-season grasses begin to dominate fields, the grasses will be suppressed through disking, herbicide, or prescribed fire, and forb seed will be added to the field. (Wildlife)

Management Objective 3: Manage existing woodlands to increase the number and diversity of native herbaceous and woody species.

Strategy 1: Manage woody and herbaceous invasive species, such as bush honeysuckle, multiflora rose, garlic mustard, etc. through the use of herbicides, prescribed fire, and other methods. (Wildlife)

Strategy 2: Conduct woodland/forest thinning activities to increase mast production and native species diversity. This work is to be conducted after successful management of the larger, woody invasive species. (Wildlife)

Strategy 3: Conduct a forest inventory on the Darst Bottom tract and continue conversion to a bottomland forest community through regeneration and selected tree plantings. (Forestry, Wildlife)

Management Objective 4: Expand the current Weldon Spring Hollow Natural Area to include an additional 100-plus acres.

Strategy 1: Propose a 100-plus-acre expansion of the current Weldon Spring Hollow Natural Area by working through the natural area addition process with assistance from the natural history biologist and natural areas coordinator. (Wildlife)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Maintain adequate fish habitats for healthy, sustainable fish populations.
- 2) Portions of streams within Weldon Spring CA may have narrow riparian forest buffers.
- 3) Some pond dams, stream banks, or structures may suffer from erosion or damage.
- 4) Potential for additional small fishless pond and wetland habitats may exist.
- 5) Access to some pond/lake embankments could be improved.

Management Objective 1: Establish, maintain, or expand aquatic habitats.

Strategy 1: Install and/or maintain brush piles in lakes managed for multiple species fishing opportunities, where appropriate. (Fisheries)

Strategy 2: Establish and maintain native aquatic vegetation in lakes, where appropriate. (Fisheries)

Strategy 3: Explore options to create additional small fishless ponds. (Wildlife)

Strategy 4: Inspect condition of Femme Osage Slough water control structure and propose repairs to increase connectivity with the Missouri River. (Wildlife)

Strategy 5: Conserve, expand, or establish riparian forest buffers to a minimum of 100-foot wide, on both sides of area streams, according to Department riparian guidelines (Missouri Department of Conservation, 2009). (Fisheries, Wildlife)

Management Objective 2: Improve or maintain embankments and access.

Strategy 1: Explore opportunities to improve access to Prairie Lake shorelines to decrease steepness and improve mowing safety. (Wildlife)

Strategy 2: Improve protection of dam faces and outflow structures of fishless ponds. (Wildlife, Design and Development)

Strategy 3: Maintain fishing access to dams and shorelines through mowing. (Wildlife)

Strategy 4: Monitor Little Femme Osage Creek stream bank stability adjacent to the Katy Trail and consider setting back levees, if conditions change. (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Educate diverse users about area regulations related to hunting, fishing, and other recreational activities.
- 2) Provide a diverse array of hunting and fishing opportunities of a wide variety of species for the public.
- 3) Manage multiple public user group activities to avoid conflicts between the groups.
- 4) The area includes considerable infrastructure (lakes, roads, trails, etc.) that require maintenance.
- 5) Constructed pools adjacent to Lost Valley Spring may provide limited cold water habitat.

Management Objective 1: Educate area users about area regulations, using a variety of media (area brochures, Department website, area signage), to reduce *Wildlife Code of Missouri* violations and enhance enjoyment of area resources.

Strategy 1: Maintain area signage (boundary, fishing regulation, trail signs, etc.) to inform the public and reduce violations. (Wildlife)

Management Objective 2: Provide sustainable hunting opportunities for a wide variety of species on a high public use area.

Strategy 1: Conduct managed hunts for deer and spring turkey to control hunting pressure. (Wildlife)

Management Objective 3: Maintain healthy deer populations to provide ample hunting opportunities.

Strategy 1: Conduct surveys of the deer population on the area to periodically assess density. (Wildlife)

Strategy 2: Conduct a variety of managed hunts to help manage deer numbers and provide several options for hunters to enjoy the resource. (Wildlife)

Management Objective 4: Manage large and special requests user groups through the special use permit process to help minimize conflicts between groups.

Strategy 1: Follow Department special use permit guidelines when evaluating special use permit applications to determine if activities can be allowed or not. (Wildlife)

Strategy 2: Follow the special use permit policy and establish local guidelines to monitor athletic competitions (running and bike races) to ensure they do not conflict with hunting seasons and general area users. (Wildlife)

Public Use Strategy 3: Work with Missouri Department of Natural Resources and University of Missouri Research Park staffs to coordinate events on the Hamburg Trail, Katy Trail, Research Park Trail loop and ensure proper permits are issued. (Wildlife)

Management Objective 5: Provide high-quality fishing opportunities.

Strategy 1: Maintain multi-species fish communities (with bluegills and largemouth bass), where appropriate. (Fisheries)

Strategy 2: Explore options for developing limited coldwater fisheries potential at Lost Valley Spring branch. (Fisheries)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Work with neighboring homeowners to reduce encroachment (tree cutting, yard waste dumping, and other activities) along property boundaries.
- 2) Provide adequate parking for area trails to accommodate increased usage.
- 3) Consider acquiring land from willing sellers adjacent to the Weldon Spring CA.

