Ted Shanks Conservation Area

25-Year Area Management Plan

FY 2020-2044

Joel W. Porath	7/25/2019
Wildlife Division Chief	**Date**

Ted Shanks Conservation Area Management Plan Approval Page

PLANNING TEAM

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WILDLIFE DIVISION

Wildlife Management Chief	Michael D. Schroer	7/24/2019
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OVERVIEW

- **Official Area Name:** Ted Shanks Conservation Area #7011
- **Year of Initial Acquisition:** 1970
- **Acreage:** This area includes 6,705 acres. The Missouri Department of Conservation (MDC) owns 3,827 acres. MDC manages and leases the remaining 2,878 acres from the U.S. Army Corps of Engineers (USACE).
- **County:** Pike
- **Region:** Northeast
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
    - **A. Strategic Direction**
      Protect, restore, and manage fish, forest, and wildlife habitats; particularly wetlands and their associated plants and animals, emphasizing biodiversity and ecosystem integrity, while providing high-quality public use opportunities for hunting, fishing, and wildlife viewing.
    - **B. Desired Future Condition**
      The desired future condition of Ted Shanks Conservation Area (CA) is a healthy, intensively managed wetland complex of seasonal, semi-permanent, and permanently flooded habitats and associated bottomland forest adjacent to the Mississippi and Salt rivers to provide diverse habitats for a suite of game and non-game species.
    - **C. Federal Aid Statement**
        - This area, or a portion thereof, was acquired with Pittman-Robertson Wildlife Restoration funds to restore and manage wildlife, conserve, and restore suitable wildlife habitat and provide public access for hunting or other wildlife-oriented recreation.
        - This area, or a portion thereof, was acquired with Land and Water Conservation Fund dollars to provide land or facilities for public outdoor recreation.

GENERAL INFORMATION AND CONDITIONS

I. <u>Special Considerations</u>

A. Priority Areas: Mississippi River Stream Reach Conservation Opportunity Area and Ted Shanks Wetland Complex Conservation Opportunity Area

B. Natural Areas: Oval Lake Natural Area (12.5 acres) was designated in 1974 to recognize a natural floodplain pond that was noted on 1816 Government Land Office plots. Due to its lack of rare species, low plant diversity, and small size, it is currently being considered for declassification. Bur-Reed Slough Natural Area (40.5 acres) is a

small natural marsh that is dominated by giant bur-reed and great river bulrush. Designated a natural area in 1974, this marsh has moderate to high plant diversity and has provided nesting habitat for a variety of wetland birds, including king rails, American bitterns, and least bitterns (all Missouri species of conservation concern).

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. High Quality Natural Communities: Yes, records kept with MDC natural history biologist.

C. Caves: None

D. Springs: None

E. Other: According to the *Missouri Atlas of Ecoregions* (Nigh & Schroeder, 2002): The area lies in the Central Dissected Till Plains Section, Mississippi River Alluvial Plain Subsection. The landtype association is Till Plains Alluvial Plain. This landtype association consists of the alluvial plain and channel of the Mississippi River. Soils are very deep loamy and clayey soils of variable drainage capacities. Historically, annual flooding created a shifting mosaic of bottomland forests, marshes, wet prairies, and sand bars.

III. Existing Infrastructure

- Headquarters: six offices, conference room, draw room, visitor room, observation room, hunter check in/out/information room, bunk room with kitchen and full bath, and public men's and women's restrooms, all are Americans with Disabilities Act (ADA) accessible. The headquarters building has a constructed earthen berm surrounding it to protect from major flooding events.
- Maintenance shop: three vehicle bays, one office, employee restroom
- Equipment storage shed
- Flood protection levee (13.5 miles)
- Three pump stations (two diesel-powered and one three-phase electric powered)
- Twenty-four wetland pools with associated water-control structures
- Roads and interior levees (35 miles)
- Twenty-three gravel parking lots (two are ADA-accessible with concrete pads)
- One gravel boat ramp
- Two concrete boat ramps (one ramp at Horseshoe Lake, one ADA-accessible ramp at Salt River)
- Nine waterfowl hunting blinds (one is ADA-accessible)
- One primitive camping area

- Two privies (both are ADA-accessible)
- Ducks Unlimited monument
- Hiking trail (0.3 miles)
- Horseshoe Lake (70-acre fishing lake)
- Flag Lake (40-acre fishing lake)
- Rainbow Lake (10-acre fishing lake)

IV. Area Restrictions or Limitations

A. Deed Restrictions or Ownership Considerations: A portion of the area (2,878 acres) is owned by the USACE and managed by MDC through a cooperative agreement with the U.S. Fish and Wildlife Service.

B. Federal Interest:

- Sport Fish Restoration federal funds were used in the development of this area, or a portion thereof. MDC 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.
- Uses of land acquired with Pittman-Robertson Wildlife Restoration 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.
- This land must provide land/facilities for public outdoor recreation in perpetuity. Land and Water Conservation 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.
- A Habitat Restoration and Enhancement Project funded through the USACE's Environmental Management Program was initiated to address habitat degradation issues on the USACE-owned portion of the area. The project features included construction of river levee setbacks, interior levees, water-control structures, and a three-phase electric pump station. In a letter dated Oct. 5, 2004, MDC agreed to pay the operating and maintenance costs for the project.

C. Easements:

- Ameren has an easement for three-phase electric service to a newly constructed pump station.

- BNSF Railway owns a track that runs approximately 4 miles along the western boundary of the area with two crossings that provide vehicular access to the area.

