Columbia Bottom Conservation Area

Ten-Year Area Management Plan FY 2016-2025



Wildlife Division Chief Date

Columbia Bottom Conservation Area Management Plan Approval Page

PLANNING TEAM

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Date

OVERVIEW

• Official Area Name: Columbia Bottom Conservation Area, # 9736

• Year of Initial Acquisition: 1997

Acreage: 4,318 acresCounty: St. Louis

• Division with Administrative Responsibility: Wildlife

• Division with Maintenance Responsibility: Wildlife

• Statements of Primary Purpose:

A. Strategic Direction

Columbia Bottom Conservation Area (CA) is managed to enhance and restore its large river ecosystem and associated mosaic of bottomlands habitats; while providing high quality, compatible public recreational activities and public educational and interpretive opportunities.

B. Desired Future Condition

The desired future condition of Columbia Bottom CA is a mosaic of bottomland habitats, including shallow wetlands, bottomland forests, prairie and cropland that provide habitat for a variety of resident and migratory wildlife.

C. Federal Aid Statement

Federal funds (Dingell-Johnson Sport Fish Restoration) were used in the development of this area, or a portion thereof. The Missouri Department of Conservation (the Department) must maintain the developed project throughout its useful life. 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.

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- **A. Priority Areas:** Confluence Terrestrial Conservation Opportunity Area, Audubon Missouri Important Bird Area
- 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: NoneC. Springs: None

D. Other: Occurs in the West Alton Alluvial Plain Landtype Association within the Missouri River Alluvial Plain. This small but distinctive landtype association is an alluvial plain at the confluence of the Missouri and Mississippi Rivers that receives frequent floodwaters and alluvium from both rivers, but mainly from the Missouri River. Soils are recent and immature. Historically the landtype association consisted of bottomland prairie and wetland complexes. Today it is in row crops and a major restored wetland complex with very limited residential and commercial development due to the frequent flooding. Columbia Bottom CA and Edward "Ted" and Pat Jones-Confluence Point State Park sit on opposite banks of the mouth of the Missouri River. (Nigh & Schroeder, 2002).

III. Existing Infrastructure

- 24 parking areas, 13 Americans with Disabilities Act (ADA) accessible
- 1 concrete boat ramp (ADA accessible)
- Howard and Joyce Wood Education and Visitor Center
 - o Open classroom area
 - o Clerical area
 - o Restroom facilities
 - Staff office space
- 9 exploration stations
- Viewing platform (ADA accessible)
- Confluence observation platform (ADA accessible)
- Viewing blind (ADA accessible)
- 1 waterfowl hunting blind (ADA accessible)
- 4 privies (ADA accessible)
- 3 pavillions (ADA accessible)
- Slough boardwalk (ADA accessible)
- Fishing pier/platform (ADA accessible)
- Canoe/kayak access area
- 13 water control structures
- River pump station with two electric pumps
- Maintenance compound area with shop building, fuel and chemical storage buildings
- Trails
 - o 4.8-mile Confluence Trail (hike/bike)
 - o 2.75 mile River's Edge Trail (hike)
 - o 7.8-mile Madison Ferry Trail (hike/bike/horse)

IV. Area Restrictions or Limitations

A. Deed Restrictions or Ownership Considerations: The City of St. Louis retained the rights to the groundwater and any such easements needed to gain access to

- that water, and the right to share a percentage of any revenues the Department may generate from nontraditional income or from the sale of mitigation bank credits. This agreement does not include income from the Agricultural Crop program.
- **B.** Federal Interest: Federal funds (Dingell-Johnson Sport Fish Restoration) were used in the development of this area, or a portion thereof. The Department must maintain the developed project throughout its useful life. 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: In addition to easements granted to the City of St. Louis in relation to their water rights, a number of easements are listed in the title insurance policy. This policy lists easements for the following individuals, companies or agencies: St. Louis County, Union Electric Light and Power Company (now Ameren UE), a private road to an adjoining property, Yarhola pipeline company, Ozark pipeline corporation, Shell (now Equilon) pipeline corporation (operated by Buckeye Partners LP.), Laclede pipeline company, the United States of America and Mississippi River Transmission Corporation. Many of these easements are very old and exact locations are unknown. Several are not actively being used. The U. S. Army Corps of Engineers acquired U. S. Fish and Wildlife Mitigation easements on the property in 2002 and 2003 to facilitate their ability to perform habitat enhancement work on the area. In 2011, the Corps of Engineers requested an easement to establish a Water Trail Informational Kiosk. In 2014, the Corps of Engineers requested this Kiosk easement to be converted to a license agreement.
- **D.** Cultural Resources Findings: Yes, records kept with the Department Environmental Compliance Specialist. Managers should follow Best Manangement Practices for Cultural Resources found in the Department Resource Policy Manual.
- E. Endangered Species: Endangered species are known from this area. Area Manager should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.
- F. Boundary Issues: None

MANAGEMENT CONSIDERATIONS

V. <u>Terrestrial Resource Management Considerations</u>

Challenges and Opportunities:

- 1) Manage forest community.
- 2) Maintain reforestation areas.
- 3) Maintain landscape plantings around parking lots and other facilities.
- 4) Ensure that structures, roads, trails, parking lots, etc. are free from hazardous trees.
- 5) Manage bottomland prairie habitat.
- 6) Utilize permittee farming as a technique to maintain open land, control problem weeds and provide wildlife food sources.
- 7) Convert a portion of the agriculture production acres to small game friendly habitat.