Management Objective 1: Maintain well marked, accurate boundary lines.

Strategy 1: Maintain signage along boundary lines every five years. (Wildlife)

Strategy 2: Work with neighboring homeowners to provide education about area regulations and request compliance. (Wildlife)

Strategy 3: Obtain administrative guidance on resolving minor boundary issues. (Wildlife)

Management Objective 2: Provide adequate parking for area users.

Strategy 1: Explore the feasibility of increasing the parking lot size at the Lewis and Clark Trail and the Weldon Spring boat ramp to accommodate increased area usage. (Wildlife)

Strategy 2: Explore opportunities to purchase property from willing sellers adjacent to the Darst Bottom Tract that would allow the development of a public parking area to increase access to the area. (Wildlife)

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:

| | | | <u></u> | | | | | | | |
|---------------------------------|---------|---------|---------|------|------|------|------|------|------|------|
| | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 |
| Terrestrial Resource Management | | | | | | | | | | |
| Objective 4 | | | | | | | | | | |
| Strategy 1 | X | | | | | | | | | |
| Aquatic Resour | ce Mana | igement | | | | | | | | |
| Objective 1 | | | | | | | | | | |
| Strategy 2 | | X | | | | | X | | | |
| Strategy 3 | | X | | | | | X | | | |
| Objective 2 | | | | | | | | | | |
| Strategy 2 | | | X | | | X | | | X | |
| Administrative Considerations | | | | | | | | | | |
| Objective 1 | | | | | | | | | | |
| Strategy 1 | | X | | | | | X | | | |
| Objective 2 | | | | | | | | | | |
| Strategy 1 | X | | | | | | | | | |
| | | | | | | | | | | |

APPENDICES

Area Background:

Weldon Spring Conservation Area (CA) is in St. Charles County, near the town of Weldon Spring. The area is named after John Weldon, who came to this region in 1796 with a Spanish land grant for 425 acres. This acreage included the spring after which Weldon Spring is named.

From settlement until the early 1940s, the primary land use was small farms. During the 1940s, the U.S. Department of Army took control of 17,000 acres to construct the world's largest TNT (trinitrotoluene) munitions plant to serve the World War II effort. In addition, the Atomic Energy Commission (now the U.S. Department of Energy) operated a uranium feed materials plant on land adjacent to Weldon Spring CA in the 1960s. The affected portions were part of a federal environmental cleanup project and were required to meet certain environmental health and safety standards. The area is now considered safe for all recreational pursuits allowed on the area, as well as the wildlife found within the area. Most of this area is now the August A. Busch Memorial CA and Weldon Spring CA. Weldon Spring CA was given to the University of Missouri in 1948. The University of Missouri used the land as an agricultural experiment farm until it was sold to the Missouri Department of Conservation (Department) in 1978. The original tract of land was 7,356 acres.

The Darst Bottom Tract is located south of Weldon Spring CA. The area is located in the Missouri River bottom, upstream from the bottomland portion of the conservation area. The area is comprised of 1,056 acres in the floodplain. Two tracts totaling 839 acres were purchased in 1995 as a result of flood buyout opportunities. In 2002, St. Louis County and the Spirit of Saint Louis Airport donated 217 additional acres in the Darst Bottom Tract that connected the two existing tracts of land. This area is separate from the main portion of the Weldon Spring CA, but has been managed as part of the Weldon Spring CA. Public access to the Darst Bottom Tract is by boat via the Missouri River.

The Darst Bottom Tract received heavy damage due to flooding and levee breaks in the 1990s. As a result, large sections of the area have sand deposits of varying depth. Most of the area is protected from flooding by a Missouri River levee. Existing habitat on the area is composed of mature bottomland forest located outside of the levee; young (approximately 20 years) stands of bottomland forest located inside of the levee; open sandy areas with sporadic vegetation; idle fields; and crop fields.

To find out more about the history of the U.S. Army and U.S. Department of Energy activities on the area, you can visit the Weldon Spring Site Interpretive Center located at 7295 Highway 94 South, St. Charles, Missouri, 63304.

Current Land and Water Types:

| Land/Water Type | Acres | Miles | % of Area | |
|---------------------------------------|-------|-------|-----------|--|
| Forest and Woodland | 6,752 | | 80 | |
| Open Land | 744 | | 9 | |
| Other (sparsely vegetated sand flats) | 500 | | 6 | |
| Grassland | 300 | | 4 | |
| Lakes/Ponds | 66 | | <1 | |
| Glade | 20 | | <1 | |
| Wetland | 16 | | <1 | |
| Total | 8,398 | | 100 | |
| Stream Frontage | | 15.5 | | |

Public Input Summary:

The draft Weldon Spring Conservation Area Management Plan was available for a public comment period Sept. 1–30, 2016. The Missouri Department of Conservation received comments from 15 respondents (Appendix A). The Weldon Spring 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.