D. Cultural Resources Findings: No known cultural resources.

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: None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

1) Provide high-quality waterfowl habitat and refuge that supports abundant waterfowl populations during spring and fall migrations.
2) Manage wetland pools and adjoining upland habitat to provide a large wetland complex that supports a broad suite of wetland-dependent species throughout the year.
3) The area contains some of the best examples of wetlands occurring in the lower impounded reach of the Upper Mississippi River and Lower Salt River. Alterations, such as lock-and-dam construction on the Mississippi River and dam construction on the Salt River, have affected flood frequency, depth, duration, and base flows; making wetland management more challenging. Recent wetland renovations have partially restored stream-floodplain connectivity along the Salt River.
4) Controlling invasive plant species, particularly reed canary grass, phragmites, sesbania, purple loosestrife (in the wetlands), and bush honeysuckle (in the upland forest) require significant resource commitments.
5) Past flooding and altered hydrology due to river management have caused extensive loss of bottomland forest, especially hard-mast species. New water-control structures and a third pump station will provide new opportunities to restore and maintain bottomland forest.

Management Objective 1: Manage wetland pools to provide food and refuge for spring and fall migrating waterfowl.

Strategy 1: Manage pools using a variety of moist-soil management techniques, including but not limited to mowing, spraying, burning, and disking. Manage water in spring and fall to promote native annual plants that are shallowly flooded and to provide interspersed open-water areas. (Wildlife)

Strategy 2: Plant large- and small-grain crops to manage succession and provide high-energy food for waterfowl annually. (Wildlife)
Strategy 3: Manage spring and fall water levels to maximize the amount of shallowly flooded habitat, interspersed with mudflats to serve as forage and loafing areas for waterfowl. (Wildlife)
Strategy 4: Continue to provide high-quality inviolate refuge, per dates given in the *Wildlife Code of Missouri* that supports large concentrations of waterfowl. (Wildlife)

Management Objective 2: Manage site suitable wetland units to promote diverse wetland communities, including moist-soil interspersed with open water, emergent marsh, and shrub-scrub wetlands to provide for a broad range of wetland-dependent species.

Strategy 1: Manage water levels in conjunction with mechanical and/or chemical treatments throughout the year to promote and maintain moist-soil, emergent marsh, and shrub-scrub habitat for a broad range of wetland species. (Wildlife)

Management Objective 3: Manage the Bur-Reed Slough Natural Area to maintain a high quality natural area and continue collecting data toward the delisting of Oval Lake Natural Area.

Strategy 1: Continue prescribed burns on Bur-Reed Slough Natural Area to control woody encroachment. (Wildlife)
Strategy 2: Provide for the annual life cycle needs of marsh-nesting species of conservation concern. (Wildlife)
Strategy 3: Collect plant and animal data to support delisting Oval Lake Natural Area. (Wildlife)

Management Objective 4: Control and monitor invasive plant species.

Strategy 1: Control invasive plant species, including but not limited to reed canary grass, phragmites, sesbania, and purple loosestrife, with chemical and mechanical means. (Wildlife)
Strategy 2: Continually monitor for new and/or recurring populations of invasive plant species and treat as necessary. (Wildlife)

Management Objective 5: On appropriate sites, adaptively manage forest communities to provide healthy and diverse habitats for forest-dependent wildlife.

Strategy 1: Develop an understanding of how to utilize new infrastructure (large water-control structures and pump station) to help maintain existing bottomland forest and provide conditions that enhance opportunity for long-term tree survival. (Wildlife)

Strategy 2: Periodically monitor for the presence of invasive forest pests and treat as needed. (Forestry, Wildlife)
Strategy 3: Utilize a variety of sustainable forest management techniques to promote healthy forest communities including, but not limited to, timber harvesting, forest stand improvement, firewood cutting, salvage cutting, tree planting, seeding, and prescribed burning. (Forestry, Wildlife)
Strategy 4: Utilize best management practices during forest management, as described in MDC's *Missouri Watershed Protection Practice* manual (MDC, 2014b) and the *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* (MDC, 2014a) (Forestry)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

1) Manage fish, freshwater mussels, crayfish, amphibian, aquatic reptiles, and other aquatic or semi-aquatic species compatible with an area intensively managed for waterfowl and wetland diversity.
2) Missouri species of conservation concern occur in the Mississippi and Salt rivers, adjoining riparian corridor, and interior wetland units.
3) Invasive aquatic species, such as common carp, bighead carp, and silver carp, are common throughout the area and affect both species and habitat management opportunities.
4) Recent upgrades to water-control structures surrounding the Horseshoe Lake Management Unit were designed to prevent migration of most fish into or out of the unit, thus creating additional fisheries management opportunities.
5) Recent levee setbacks have provided connectivity of 300 acres of floodplain forest to the Salt River, allowing for natural fisheries production.

Management Objective 1: Manage the area's streams and adjacent floodplain for a diversity of aquatic species, consistent with other management objectives.

Strategy 1: Maintain riparian corridors to a width of at least 300 feet, or to the maximum width possible, along the Mississippi and Salt rivers. (Wildlife)
Strategy 2: Continue to manage riparian areas for streambank stability, which will help promote quality instream habitats for fish and other aquatic organisms, in accordance with MDC's stream management guidelines (MDC, 2009). (Wildlife)
Strategy 3: Opportunistically setback exterior levees, if conditions and funding allow. (Wildlife, Design and Development)
Strategy 4: Maintain or allow woody species to develop alongside interior water distribution canals when it does not interfere with management of the area. (Wildlife)

Management Objective 2: Minimize impacts to aquatic and semi-aquatic species while managing wetland resources.