Management Objective 1: Maintain healthy trees and forest with management emphasis on wildlife habitat.

Strategy 1: Monitor forest for invasive vegetation. Assess feasibility of treatment and develop plan for control, as needed (Wildlife/Forestry).

Strategy 2: Retain and protect existing den trees (Wildlife/Forestry).

Management Objective 2: Maintain reforestation areas.

Strategy 1: Monitor the reforestation areas for invasive species. Assess feasibility of treatment and develop possible plan for control (Wildlife/Forestry).

Strategy 2: Evaluate and perform forest stand improvement, as needed, on reforestation areas to promote planted hardwood trees (Wildlife/Forestry).

Management Objective 3: Maintain landscape plantings around parking lots and other facilities.

Strategy 1: Monitor trees for health issues (Wildlife/Forestry).

Strategy 2: Trim and mulch around trees as needed (Wildlife).

Management Objective 4: Ensure that structures, roads, trails, parking lots, etc. are free from hazardous trees.

Strategy 1: Trees should be inspected for hazard conditions by trained area staff or with assistance of regional Forestry staff (Wildlife/Forestry).

Strategy 2: Trees and limbs identified as hazardous should be removed or pruned as soon as possible in accordance with the *Guidelines for Avoiding and Minimizing Impacts to Federally-Listed Bats on Missouri Department of Conservation Lands* (Wildlife/Forestry).

Management Objective 5: Manage bottomland grasslands.

Strategy 1: Manage grassland units with a combination of techniques, including, but not limited to, prescribed fire, mowing and selective herbicides to maintain a diverse plant community (Wildlife).

Strategy 2: Monitor plant diversity in each prairie and flooding effects on them. Supplemental plantings may be used if plant diversity is below desired level (Wildlife).

Strategy 3: Control invasive plants and trees in grassland plantings (Wildlife).

Management Objective 6: Utilize permittee farming as a technique to maintain open land, control problem plants and provide wildlife food sources.

Strategy 1: Design annual crop plans to maintain open areas. Address areas with invasive plant problems and provide food sources for wildlife (Wildlife).

Strategy 2: Utilize bartered services with permittee farmers to help address other area management goals (Wildlife).

Management Objective 7: Convert areas to small game habitats.

Strategy 1: Establish small game habitat on 300-500 acres of converted agriculture production ground. Evaluate field elevations and soil conditions to help determine what plant species will do best and plant accordingly (Wildlife).

Strategy 2: Monitor plant and animal response to this habitat conversion (Wildlife).

Strategy 3: Control invasive plants and trees in small game habitats (Wildlife).

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Manage for early successional herbaceous plant communities in seasonal wetlands.
- 2) Manage at least one wetland pool annually to create habitat for migrating shorebirds.
- 3) Manage wetland pools annually to create habitat for migrating waterfowl during fall and spring migrations.
- 4) Coordinate with the U. S. Army Corps of Engineers on any projects, on or near the area that may affect management of the area.
- 5) Investigate the feasibility of reconnecting the main slough area outside the river levee with the river to provide additional fisheries habitat.

Strategy 1: Utilize a combination of moist soil management techniques to maintain an open, early successional plant community dominated by native wetland plants (Wildlife).

Strategy 2: Periodically use row cropping in wetland pools as a soil disturbance technique and as a means of providing high energy foods for migratory waterfowl and escape cover (Wildlife).

Strategy 3: Carefully monitor water levels and manipulate water control structures and pumps to manage water levels efficiently (Wildlife).

Strategy 4: Control invasive plants and trees in wetlands (Wildlife).

Management Objective 2: Manage at least one wetland pool annually to create habitat for migrating shorebirds.

Strategy1: Annually ensure mud flats and shallow water habitats are available for migrating shorebirds in both spring (March) and fall (August) migratory periods (Wildlife).

Strategy 2: Consider public viewing opportunities when selecting pools for shorebird management (Wildlife).

Strategy 3: Utilize selective mowing and discing to create invertebrate substrate and open vistas (Wildlife).

Management Objective 3: Manage wetland pools annually to create habitat for migrating waterfowl during fall and spring migrations.

Strategy 1: Monitor water levels and manipulate water control structures and pumps to manage water levels efficiently (Wildlife).

Strategy 2: Annually evaluate vegetation in wetland pools and manage for early successional wetland plant communities (Wildlife).