Department responses to themes and issues identified through the Weldon Spring Conservation Area Management Plan public comment period.

Concerned about management activities on this area due to contaminated soils.

The Department discussed this comment with the Missouri Department of Health and Senior Services (DHSS). The data and other information currently available from DHSS do not warrant the restriction of management activities on this area.

Suggests improving fish habitat in Prairie Lake by adding more pole stumps, trees, and other structures.

Prairie Lake's fluctuating water levels (due to a leak) make maintaining good fish habitat challenging, as previously-placed habitat had been left "high and dry" during drier years. However, we will investigate the possibility of adding woody cover off the lake dam. Also, there are currently no plans to repair the leak since this type of repair is generally expensive and repair success is not assured.

Suggests allowing horseback riding in Weldon Spring CA (even if by special use permit).

Two-thirds of the Weldon Spring CA contains soils that are considered moderate to highly erodible and are not well suited for equestrian use trails. The current hiking and biking trails are

heavily used, and the addition of equestrian use would increase possible user conflicts. There are currently over 70 miles of equestrian trails on conservation areas within the St. Louis Region and an additional 16 miles within the St. Charles County Park system. The closest equestrian trails are located at Broemmelsiek Park and Indian Camp Creek Park and are part of the St. Charles County Park system. Nearby Department areas with equestrian trails include Rockwoods Range, Forest 44 CA, Little Lost Creek CA, and Daniel Boone CA.

Suggests closing trails if conditions are too wet.

This is very difficult to do because our trails have numerous access points, and it would involve considerable staff time to place and remove signs at each of these locations. Also, the conditions on when a trail should be closed are subjective and can change quickly.

Concerned about trail conditions due to overuse. Suggests adding more trails, issuing trail condition alerts, rerouting trails, and utilizing volunteers to maintain trails.

We are currently working with local groups to perform trail maintenance. We continually monitor all trails to maintain quality hiking conditions and, when necessary, reroute sections of trail to a more sustainable location.

Concerned that hikers and bicyclists aren't staying on designated trails.

All trails are designated for the uses allowed and bicycles in particular are required to stay on trails designated for that use. However, users are allowed to participate in a variety of uses throughout the area, which may require hiking off designated trails.

Suggests adding more hiking trails.

Current efforts are being directed at maintaining existing trails to minimize erosion and perpetual wet areas. There are currently over 100 miles of hiking trails on conservation areas within the St. Louis Region and an additional 50 miles of trail within the St. Charles County Park system. Additional trails on the area would depend on soil conditions and their ability to withstand foot traffic and availability of hiking opportunities in the region.

Suggests only allowing catch and release fishing on this area due to potential contaminants.

The Department discussed this comment with the Missouri Department of Health and Senior Services (DHSS). The data and other information currently available to DHSS do not warrant the placement of fish and wildlife consumption restriction signs. The DHSS is working with other state and federal agencies and the Department to collect updated samples in this area.

Suggests not allowing waterfowl hunting, canoe use, or fishing in the Femme Osage Slough due to potential contaminants.

The Department has discussed this comment with the Missouri Department of Health and Senior Services (DHSS). The data and other information currently available to DHSS do not warrant the

placement of fish and wildlife consumption restriction signs. The DHSS is working with other state and federal agencies and the Department to collect updated samples in this area.

Concerned that canoes and kayaks are not allowed on Prairie Lake.

Due to the proximity of many area users and the small size of the lake, the potential for user conflicts is high (e.g., boater conflicts with shore-anglers and waterfowl hunters) if private water craft were allowed on Prairie Lake. There is concern that allowing private watercraft at one lake in the Busch/Weldon complex would encourage users to illegally place their boats on other lakes, further increasing user conflict problems throughout the two areas while creating an enforcement issue. Additionally, adequate launching facilities are not present at Prairie Lake and, given the fluctuation of water levels there, they would be very expensive to construct.

Suggests better informing area users about hunting seasons by posting signs weeks in advance.

We currently post all managed deer hunting dates at each of the area parking lots and access points prior to the beginning of the season. We also post additional signs prior to the firearms managed hunts at each trailhead.

Suggests adding parking areas.

There is currently a project submitted to enlarge the Lewis and Clark Trail parking lot. Additional parking lots will be evaluated based on use and condition.

Suggests adding information to the Area Background section about the Boone "Missouritown."

The planning team will look into adding information to the Area Background section of the area brochure and area website concerning the history of this Boone settlement.

Suggests adding land access to the Darst Bottom Tract.

When available, adjacent land to the Darst Bottom Tract may be considered for acquisition from willing sellers.

Supports Weldon Spring CA management plan.

The Department appreciates your support and thanks you for your comments on the Weldon Spring CA management plan.

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.