Strategy 1: Maintain elevated water levels during spring and early summer in wetland units with fisheries management potential when possible. (Wildlife, Fisheries)

Strategy 2: Identify appropriate water levels to optimize available habitats for fish, freshwater mussels, crayfish, amphibians, and turtles. (Wildlife, Fisheries)

Strategy 3: Conduct wetland unit drawdowns in a manner to allow aquatic species to migrate to deeper water. (Wildlife)

Strategy 4: Eliminate or reduce total dewatering of management units where practical. (Wildlife, Fisheries)

Strategy 5: Direct water to wetland units to maintain minimum water levels during periods of low precipitation. (Wildlife)

Strategy 6: Allow the area to back-flood from river resources when it will not interfere with other management objectives. (Wildlife)

Management Objective 3: Manage area fish populations.

Strategy 1: Survey fish and mussel populations in individual wetland management units and manage those populations to maximize their potential. Resurvey every three to five years. (Fisheries)

Strategy 2: Stock supplemental fish species, as needed and if approved. Examples include supplemental channel catfish stockings to meet the public's interest or piscivorous species, which could help control invasive fish species. (Fisheries)

Strategy 3: Conduct depth analysis and aquatic habitat surveys of wetland units containing permanent water in order to identify seasonal aquatic habitat availability. (Fisheries)

Strategy 4: Monitor and manage vegetation in fishable wetland units as needed. (Fisheries)

Strategy 5: Place submerged hard cover for fish in select locations in wetland management units where fisheries management potential exists. (Fisheries)

Strategy 6: Submit regulation changes, as needed, to better address management objectives of aquatic species on the area. (Fisheries, Wildlife, Protection)

VII. Public Use Management Considerations

Challenges and Opportunities:

1) The waterfowl hunting program on Ted Shanks CA provides excellent opportunity on a large scale, while balancing hunter preferences for a range of hunting styles.

2) The area provides quality archery deer hunting and is a popular destination for both resident and non-resident hunters. Access is limited seasonally by road or zone closures.
3) Access to the Mississippi River is available by walk-in only and to the Salt River by one parking lot with boat ramp. Boating access to the Mississippi River is available from the Salt River boat ramp or on the adjoining DuPont Reservation CA boat ramp.
4) Access to interior wetland units is good via shoreline parking lots and gravel boat launches. Maintenance of existing launches and parking lots is a priority to provide opportunities for hunting, fishing, and nature viewing.
5) Work to build positive relationships with stakeholders (such as neighboring landowners and duck clubs) by providing timely assistance if private access or public use issues develop.
6) The area's size, habitat diversity, and existing infrastructure provide good educational and interpretive opportunities.
7) Portions of the area are closed to all activity, except waterfowl and archery deer hunting from Oct. 15 until the end of the appropriate zone's duck season. The waterfowl refuge portion of the area is closed to all activity from Oct. 15 through March 1.

Management Objective 1: Provide a range of waterfowl hunting opportunities to meet the needs and preferences of waterfowl hunters.

Strategy 1: Continue administering a daily draw system to fairly allocate waterfowl hunting opportunity during the area's prescribed duck season. (Wildlife)

Strategy 2: Maintain and provide waterfowl hunting opportunities that include blinds, wade-and-shoot, and boat-blind hunting. (Wildlife)

Strategy 3: Continue to provide one ADA-accessible waterfowl hunting blind. (Wildlife)

Management Objective 2: Provide quality deer hunting opportunities.

Strategy 1: Manage for quality archery deer hunting opportunities through food plot planting and management. (Wildlife)

Strategy 2: Maintain area deer regulations that promote a sustainable population with a balanced age structure. (Wildlife, Protection)

Management Objective 3: Maintain access to stream and wetland resources for aquatic-based recreational activities.

Strategy 1: Maintain parking lot, boat ramp, and bank-fishing access points on the Mississippi and Salt rivers. (Wildlife)

Strategy 2: Maintain parking lots, gravel and concrete boat ramps, and bank-fishing access points to individual lakes and wetland units. (Wildlife)

Management Objective 4: Provide wildlife viewing and parking areas that are inviting to the public.

Strategy 1: Maintain all current parking lots. (Wildlife)

Management Objective 5: Foster positive relationships with neighboring landowners.

Strategy 1: Work with neighbors to prevent or resolve any ingress/egress, boundary, or trespass issues. (Wildlife, Protection)

Management Objective 6: Continue providing educational and interpretive opportunities.

Strategy 1: Maintain displays and update or replace outdated displays in the observation and draw room. Add additional mounted fish and wildlife specimens as funding permits. (Wildlife)

Strategy 2: Update maps and information on MDC's website, as needed, to inform the public of area opportunities. (Wildlife)

Strategy 3: Communicate the area's educational programs and opportunities to teachers and other educational groups as opportunities arise. (Outreach and Education)

Management Objective 7: Maintain all closed areas through appropriate regulations and signing.

Strategy 1: Post appropriate signage to clearly identify closed areas. (Wildlife)

Strategy 2: Monitor for and address violations of entry into closed areas. (Protection, Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

1) Maintain and clearly demarcate area boundary lines.
2) Maintain all area infrastructure.
3) Evaluate land offered as additions to the area.

Management Objective 1: Clearly identify area boundaries.

Strategy 1: Inspect and maintain boundaries on a regular cycle. (Wildlife)

Management Objective 2: Maintain all area infrastructure according to MDC standards.