Management Objective 4: Coordinate with the U. S. Army Corps of Engineers on projects, on or near the area that may affect management of the area.

Strategy 1: Keep apprised of U. S. Army Corps of Engineers projects in-river next to the area (Wildlife/Fisheries).

Strategy 2: Communicate with the U. S. Army Corps of Engineers on potential projects on the area that fall under the Missouri River Recovery Program (Wildlife).

Management Objective 5: Investigate the feasibility of reconnecting the slough outside the levee with the river.

Strategy 1: Explore ways to increase river-slough connectivity for improved seasonal fish habitat (Wildlife/Fisheries).

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Provide for hunting, fishing and viewing opportunities.
- 2) Manage area to minimize trash and property destruction.
- 3) Provide educational and interpretive opportunities.
- 4) Enforce area regulations.
- 5) Reevaluate the Visitor Center days/hours of operation.

Management Objective 1: Provide public hunting, fishing and viewing opportunities.

Strategy 1: Conduct annual management activities that will provide habitat for a variety of species (Wildlife).

Strategy 2: Seasonally flood wetland pools to provide waterfowl hunting opportunities (Wildlife).

Strategy 3: Monitor deer population levels and use this information to allow for managed deer hunts on the area to regulate deer numbers (Wildlife).

Strategy 4: Provide high quality dove hunting opportunities by providing a managed dove hunt program for the first portion of the dove season (Wildlife).

Strategy 5: Provide youth hunting opportunities for dove, turkey, waterfowl and deer. Work with Outreach and Education staff to provide an educational clinic and hunting event for each of these hunts (Wildlife/Outreach and Education).

Management Objective 2: Provide dove hunting fields.

Strategy 1: Utilize permittee farmers or area staff to establish at least 125 acres of wheat and sunflowers annually (Wildlife).

Strategy 2: Select required planting dates or proper variety of seed to ensure sunflowers mature no later than Aug. 10 annually (Wildlife).

Strategy 3: Begin annual field manipulation (mowing or discing) of wheat and sunflowers by Aug. 1 and continue periodically through the month of August (Wildlife).

Strategy 4: Utilize alternative crops such as buckwheat or millets, where appropriate, to provide an alternative food source for doves (Wildlife).

Management Objective 3: Maintain and enforce area regulations. Work to minimize area property destruction and littering.

Strategy 1: Patrol area on a regular basis (Wildlife/Protection).

Strategy 2: Encourage assistance from local law enforcement agencies by maintaining security contract with St. Louis County Police and working with other agencies as needed (Wildlife/Protection).

Strategy 3: Protection Division will oversee enforcement efforts with area staff assisting as needed. Arrange for special patrols to curb area abuse problems (Protection).

Strategy 4: Monitor area use and evaluate the effectiveness of area regulations (Wildlife/Protection).

Strategy 5: Ensure needed regulation changes are submitted for code review (Wildlife/Protection).

Management Objective 4: Continue to provide and expand non-personal interpretive opportunites for individuals and groups.

Strategy 1: Maintain current man-made and natural structures, which include, but are not limited to, the Exploration Stations, overlook platforms at the Cropland Exploration Station and Confluence area, ADA facilities, trail system, etc. (Wildife/Outreach and Education).

Strategy 2: Review interpretive signage and update or repair signage as necessary (Outreach and Education).

Strategy 3: Renovate Visitor Center exhibits to reflect current management of area resources and to support the Discover Nature curriculum (Outreach and Education).

Management Objective 5: Continue to provide and expand personal interpretive and educational opportunities.

Strategy 1: Provide comprehensive educational and interpretive opportunities that promote the Discover Nature curriculum and outdoor skills (Outreach and Education).

Strategy 2: Continue to provide programming on-site and off-site for organized groups and the general public (Outreach and Education).

Strategy 3: Solicit area teachers via Conservation Education Consultants to bring their students out for Discover Nature field trips (Outreach and Education).

Strategy 4: Present one public special event per year. Evaluate the potential to add an associated special school event (Outreach and Education).

Management Objective 6: Re-evaluate the Visitor Center days/hours of operation.

Strategy 1: Monitor public use of the Visitor Center by maintaining a record of phone calls received and visitors who enter the Visitor Center (Wildlife/Outreach and Education).

Strategy 2: Analyze the record of phone calls received and visitors to determine if a change in days of operation should be recommended (Wildlife/Outreach and Education).

Strategy 3: Make recommendations to administration to best meet staff and visitor needs (Wildlife/Outreach and Education).

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain area infrastructure at current levels.
- 2) Repair flood damage on main area road.
- 3) Maintain flood protection levee.
- 4) Maintain relationships with neighbors.
- 5) Provide the U.S. Army Corps of Engineers with an annual management plan on habitat enhancement projects.
- 6) Acquisition of land.

Management Objective 1: Maintain area infrastructure at current levels.