Maps:

Figure 1: Weldon Spring CA Area Map

Figure 2: Weldon Spring CA Darst Bottom Tract Area Map

Figure 3: Weldon Spring CA Aerial Map

Figure 4: Weldon Spring CA Easement Map

Figure 5: Darst Bottom Tract Easement Map

Figure 6: Weldon Spring CA Landtype Association Map

Figure 7: Weldon Spring CA Cover Type Map

Additional Appendices:

Appendix A. Weldon Spring Conservation Area Management Plan Public Comments

Figure 1: Weldon Spring CA Area Map

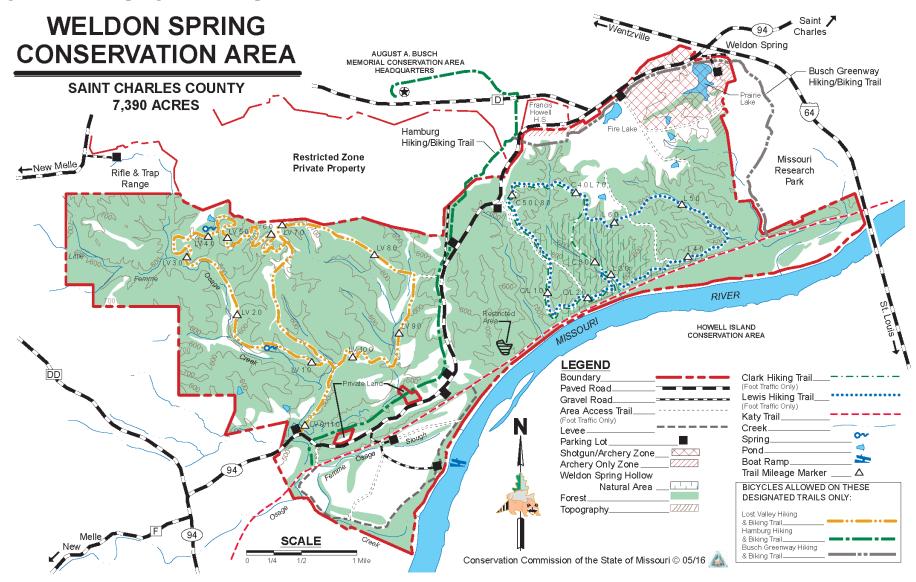


Figure 2: Weldon Spring CA Darst Bottom Tract Area Map

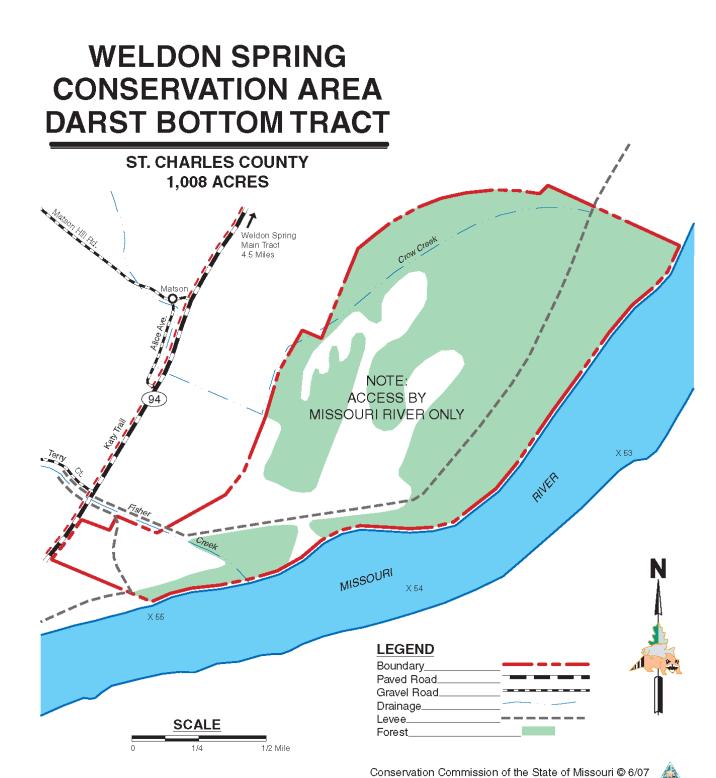


Figure 3: Weldon Spring CA Aerial Map

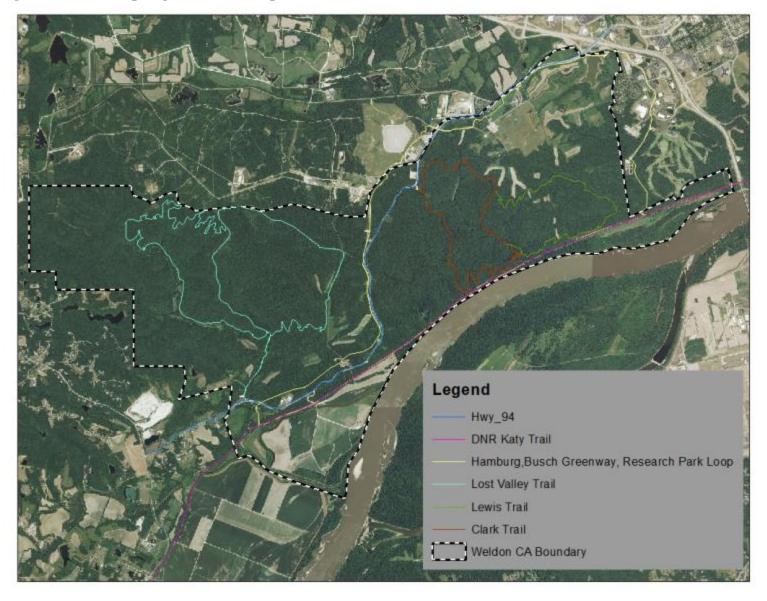


Figure 4: Weldon Spring CA Easement Map

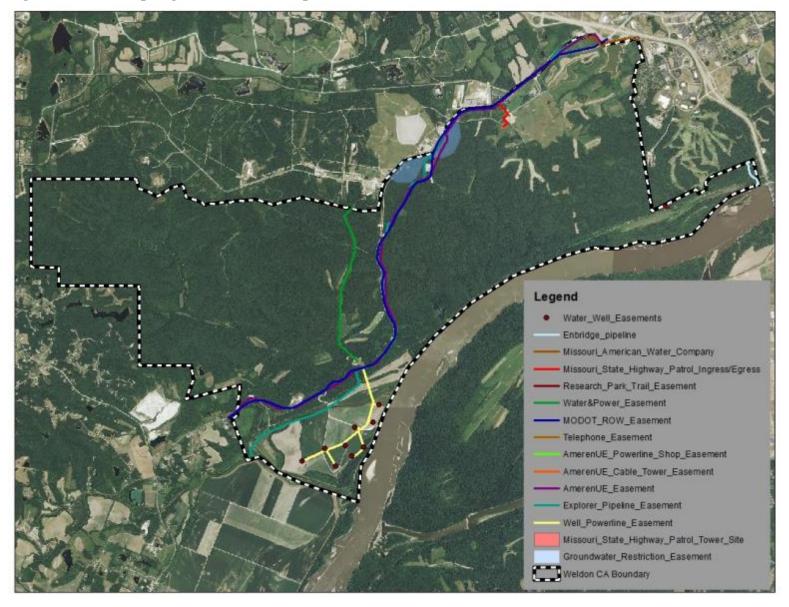


Figure 5: Darst Bottom Tract Easement Map

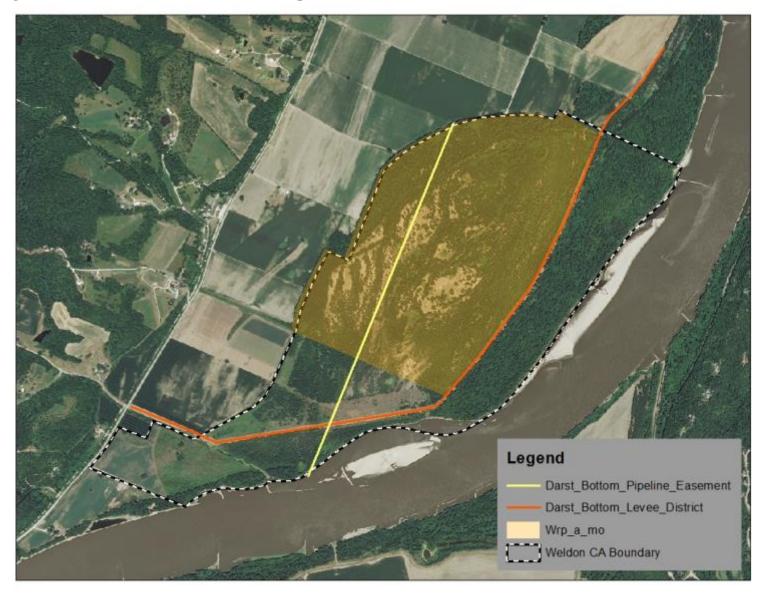


Figure 6: Weldon Spring CA Landtype Association Map

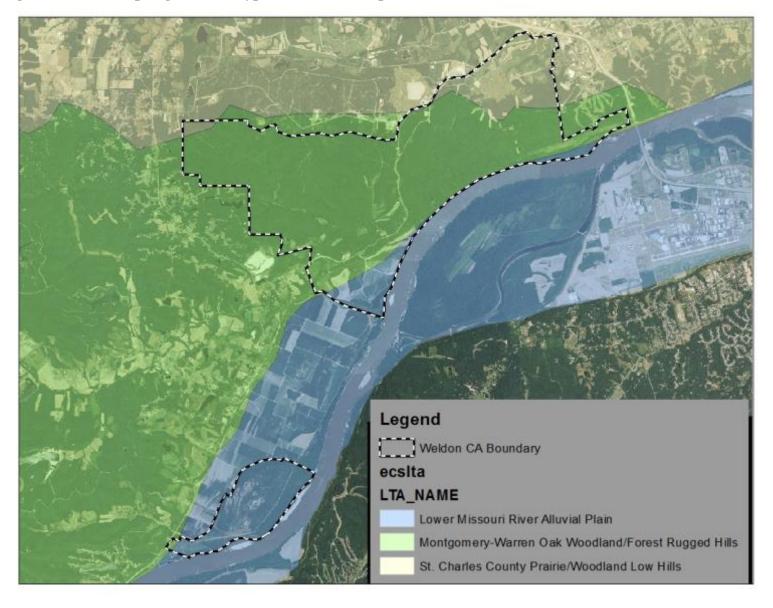
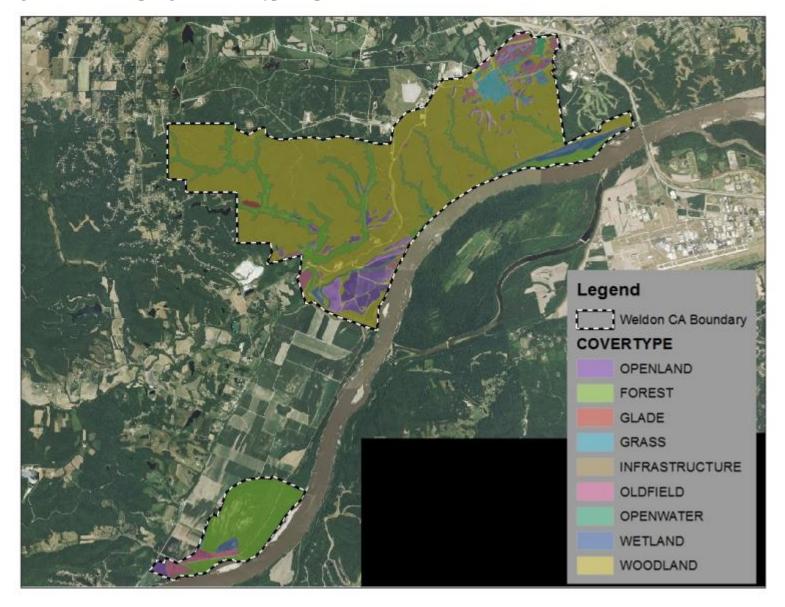


Figure 7: Weldon Spring CA Cover Type Map



Appendix A. Weldon Spring Conservation Area Management Plan Public Comments

Received during public comment period (Sept. 1-30, 2016):

I wish that there was horse riding access to this beautiful conservation area. I have some ideas on how the area could provide a specified and\or limited amount of riders at a time to limit damage to trails but still provide access. By providing a limited amount of access similar to the method for duck hunting (numbered pills) using the honor system so as to keep additional expenses and man power at a minimum.