Strategy 1: Conduct maintenance, as required or needed, on all area infrastructure. (Wildlife, Design and Development)

Strategy 2: Complete annual operation and maintenance activities associated with new developments on USACE-owned portions of the area. (Wildlife, Design and Development)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that eliminate inholdings, improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other MDC priorities, as identified in the annual MDC land acquisition priorities, may be considered.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	Fiscal Year																								
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**
Terrestrial Resource Management Considerations																									
Objective 3																									
Strategy 1			X			X			X			X			X			X			X			X	
Strategy 3	X																								
Aquatic Resource Management Considerations																									
Objective 2																									
Strategy 2	X																								
Objective 3																									
Strategy 1				X				X				X							X						
Strategy 2	X			X			X			X			X			X			X			X			X
Strategy 3	X															X									
Strategy 5		X															X								

APPENDICES

Area Background:

The Ted Shanks Conservation Area (CA) is 6,705 acres of primarily river floodplain lands immediately north of the confluence of the Mississippi and Salt rivers in Pike County. The conservation area is in the Pool 24 floodplain of the Mississippi River and includes 2,878 acres owned by the U.S. Army Corps of Engineers (USACE) at the southern end (referred to as the Riverlands Tract) and 3,827 acres owned by the Missouri Department of Conservation (MDC). The Riverlands Tract is managed by MDC under a lease "General Plan" cooperative agreement with the USACE and administered by the U.S. Fish and Wildlife Service.

The USACE purchased the Riverlands Tract in the late 1930s immediately before closure of Lock and Dam 24. Purchase of these lands was partly to mitigate flooding effects of the Lock and Dam and to eliminate potential impacts to privately-owned agricultural lands subject to frequent flooding. In 1967, a USACE plan to construct a protective levee for the tenant farmers of the Riverlands Drainage District prompted an intense citizen-led effort for a public agency to acquire the area surrounding the USACE Riverlands tract. MDC also saw the need to acquire significant blocks of acreage where wetland areas could be developed and managed for migratory waterfowl and shorebirds along their flight corridors. The purchase of four major tracts of land was completed in 1970, which makes up the bulk of the fee title lands contained in Ted Shanks CA. Development funds were unexpectedly enhanced when the state Legislature appropriated a share of Missouri's Federal Revenue Sharing Funds, and wetland construction commenced in 1974. The last phase of wetland development was completed in 1983. Controlled waterfowl hunting began in 1978.

Higher river levels resulting from construction of locks and dams on the Mississippi river, coupled with the Flood of 1993, greatly altered hydrology on the area. This led to large-scale habitat degradation in the form of lost bottomland forest, especially hard-mast species, and a subsequent invasion of reed canary grass. The altered condition and ongoing habitat degradation led to development of a cooperative project between the USACE and MDC aimed at addressing the issues associated with river flooding and wetland habitat quality.

Current Land and Water Types:

Land/Water Type	Acres	% of Area	Miles
Wetland	2,977	44	
Forest	1,471	22	
Open land	1,420	21	
Impounded water	333	5	
Infrastructure	318	5	
Old Field	186	3	
Total	**6,705**	**100**	
Stream frontage			13.3

Public Input Summary:

The draft Ted Shanks Conservation Area Management Plan was available for a public comment period Feb. 1–28, 2019. MDC received comments from 13 respondents (Appendix A). The Ted Shanks Conservation Area Planning Team carefully reviewed and considered these ideas as they finalized this document. A brief summary of public input themes, including how they were incorporated or why they were not, can be found below. Rather than respond to each individual comment, comments are grouped into general themes and are addressed collectively.

MDC responses to themes and issues identified through the Ted Shanks Conservation Area Management Plan public comment period.

Terrestrial Resource Considerations

Has observed a diversity of reptiles and amphibians at Ted Shanks CA. Suggests closing a portion of the main road during peak times of snake migration. This would help protect snake species on the area, attract interested visitors, and provide an educational opportunity.

There are numerous roads on the area closed to public vehicle traffic that provide foot access to view the diversity of reptiles and amphibians found on the area. The roads that are open provide important access to other portions of the area, including the Salt River boat ramp. These open roads also provide great viewing opportunities for all wildlife throughout the year and especially during the spring and fall. We appreciate your concern for wildlife being harmed by vehicles, especially when it is intentional. We will continue to work toward educating our citizens about the value of all species.

Supports managing this area for its wetland natural communities and wetland wildlife. Supports connecting wetland units and keeping water levels high during dry periods.

Wetlands are very diverse and provide crucial habitat for hundreds of different wildlife species. As mentioned in this plan, we will continue to manage for a diversity of quality wetland habitats, providing for a range of wetland-dependent wildlife.

We continue to use all new information, including better designs of our infrastructure to improve wetland function and direct future renovation projects. Water management is a high priority for area staff and we consider weather conditions as we make those decisions. Wetland systems do require dry periods to help reset plant communities. We frequently take advantage of dry periods to apply management techniques that address successional changes and promote plant diversity within the wetland pools.

Supports taking aggressive management efforts to remove invasive species.
Area staff continually monitor for and treat invasive species when found.

Aquatic Resource Considerations

Loves to fish Horseshoe Lake. Used to fish the lake at least once a week until our daughter was hit with an Asian carp (and now refuses to go). Suggests reducing Asian carp in the lake.
Recent infrastructure improvements included grating on water-control structures aimed at controlling the movement of adult fish into Horseshoe Lake. Unfortunately, the area continues to see over-levee flood events (1993, 2001, 2008, 2013, 2014, and 2019) that contribute carp species (silver, bighead, grass, and common) to the lake.

Public Use Resource Considerations

Suggests adding more horse-riding/multi-use trails to this area.
There are no plans to add multi-use trails to this area. This area provides extensive opportunities for users to enjoy multi-use roads and trails. There is a 35-mile levee and service road system that is open to foot access and bicycle, and there are 12 miles of roads that are open to equestrian and vehicular traffic. In addition, Ranacker CA is less than 20 minutes away and offers additional equestrian and bicycling opportunities by special use permit.

Suggests creating a hiking trail along the river unless it floods too much.
There are nearly 13 miles of river protection levee that border the Mississippi and Salt rivers and provide hiking opportunities near the river (March 2 – Oct. 14). Building and maintaining a trail along the river is not feasible due to flood frequency and the high cost of maintenance.