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

Strategy 2: Work with Department construction crews to develop and implement a plan to repair/replace damaged asphalt roads (Wildlife/Design and Development).

Management Objective 2: Maintain the flood protection levee.

Strategy 1: Maintain flood protection levee to U. S. Army Corps of Engineers' standards (Wildlife/Design and Development).

Management Objective 3: Facilitate a good working relationship with neighboring land owners.

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

Stragey 2: Work to keep neighbors informed of major activities or changes on the area (Wildlife/Outreach and Education).

Management Objective 4: Provide the U. S. Army Corps of Engineers with an annual management plan for habitat enhancement projects.

Strategy 1: Work with the U. S. Army Corps of Engineers to develop and implement an annual habitat management plan. (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 (Wildlife).

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

| | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 | | |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|--|--|
| Terrestrial Resource Management | | | | | | | | | | | | |
| Objective 7 | | | | | | | | | | | | |
| Strategy 1 | X | X | X | X | X | | | | | | | |
| Strategy 2 | X | X | X | X | X | | | | | | | |
| Aquatic Resource Management | | | | | | | | | | | | |
| Objective 5 | | | | | | | | | | | | |
| Strategy 1 | | | X | | | | | | | | | |
| Public Use Manangement | | | | | | | | | | | | |
| Objective 4 | | | | | | | | | | | | |
| Strategy 3 | | | X | | | | | X | | | | |
| Objective 5 | | | | | | | | | | | | |
| Strategy 4 | | X | | | | | | | | | | |
| Objective 6 | | | | | | | | | | | | |
| Strategy 2 | X | | | | | | | | | | | |
| Strategy 3 | X | | | | | | | | | | | |
| Administrative Consideration | | | | | | | | | | | | |
| Objective 1 | | | | | | | | | | | | |
| Strategy 2 | | X | X | | | | | | | | | |

APPENDICES

Area Background:

Columbia Bottom CA is located at the confluence of the Missouri and Mississippi rivers in the north St. Louis County community known as Spanish Lake. The Department purchased this 4,318-acre area in 1997 to create an urban conservation area. The area includes a view of the confluence of the Missouri and Mississippi rivers, more than 6.5 miles of river frontage, about 900 acres of bottomland forest and a 110-acre island.

A flood protection levee protects most of this bottom from minor floods. The Great Flood of 1993 overtopped this levee and flooded most of the area, depositing sand and debris. The area is still prone to occasional flooding as experienced in 2002, 2008 and 2013.

The Department is managing Columbia Bottom CA to create a mosaic of bottomland habitats that includes shallow wetlands, bottomland hardwoods, grassland and cropland. These habitats attract a wide variety of resident and migratory wildlife for the enjoyment of Missouri's residents and visitors.

The Howard and Joyce Wood Education and Visitor Center is located near the entrance to the area. Normal operating hours are 8 a.m. to 5 p.m., Wednesday through Friday; and 8 a.m. to 4 p.m., Saturday and Sunday. The Visitor Center is closed on Mondays, Tuesdays and official state holidays. The area is open from a half-hour before sunrise to a half-hour after sunset daily, except for authorized hunting and fishing activites and launching and landing boats.

Current Land and Water Types:

| Land/Water Type | Acres | Miles | % of Area |
|-----------------------------------|-------|-------|-----------|
| Cropland | 1,500 | | 34 |
| Wetlands | 900 | | 21 |
| Forest | 800 | | 19 |
| Reforestation | 500 | | 12 |
| Grassland | 400 | | 9 |
| Infrastructure | 118 | | 3 |
| Old Field | 100 | | 2 |
| Total | 4,318 | | 100 |
| River Frontage - Missouri River | | 3.7 | |
| River Frontage- Mississippi River | | 2.8 | |

Public Input Summary:

The draft Columbia Bottom Conservation Area Management Plan was available for a public comment period August 1– September 30, 2015. The Missouri Department of Conservation received 11 comments from 10 respondents (Appendix A). The Columbia Bottom 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.

Prior to writing this draft area management plan, the Department conducted a public input process (the Columbia Bottom Conservation Area Idea Gathering Stage) from Jan. 15 – Feb. 15, 2015. The objectives of this phase were to inform key stakeholders that the Department is drafting an area management plan, to identify initial issues and concerns from stakeholders and to determine how best to reach out to stakeholders and the public during the upcoming public comment period. The Department sent emails to 32 organizations and neighbors and received comments back from nine respondents. Department responses to comments received during the idea gathering stage can be found in the report, Missouri Department of Conservation Responses to Public Comments – Columbia Bottom Idea Gathering Stage. This report is available upon request by contacting Amy Buechler (amy.buechler@mdc.mo.gov).

<u>Department responses to themes and issues identified through Columbia Bottom Conservation</u> <u>Area public comment period</u>

Opposes maintaining cropland on this area. Would like to see less cropland and more trees.