Missouri has the 3rd highest horse population in the nation. It would be great for the state if we could accommodate this untapped potential, even possible revenue streams for the commission.

I want land access to the Darst bottom tract. Also more wetlands.

excellent and comprehensive study and plan.

add more hiking trails. lewis and clark are used a lot.

Please accept the below MY COMMENT: sugestions in the planning of this WLA.

| ****** | ****** |
|--------|--------|
| ***** | ***** |
| ***** | ****** |
| ***** | ***** |

DRAFT Weldon Spring Conservation Area Ten-Year Area Management Plan FY 2017-2026 To submit a comment on this document, click on the following link: https://mdc.mo.gov/node/10013?ap=13820

Management Objective 1 p 8

Strategy 4: Inspect condition of Femme Osage Slough water control structure and propose repairs to increase connectivity with the Missouri River. (Wildlife)

MY COMMENT: I like this idea because it will remove the uranium, arsenic and by products including heavy metals from the Lower Femme Osage Slough and the entire alluvium. I do not think the crops produced in this bottom land unnundated by residual contamination especially in the sloughs, Katy Trail and alluvium as well. There should be no long range plan to convert the area to a controlled wetland as well because of the public health concerns.

Management Objective 2

Strategy 4: Monitor Little Femme Osage Creek stream bank stability adjacent to the Katy Trail and consider setting back levees, if conditions change. (Fisheries)