Values hiking trails and bird watching opportunities.
The planning team appreciates this comment. The area's extensive levee and road system provides a diversity of hiking and bird watching opportunities throughout the area.

Feels that waterfowl hunting operations were better in the past. Suggests extending hours of hunting and improving the pit blinds and area maintenance.
The decision to reduce waterfowl hunting hours from all-day (on portions of the area) to a 1 p.m. closure was made to improve hunting success while providing migratory waterfowl the opportunities to use the entire area (not just the refuge) for feeding and resting. Since this change was made, waterfowl harvest and use have risen substantially, indicating we are seeing the desired results.

The current pit blinds were located, designed, and constructed to reduce time spent on annual maintenance and management of waterfowl blinds. Waterfowl hunting success in the new pit blinds is consistently better than in the old blinds; and long-term maintenance costs have been greatly reduced.

Likes to trap fur-bearing animals at Ted Shanks CA. Suggests making more of the area accessible for trapping. For instance, suggests allowing access to the perimeter roads to improve access to the Salt and Mississippi rivers.
Trapping is one of many important components of the area's management. We understand that the limited vehicle access restricts access to some trappers. However, there are a lot of trappers that access the river borders to the area by boat. On occasion, we have provided trappers with interior access to portions of the area to address damages caused by muskrats and beavers.

The planning team also recognizes the importance of providing refuge area for all wildlife. Therefore, we don't plan to regularly open refuge areas to further access.

Suggests providing more primitive camping sites at this area.
The area provides numerous primitive camping opportunities throughout the year. From Oct. 15 to the end of the area duck season, camping is only allowed in the large, gravel parking lot at the area headquarters. This limits disturbance to migratory waterfowl at the area. In addition, primitive camping opportunities are provided year-round on the adjoining DuPont CA. DuPont CA has a campground located along the banks of the Mississippi River. This campground provides individual gravel pads and areas for tents.

Appreciates the recreational opportunities provided at Ted Shanks CA. The area is well thought out.
The planning team appreciates this comment.

Administrative Considerations

Would like to volunteer at this area.
Anyone wishing to volunteer should contact the area manager to discuss opportunities.

Suggests partnering with other agencies and organizations to greatly expand Ted Shanks CA. Such an expansion would support the river ecosystem, aid in flood control, and put more people in close proximity to the area.
We partner with the United States Army Corps of Engineers, United States Fish and Wildlife Service, Ducks Unlimited, and other organizations to manage Ted Shanks CA. We will continue to evaluate lands offered to MDC for purchase. We recognize the value of riverine and wetland ecosystems and will continue to work with partners and neighbors to develop and improve these important habitats.

General Comments

Appreciates this area management plan. Other states should use this as a model.
The planning team appreciates this comment.

Values Ted Shanks CA. Our family has made many great memories at this area for years. Thank you for the work you do.
The planning team appreciates this comment and hopes that you will continue to create great memories at Ted Shanks CA.

References:

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Nigh, T. A., & Schroeder, W. A. (2002). Atlas of Missouri ecoregions. Jefferson City, MO: Missouri Department of Conservation.

Maps:

Figure 1: Area Map
Figure 2: Aerial Photograph with Ownership
Figure 3: Habitat Cover Types
Figure 4: Easement Map

Additional Appendices:

Appendix A: Ted Shanks Conservation Area Management Plan Public Comments

Figure 1: Area Map

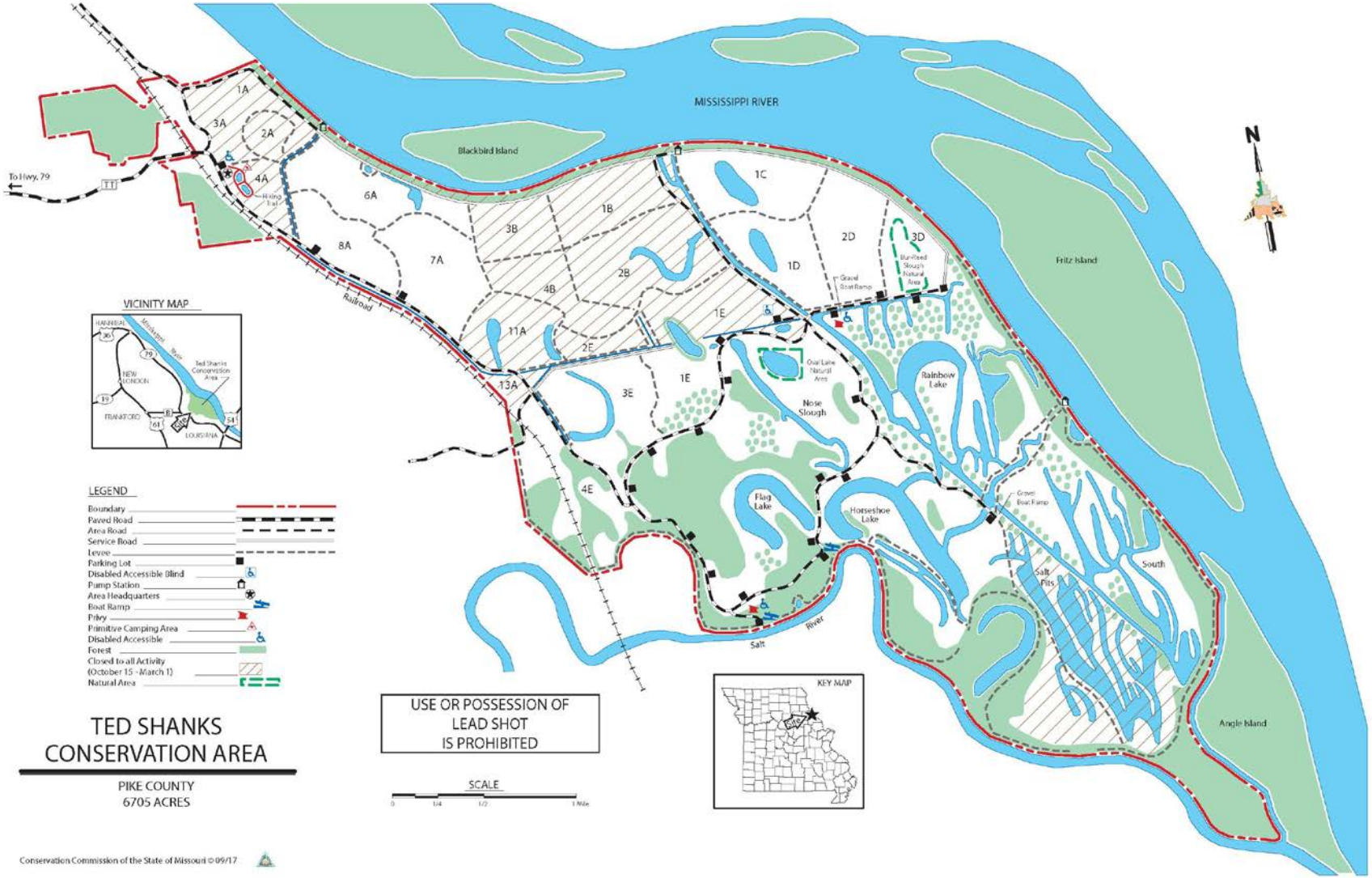


Figure 2: Aerial Photograph with Ownership