There is an ongoing project to reduce large grain cropland on the area. A portion of the area is being converted to small game friendly habitat over the next several years. Row cropping does provide additional food resources and cover for wildlife and is used to control invasive plants. A certain amount of row cropping will remain on area into the future.

Suggests maintaining and improving biking and hiking trails. Suggests repaving trails. Future flood damage to infrastructure is being considered before restoring trails and roads. The Confluence Trail will be restored to a gravel surface.

Appreciates this bike-friendly area. Opposes bicycle use on this area.

Bicycle usage is limited to roads open to vehicles and designated trails. No off road bicycling is allowed.

Suggests expanding time that horseback riding is allowed (from April-August to January-August). Suggests allowing horseback riding year-round in portions of the area closed to hunting. Recommends allowing horseback riding on the Confluence Trail.

Horseback riding is currently allowed on Madison Ferry Trail from April 1 to August 31. Ground conditions during this time frame provide a solid surface and tend to dry out quickly, which minimizes any trail surface damage. Due to soft soil conditions from freeze-thaw conditions in January through March, horseback riding could result in trail surface damage. The area is closed to horseback riding September 1 each year due to the fall hunting seasons. Hunting allowed includes Dove, Waterfowl, Managed Deer Hunts and Managed Youth Spring Turkey Hunts. Hunting is allowed on all of the area except in the No Hunting zones near the Visitor Center, Boat Ramp, and Confluence, and the Waterfowl Refuge. The Waterfowl refuge is closed to all public uses from October 15 to February 15 each year to allow migrating waterfowl a safe and quiet place to rest and feed. The Confluence trail has multiple surface types and is located on the area flood protection levee. Due to concerns about potential trail surface damage and damage to the area levees during wet conditions, the Department does not intend to allow horseback riding on the Confluence Trail.

Suggests partnering with birding organizations to add elevated platforms along road bordering Pools 3, 4, and 5 for wildlife viewing.

Any structures would have to meet construction standards (including Americans with Disabilities Act [ADA] accessibility), have available funding and would only be accessible from the end of duck season to October 15 each year.

Suggests allowing road access to Pool 2 during spring and fall migration to view birds.

Refuge pools 1 and 2 are closed to all public access from October 15 to February 15 each year to allow migrating waterfowl a safe and quiet place to rest and feed during their migration each fall and spring. These pools are accessible before and after these dates. Access is by foot traffic only. Current road access is a narrow one lane service road which is not set up to handle regular vehicular traffic and there are no turn around or pull off locations on this service road.

Suggests acquiring additional land adjacent to this area.

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.

Concerned that levee district doesn't exist and repairs are not being made.

The Department will evaluate and appropriately respond to levee issues on Columbia Bottom Conservation Area as they occur.

Suggests increasing visitor center hours of operation.

Current staffing will not allow for increased hours of operation. Staff is looking at visitation records to see if a change in the days of operation should be considered.

Suggests partnering with local schools and organizations to increase area use.

There are current and future plans to partner with school, youth, church, and other organizations to increase area usage.

Suggests increased enforcement patrols at this area.

The Department currently contracts with the St. Louis County Police Department to patrol the area on a regular basis. In addition, the Department conservation agents also patrol the area on a regular basis.

References:

Nigh, T. A., & Schroeder, W.A. (2002). *Atlas of Missouri ecoregions*. Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Topographic Map

Figure 4: Current Vegetative Map

Figure 5: Easement Map

Additional Appendices:

Appendix A: Columbia Bottom Area Plan Comments

Figure 1: Area Map

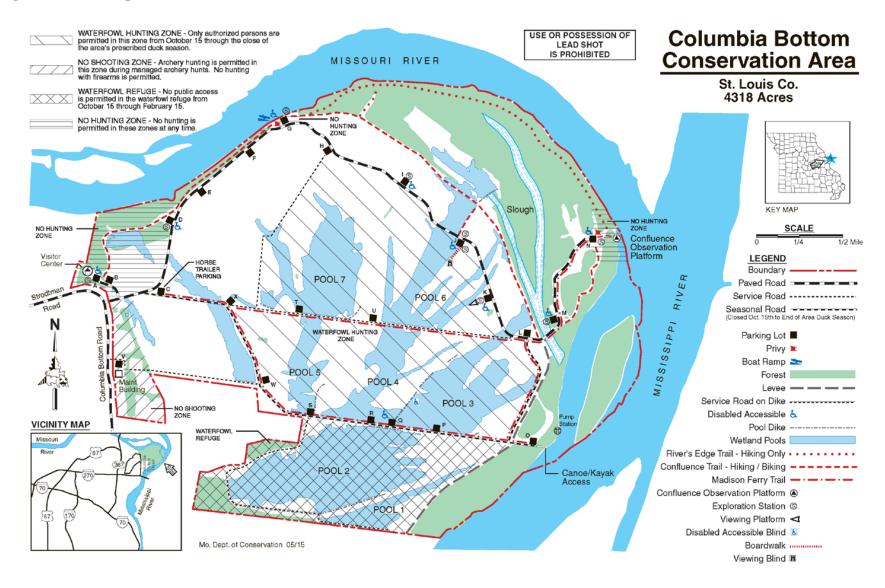


Figure 2: Aerial Map

Columbia Bottom CA Aerial View



Figure 3: Topographic Map

Columbia Bottom CA Topographical View

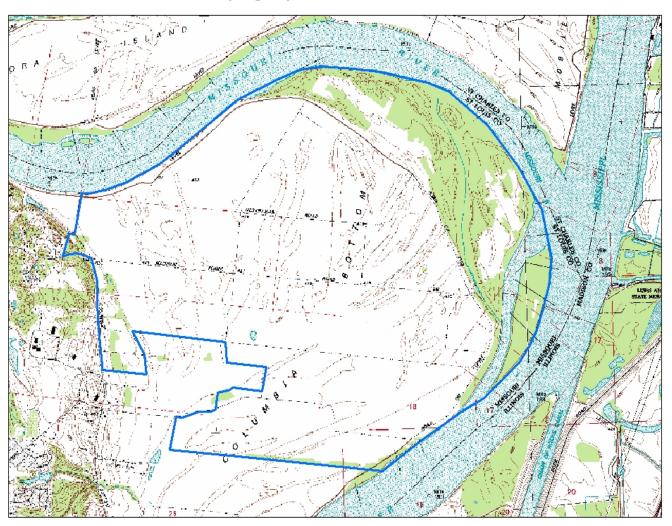


Figure 4: Current Vegetative Map

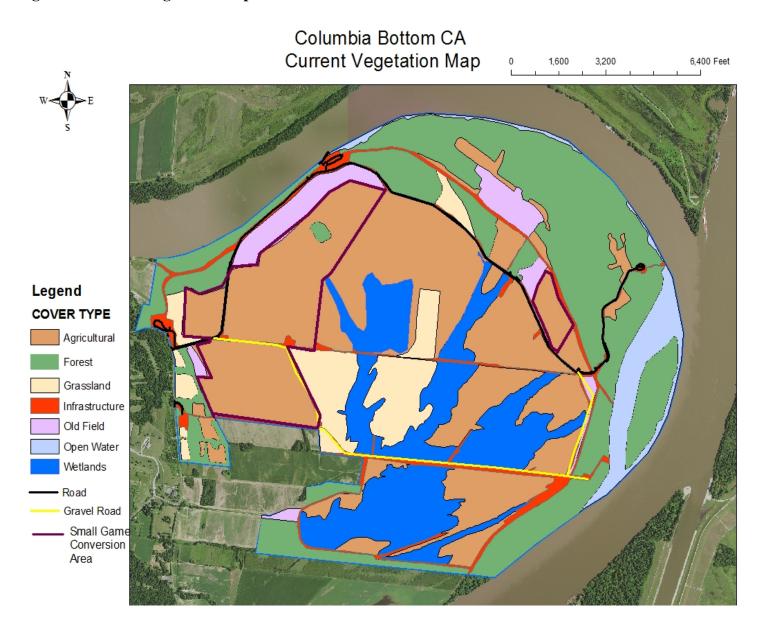
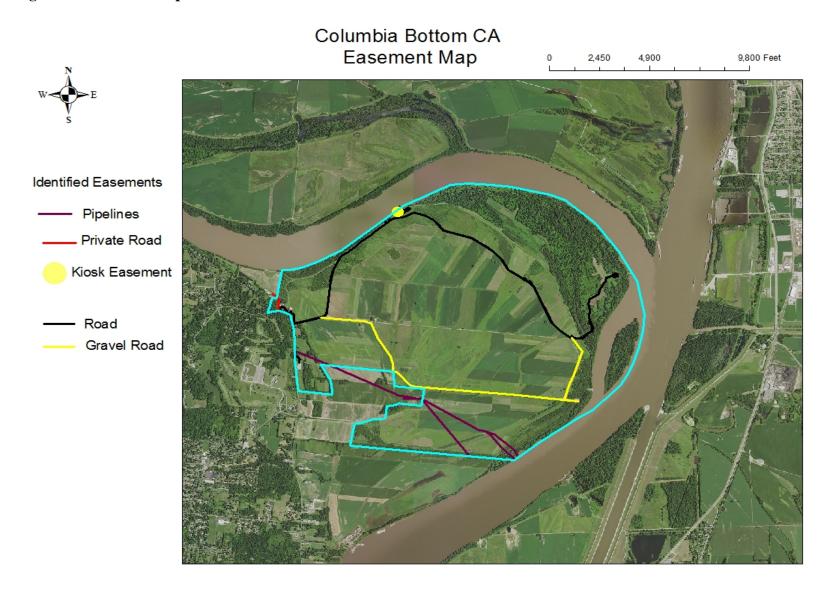


Figure 5: Easement Map



Appendix A. Columbia Bottom Conservation Area Plan Public Comments

Received during public comment period (August 1-31, 2015)

The strategic directions states "managed to enhance and restore its large river ecosystem and associated mosaic of bottomlands habitats". Cropland was not a component of the large river ecosystem, The plan is so vague that it is difficult to determine how much cropland will be maintained in the future but it should be almost none. The large river ecosystem on this portion of the Missouri River was mostly riparian forest. The levees and much of the expensive infrastructure are for protecting cropland which is not a habitat that will enhanced the conservation area for big river wildlife and plants plus provide a supplement to river fish and other aquatic resources.