MY COMMENT: This is may be misguided without consultation with the DOE and MoDNR and EPA due to the potential highly contaminated residual soils in this areas! This is especially of concern below the Quarry . This area unfortunately will flood with a much higher frequency

due to both weather extremes and our neighbor on the St. Louis County side building so called 500 plus 3-6 feet.

5) Constructed pools adjacent to Lost Valley Spring may provide limited cold water habitat.

Strategy 2: Explore options for developing limited coldwater fisheries potential at Lost Valley Spring branch. (Fisheries)

MY COMMENT; Great idea! I would add that you develop the old grave site better for cultural appreciation of the hard times of the first historic settlers in the arewa based uon the age of death. It would be cool to stage a recreation of the early settlement here but you might need to work with other agencies on this.

Management Objective 1 p 9

Strategy 1: Maintain area signage (boundary, fishing regulation, trail signs, etc.) to inform the public and reduce violations. (Wildlife)

MY COMMENT; See other areas for additional health signage. Just because the DOE and some studies have implied that the fish are ok to eat I strongly feel that one should error on the safe side and simply change certain areas as "Catch and Release". The strong potential exists for actual high contaminated clay substrate to become inadvertantly digested adds to my concerns because the heavy metals and uranium adheare to these soils and kids like to play in the mud!