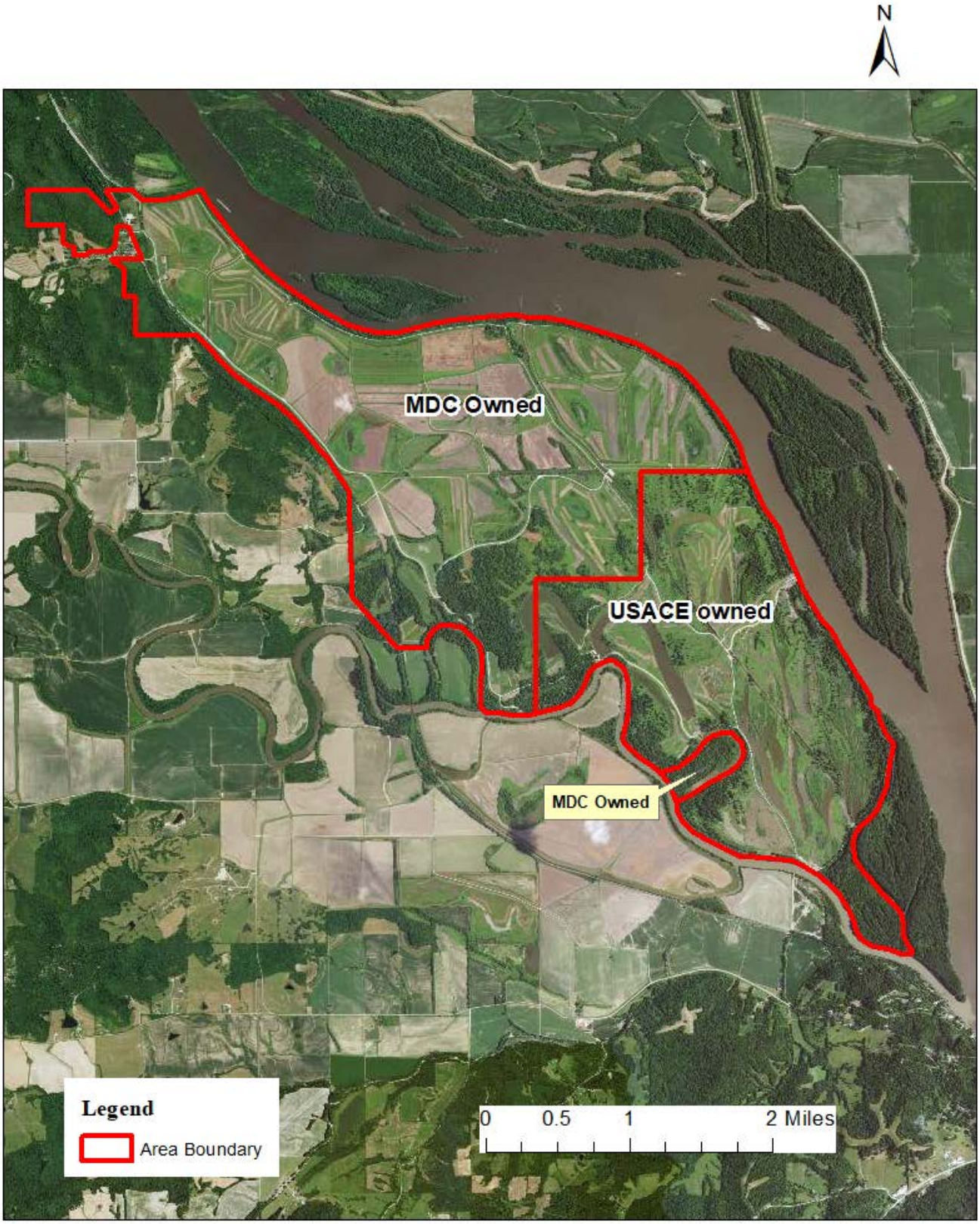


Figure 3: Land Cover Map

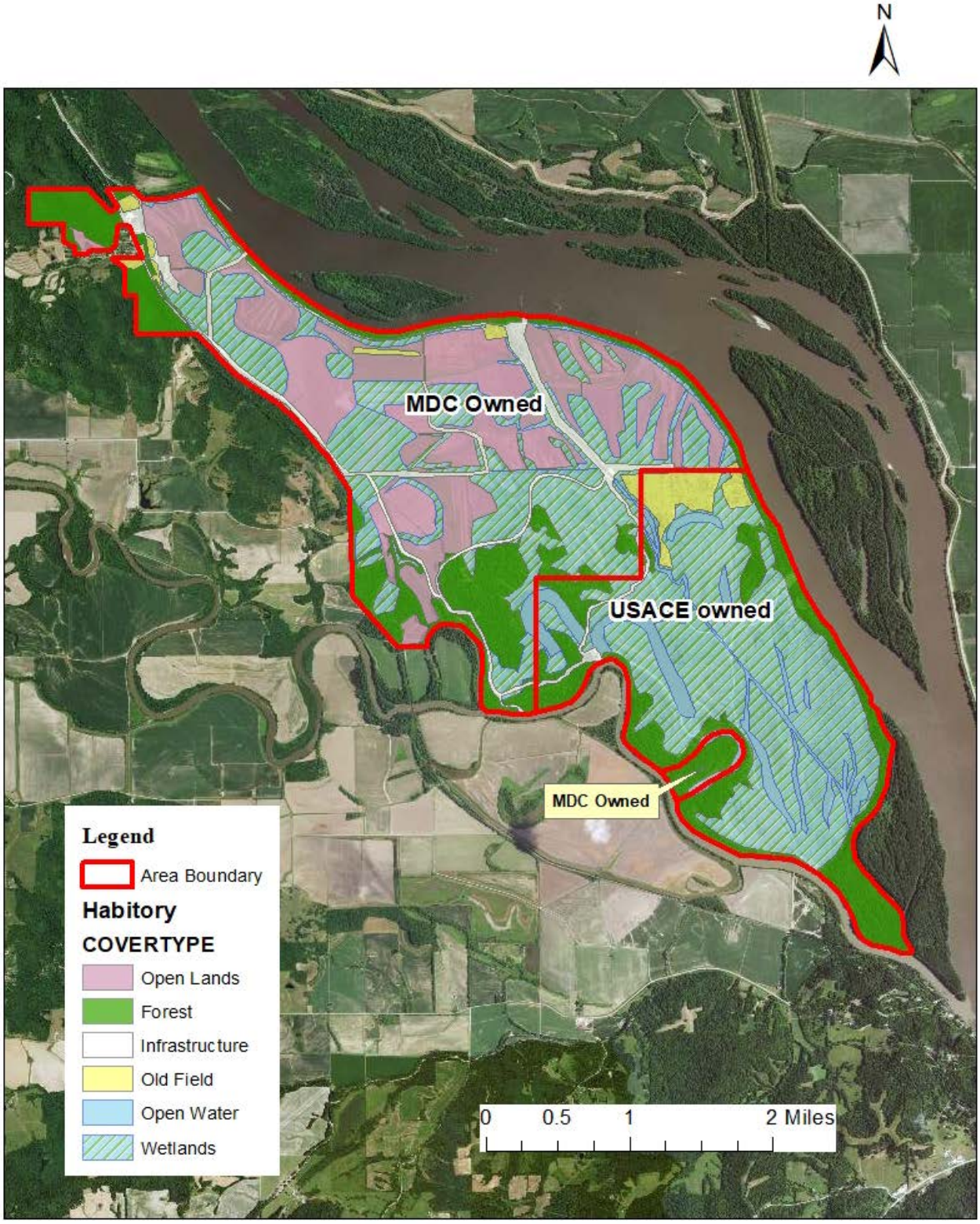
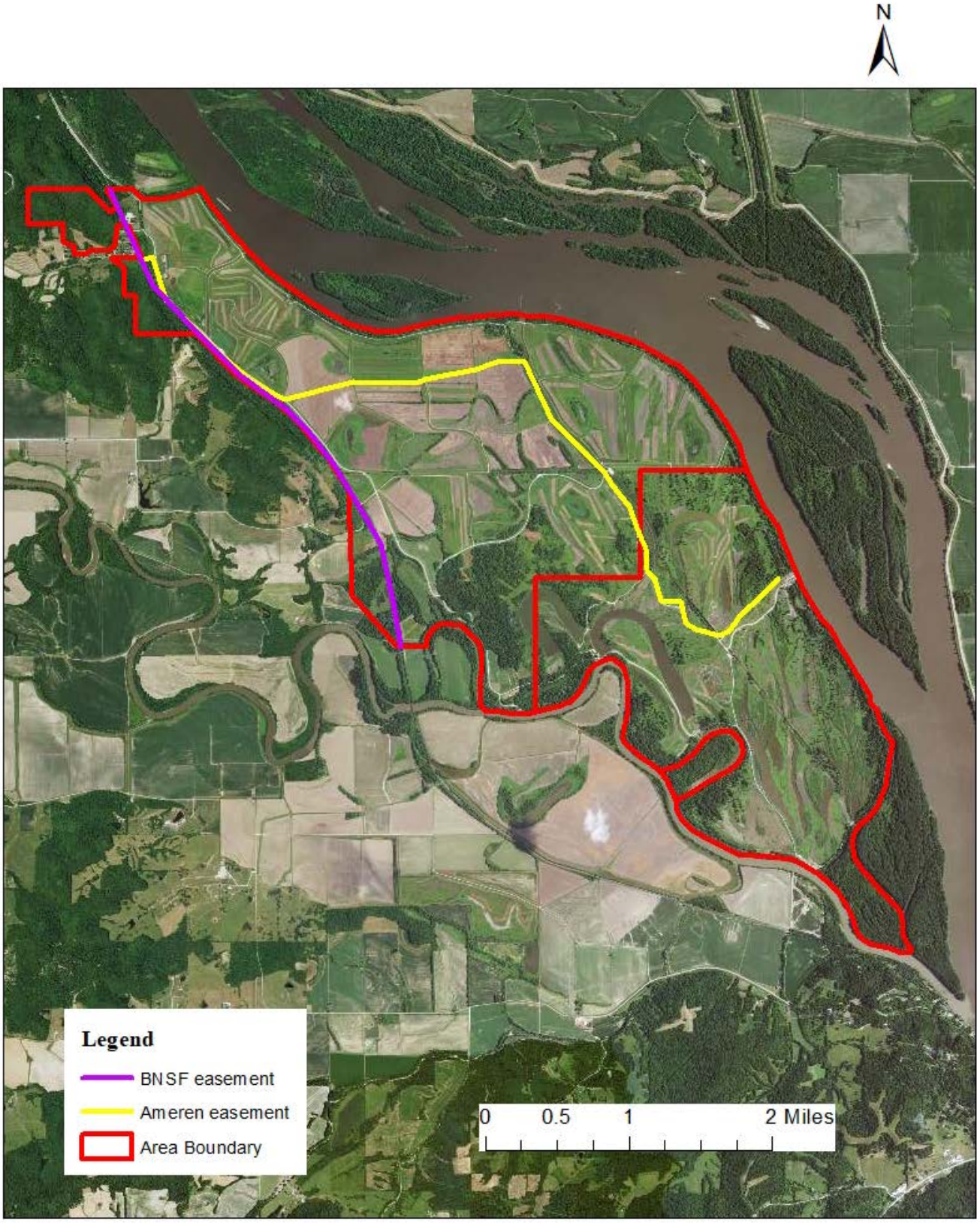