For Columbia Bottom land, a return to trails that are passable, less farming and more scenic nature preserves. I have voiced this opinion to the area manager in 2014.

Presently, plenty of woods, trees have declined. To be blunt, since there is less of a white population here in this area of north county; there seems less energy or willingness to provide the same calibur of care and creative energy for the less fortunate group of former residents of St louis city and surrounding communities.

What is needed is the same unbias approach to management of the north county land, instead of selling parts or leasing land areas for the local farmers to grow crops.

While I do understand the arrangement, I wonder if this same arrangement is offered in other conservation areas.

In my humble opinion no one speaks for me in regard to managing this property.

Look, I am not affiated with any political parties and this isn't self serving, my reasons are simple, I love this part of north county, But we are getting a RAW deal here and there seems to be no one willing to go to bat for us.

Excuse me but, I am not a SECOND CLASS CITIZEN,

Finally, I voiced my concerns last year 2014, to the area director took me on a tour to explain the rationale for present management of the land. I am left with the reasoning, we are the losers. When the whites (please forgive the reference this way) moved away, so did the commitment. I am sorry to be so harsh, but that is what I feel.

Contact me, if you want to speak on the Missouri Bottom's land, I won't hold my breath.

If land is available for purchase, that is a must to increase the size of the area. Continue to maintain and improve biking and hiking trails. Do not decrease but instead increase the hours of operation for the visitor center. So many people need to connect with nature and the outdoors so time and programs should be there for them. Partnership with local schools and organizations to increase use and opportunities. Overall the Department of Conservation does a great job.

(phone conversation 8/11/2015): The respondent previously submitted an online comment, but called to reiterate some concerns. He has lived near Columbia Bottom Conservation Area since 1997 and really enjoys the park. For many years he walked the area daily. In the last 5-6 years it seems like fewer and fewer people are visiting the area. His concerns include:

- Former walking trails are now closed and have been gated off and converted to cropland.
- Too many crops on area; should be more trees.
- Area should be better maintained and patrolled. Would like to see more police officers patrolling this area. Concerned about people using area as dumpsite and other illegal activities.

I enjoy visiting CBCA and highly recommend to all new to this area. I have stopped biking in the area due to the fact the bike/hiking trails have not been repaired. It would be nice to have the asphalt pavement again.

I would add that it would be helpful to have elevated platforms along the gravel road bordering Pools 5, 4, & 3 to view the wildlife using this area. Partnership with organizations such as St Louis Audubon could possibly help fund the erection of these blinds. I would also like to have access to Pool 2 during Spring and Fall migration to observe the birds using the area. Access could be limited to the road only.

Thank you for accepting and considering our comments.

We run a friendly bicycling competition at CBCA on Wednesday evenings in the summer. Our riders compete individually, against the clock. Our participants are doctors, lawyers, construction workers, college professors, stay-at-home moms and dads, graphic designers... There from just about every profession, and from all walks of life. Many also complete in other related sports such as running or triathlons. All share a the same goal of maintaining a healthy lifestyle.

We - the organizers and event participants alike - value the beauty, the atmosphere and the safety that CBCA offers our evening events. CBCA is bike friendly. Area visitors get along well with our riders, making it safe for all. The rideable portion of the road has good visibility and ample room for all traffic. The area itself is well managed and beautiful; and we work hard to help keep it that way when we visit.

Our feedback on the current plan is only this: Continue to manage the area as effectively as it has been to date and expedite repairs on the main road. Repairing/replacing the road will make

CBCA more accessible to bicycle traffic, both by our riders and other area visitors.

Thank you,

Thank you for the opportunity to comment on the Draft Columbia Bottom CA Management Plan, and thank you for permitting some equestrian use, albeit very restricted.

The draft plan says horseback riding is permitted on the 7.8 mile Madison Ferry Trail. This "trail" is identified on various other maps as "Madison Ferry Road" or "area service road." There is, it would seem, no trail at all but a gravel road.

The Area Regulations states that no horseback riding opportunities exist except on public roadways, and the Area Summary states that such use is allowed only between April 1 and August 31. Horseback riding on other Conservation Areas around the state is prohibited during the fall firearms deer seasons and spring turkey season. Turkey hunting is not permitted on CBCA; there is no deer hunting allowed following statewide regulations, and there is no managed deer hunt on CBCA during 2015-2016.