Management Objective 2: Provide adequate parking for area users. Strategy 1: Explore the feasibility of increasing the parking lot size at the Lewis and Clark Trail and the Weldon Spring boat ramp to accommodate increased area usage. (Wildlife) Strategy 2: Explore opportunities to purchase property from willing sellers adjacent to the Darst Bottom Tract that would allow the development of a public parking area to increase access to the area. (Wildlife)

MY COMMENT; This is great!!! Daniel Boone's only Spanish Land Grant is on the Darst Bottoms and now only assessable by boat. Boone himself designed "Missouritown" here. At this time the public cannot appreciate the historic tourism potential of this Boone Site. Also the public has no ability to see the changes from frequent flooding on the landscape. It is a perfect area for successional evaluation of Riperian areas . Greenway Network is working with the MoDOC, County Parks, local histoorians and local land owners to extend the access to the area near the Matson Trail Head and judgement Tree area to the Darst Bottoms. We will discus this when historian Ken Kamper gives a Daniel Boone presentation at Big A's on Wed Sept 14 (see bigmuddyspeakers.org or greenwaynetwork.org)

Area Background:

Weldon Spring Conservation Area (CA) is in St. Charles County, near the town of Weldon Spring. The area is named after John Weldon, who came to this region in 1796 with a Spanish land grant for 425 acres. This acreage included the spring after which Weldon Spring is named.

MY COMMENT; These were all members of the Boone contingent.

From settlement until the early 1940s, the primary land use was small farms. During the 1940s, the U.S. Department of Army took control of 17,000 acres to construct the world's largest TNT (trinitrotoluene) munitions plant to serve the World War II effort. In addition, the Atomic Energy Commission (now the U.S. Department of Energy) operated a uranium feed materials plant on land adjacent to Weldon Spring CA in the 1960s. The affected portions were part of a federal environmental cleanup project and were required to meet certain environmental health and safety standards. The area is now considered safe for all recreational pursuits allowed on the area, as well as the wildlife found within the area. Most of this area is now the August A. Busch Memorial CA and Weldon Spring CA. Weldon Spring CA was given to the University of Missouri in 1948. The University of Missouri used the land as an agricultural experiment farm until it was sold to the Missouri Department of Conservation (Department) in 1978. The original tract of land was 7.356 acres.

MY COMMENT: I am glad you finally mentioned the TNT, DNT and later uranium and plutonium surface and ground water contamination issue here but would have preferred that it was mentioned earlier in the report especially regarding lake 34,35, and 36, the Upper and Lower Femme Osage Sloughs and Burgermiester Springs. I have concerns and a strong reccomendation here. First Plaease change Lake 34,35,36 to "catch and release". This area was and is the surface and ground water drainage area froom the DOE site and the heavy metals, uranium and arsenic are present in the clay substrate where the bottom feeding oily fish find their food, This would reduce the potential for especially oily bottom feeding fish to bioaccumulate uranium, heavy metals and the by products. This is as a strong vector to poor public health! Please also install signs on both sides of the Femme Osage Sloughs at the road and parking lots stating that there is a marked increase in uranium, (years ago it was average 95 pico/lit on the upper and 45 on the lower sloughs) Question what is it now? Please aslo post no waterfowl hunting, canoe use or fishing. I have been strongly reccommending this now for almost 30 years! The sloughs were said to magically grab all the uranium, adhering to the clays, I have always said they are a "source" of contamination to the drinking wells pumping nearby. I have seen children playing in the mud and canoes on the highly contaminated water way and that is totally unacceptable!

The Darst Bottom Tract is located south of Weldon Spring CA. The area is located in the Missouri River bottom, upstream from the bottomland portion of the conservation area. The area is comprised of 1,056 acres in the floodplain. Two tracts totaling 839 acres were purchased in 1995 as a result of flood buyout opportunities. In 2002, St. Louis County and the Spirit of Saint Louis Airport donated 217 additional acres in the Darst Bottom Tract that connected the two existing tracts of land. This area is separate from the main portion of the Weldon Spring CA, but has been managed as part of the Weldon Spring CA. Public access to the Darst Bottom Tract is by boat via the Missouri River.

The Darst Bottom Tract received heavy damage due to flooding and levee breaks in the 1990s. As a result, large sections of the area have sand deposits of varying depth. Most of the area is protected from flooding by a Missouri River levee. Existing habitat on the area is composed of mature bottomland forest located outside of the levee; young (approximately 20 years) stands of bottomland forest located inside of the levee; open sandy areas with sporadic vegetation; idle fields; and crop fields.

MY COMMENT: Please add info about the Boone "Missouritown" here and place this information after you discuss the Well Field areas and mention the residual contamination from surface and groundwater from both DOE chemical plant and the Quarry site. Also area libraries have additional information

Deer hunted area couple times.saw more hikers and bicyclists than deer. They don't stay on designated trails. Area has to many non hunters. It's not being managed for the people who pay

This area definitely needs the addition of equestrian trails. In addition, certain trails should be designated for hiking or equestrian use only - NOT shared with bicycles or wheeled vehicles. I'm not against cyclists, but it is not satisfactory in most instances for either group to have to share a trail.

It's my understanding that currently no personal water craft, even if paddle powered, are permitted on Prairie Lake, for fishing purposes. I'm wondering if that can be changed, so that one can bring a kayak, canoe, or some other low impact, self-propelled watercraft there for fishing purposes since much of the lake is inaccessible otherwise, and yet the lake itself is large enough that it would be ideal for such modes of transportation on it.

Also, prairie lake, doesn't seem to have much fish holding structure in it from what I noticed (at least not where I was able to access it), so maybe putting a few more old telephone pole stumps, trees, or other forms of structure in it, that provide sanctuary, might be good for the fish population there.

One more thing, at least during the managed rifle hunts, other recreational users sometimes seem unaware what is planned for the area, and appear nervous to proceed with biking and such. My suggestion is that several weeks in advance, the parking lots be posted with signs that let's them know what to expect, so they don't arrive there on the days of the hunts, completely unaware.

This area is really short on equesterian trails so it would be awesome if we could have some additional trails for riding in the Weldon Spring CA. My thought is if we have more trails it would disperse the traffic amongst them so as to not have as much overuse. I am also a fan of "closing" the trail when conditions are too wet. As a person who has worked to maintain trails I fully understand the wear and tear when it is too wet.

First, thank you for the opportunity to comment on the Weldon Spring CA Draft Management Plan. St. Charles County is underserved with respect to available equestrian trails on public land as documented in the 2015 SMMBCH proposal, "Expanding Public Land Multi-Use Trails in Missouri." Busch CA receives heavy use by urban residents which presents opportunity for conflict between users; Weldon Spring offers an alternative to developing equestrian trails on Busch CA. Weldon Spring has an 11 mile trail, Lost Valley Trail, on the west part of the area. Currently Lost Valley Trail is open to hiking and bicycles only. Simply changing the designation to multi-use (hike, bike, horse) would address the need for additional equestrian access to trails in St. Charles County.

SMMBCH offers our services, availability of volunteers permitting, to assist the Area Manager with development and maintenance of the trails and associated infrastructure.

Thank you again for the opportunity to comment.

Adequate parking for trails due to increased use is mentioned, and the need for maintenance. Is that enough? Erosion on the Clarke trail is significant at the first Missouri River overlook, and some weekends the trail has been so heavily used that the narrow trails are deep mud, tempting people to widen or skirt the trail to avoid the sucking mud. The condition has deteriorated so far, that I don't feel welcome to hike there anymore for fear of adding to the destruction of the trail. It's a good hike, I miss it, but it's being loved to the point of damage. Do we need another trail to thin the use, trail condition alerts at the trailhead, rerouted trails due to the erosion, trail volunteers?

As a member of Show-Me Missouri Back Country Horsemen (SMMBCH), and familiar with the 2015 study "Expanding Public Multi-Use Trails in Missouri", I am aware that St. Charles County is underserved with respect to equestrian trails, per the number of riders in the area. The Lost Valley Trail on Weldon Spring CA could provide needed mileage to equestrians, and continue to be available to hikers and bicyclists to which it is now open. Although extremely heavy use can result in user conflict, I have ridden on many popular trails, specifically in Greensfelder Park, where there were bicyclists and hikers, and several national parks where backpackers and hikers far outnumbered equestrians in some areas. I experienced no conflict, probably due to education at trailheads, resulting in general positive attitudes of trail users regarding shared trails. I believe that changing the designation of Lost Valley Trail to also include equestrians, and some basic education for those not familiar with horses, would address the issue of equestrian trails needed in that area. A more "local" trail for those living in that area is also going to keep money spent "local". Consider that access to trailheads requires maintenance and fuel for trucks and usually a meal while on a day outing. Be mindful also that Show-Me Missouri Back Country Horsemen is a service organization with the mission of keeping trails open through service, education and advocacy. SMMBCH can be an available resource for the Weldon Spring CA land manager in the education of users and trail maintenance, should the Lost Valley Trail become open to equestrian use. I appreciate the opportunity to comment on the Weldon Spring CA Management Plan, as an individual rider, and on behalf of Show-Me Missouri Back Country Horsemen. **** ****, President, Show-Me Missouri Back Country Horsemen

The plan looks good and I believe you have covered all the bases. As a frequent user of the Weldon Springs CA I am glad to see the attention being paid.

As an equestrian, I would like to see more trails in this part of the state open to horses. This area is a convenient location for riders in 2 Back Country Horsemen of America Chapters. These riders would help maintain and improve the existing Lost Valley Trail that is currently designated for hiking and bicycles only. A change in designation to "multi use" for the Lost Valley Trail would provide the opportunity for local equestrians to enjoy this Conservation Area. Thank You for the chance to voice my opinion.

We appreciate very much all the resources managed in the Weldon Spring region by MDC. Plans seem to be well-thought out, and management techniques employed for long-term success. The areas seem to increase in public usage annually, so additional parking at the various facilities as indicated would be a good step. The development of trails and allowing of mountain bikes is

greatly appreciated as well.
Thanks for all the good work!