The Waterfowl Hunting Zone consists of less than 2,000 acres--less than half the area--and seasons, including dove hunting season, extends from Sept. 1 to Jan. 31. There would seem to be no reason the portions of the area open to waterfowl hunting should be closed to equestrian use after Jan. 31; we recommend that such use be permitted between Feb. 1 and March 31.

Since most of CBCA is never open to deer, turkey, or waterfowl hunting we recommend that service roads and existing trails in areas closed to hunting be open to equestrian use, as well as hiking and biking, during the entire year. We recommend that the Confluence Trail and the River's Edge Trail be designated multi-use trails open to hiking, biking, and horseback riding.

Thank you again for the opportunity to comment on the Draft CBCA Management Plan.

I attempted to reach out and contact MDC last year to no avail concerning then need to form a levee district between the five owners of the Columbia Bottoms Levee. MDC elected not to respond to my request. The lack of MDC leadership has left the tax payers with a serious dilemma. The Levee has a big hole in it. This means that the entire MDC Columbia bottoms area is at risk to be damaged or destroyed. In 2013 my levee broke and I agreed to partially repair it and the Corp. of Engineers agreed to finish it. The Corp. also said they will no longer repair the Columbia Bottoms Levee until we five formed an agreement. The letter I sent to MDC to start this process was ignored. Now, two years later the Levee broke again and remains to this date a severe threat to the entire Columbia Bottoms area. Valuable time has passed with the warm weather to fix the Levee. Every spring brings the threat of flooding. So, if this Levee is not repaired during good weather, all of the Bottoms residents and farmers will be facing the spring and the chance of floods. When the bottoms flood, approximately 2,000 acres of crop can be destroyed, numerous amounts of sand is deposited onto the farm fields which contaminates

the soil and the crop yield. Their are some homes that are also effected during a flood. I personally do not see how any plans can be made, or if crops can be planted while this hole exists. And I do not understand how the management of MDC will allow tax payers dollars to be wasted, or put in jeopardy. When a Levee breaks usually the owners put in 20% of the cost and the Corp. 80%. Without a levee agreement, the Corp. will not participate. As it stands MDC will just take the loss (the tax payers money) because they are not accountable to anyone. I'm hoping an elected official takes an interest and looks into this matter.

I do not expect an answer back from MDC. Why? Because they don't have to.

This area is Awesome, I have hunted this are.

Bicycles should not be allowed in any natural area. They are inanimate objects and have no rights. There is also no right to mountain bike. That was settled in federal court in 1996: http://mjvande.nfshost.com/mtb10.htm . It's dishonest of mountain bikers to say that they don't have access to trails closed to bikes. They have EXACTLY the same access as everyone else --ON FOOT! Why isn't that good enough for mountain bikers? They are all capable of walking....

A favorite myth of mountain bikers is that mountain biking is no more harmful to wildlife, people, and the environment than hiking, and that science supports that view. Of course, it's not true. To settle the matter once and for all, I read all of the research they cited, and wrote a review of the research on mountain biking impacts (see http://mjvande.nfshost.com/scb7.htm). I found that of the seven studies they cited, (1) all were written by mountain bikers, and (2) in every case, the authors misinterpreted their own data, in order to come to the conclusion that they favored. They also studiously avoided mentioning another scientific study (Wisdom et al) which did not favor mountain biking, and came to the opposite conclusions.

Those were all experimental studies. Two other studies (by White et al and by Jeff Marion) used a survey design, which is inherently incapable of answering that question (comparing hiking with mountain biking). I only mention them because mountain bikers often cite them, but scientifically, they are worthless.

Mountain biking accelerates erosion, creates V-shaped ruts, kills small animals and plants on and next to the trail, drives wildlife and other trail users out of the area, and, worst of all, teaches kids that the rough treatment of nature is okay (it's NOT!). What's good about THAT?

To see exactly what harm mountain biking does to the land, watch this 5-minute video: http://vimeo.com/48784297.

In addition to all of this, it is extremely dangerous: http://mjvande.nfshost.com/mtb_dangerous.htm.

For more information: http://mjvande.nfshost.com/mtbfaq.htm .

The common thread among those who want more recreation in our parks is total ignorance about and disinterest in the wildlife whose homes these parks are. Yes, if humans are the only beings that matter, it is simply a conflict among humans (but even then, allowing bikes on trails harms the MAJORITY of park users -- hikers and equestrians -- who can no longer safely and peacefully enjoy their parks).

The parks aren't gymnasiums or racetracks or even human playgrounds. They are WILDLIFE HABITAT, which is precisely why they are attractive to humans. Activities such as mountain biking, that destroy habitat, violate the charter of the parks.

Even kayaking and rafting, which give humans access to the entirety of a water body, prevent the wildlife that live there from making full use of their habitat, and should not be allowed. Of course those who think that only humans matter won't understand what I am talking about -- an indication of the sad state of our culture and educational system.