Figure 4: Easement Map



Appendix A: Ted Shanks Conservation Area Management Plan Public Comments

Received during public comment period (Feb. 1–28, 2019):

Shanks contains a very diverse and robust assemblage of reptile and amphibian species. As such, there is a twice-annual migration (once in the spring and again in the fall) of snakes species between wetlands and the bluffs, which they use for winter hibernacula, just S of Ashburn. I would like to see the main road closed off between the visitor center and Pike Co Rd 116 during this peak activity (spring will vary, fall is generally from the middle of Sep to the middle of Oct, depending upon local weather conditions). This is done on an area in S IL (between LaRue Swamp and the nearby Pine HIlls and bluffs) and has proven to be effective at protecting these species and attracting visitors who want to witness the spectacle. Perhaps this section of road could be a walking trail during this time, which would also reduce the dust in the area and be a non-consumptive activity for the local population who might otherwise not visit the area. There is also an opportunity for public education here, particularly for sportsmen/women who might otherwise see these species (particularly the snakes and turtles) as undesirable residents of the area and go out of their way to kill them.
The plan looks well thought out and very comprehensive. I especially like that it addresses the need to manage for wetland natural communities and the full range of wetland wildlife. Connecting the wetland units and maintaining water levels for wetlands and wetland wildlife during dry periods is important too. And finally it is good to recognize the threat of exotic species and aggressively deal with them.
As a citizen of Missouri, I hunted the state for 35+ years, and as a citizen of Michigan I continue to Hunt Missouri for the last 18 years. I find the Ted Shanks to be well thought out with consideration for all potential uses of the property. In comparison to other states, I would suggest to many that Missouri Management Plans be established as a model. I have no specific recommendation for changes to the Ted Shanks Conservation Area Management Plan.
Please assure that horseback riding trails and/or multiple use trails allowing horseback riding are included in the plan.
As someone who remembers the Great Flood of 1993 first hand I look at Ted Shanks as a template in miniature on what we need to do with our Great Rivers Flood plains . I also understand the cost of upkeep/maintenance of such a area as well making the area as useful to as many different activities as possible. That said, I would like to see the area expanded aggressively from Louisiana to Quincy .... Bold and expensive ... YES But with willing sellers and partnerships with orgs like DU, Delta Waterfowl, NWTF, USACE, USFWS , Great Rivers Habitat Alliance etc I think it could be done over time . Why ? to expand wetlands primary nitch in the river's ecosystem, to minimize the effects of the next monster Flood on man and local economies and expand the usefulness of the area to a larger region of Missouri and Illinois.
Please consider adding horseback riding trails to open outside of hunting seasons.

Phone call comment: I frequent Ted Shanks Conservation Area a lot. In the past, waterfowl hunting operations were better. I don't like that the whole area is closed by 1:00. The pit blinds are not very good. People tend to use the blinds as a privy. The salt pit area was great, but this area has changed. I suggest having one weekend when volunteers can help at the area and am interested in volunteering at this area.
Would it be possible to create a hiking trail along the river or does this area flood too often.
This area has been a very important part of life for our family for years and we have many memories of great times spent there. We trust that your management plans are for the better good and support your decisions to maintain the area for future generations to enjoy. If volunteer project opportunities arise we would love to participate. THANK YOU for the work you do. *****, Palmyra
My family and I fish horseshoe lake at least once a week. We love it but my 5 year was struck in tge chest last year with an Asian carp. Now she don't want to fish that lake anymore. Is there anyway to reduce the Asian carp in that lake. So we can enjoy it again!! Thank you for your time!
First I'll state that I do not hunt waterfowl. I do however apply for a permit to trap at Ted Shanks CA and I do trap for fur bearing animals there. I would like to see an opportunity to access more of the area. I understand it is a waterfowl area but, when trappers are there in January and February there is mostly ice and no waterfowl. Many of the duck hunters will tell you where they seen muskrats, mink, otter and beaver but we cannot reach those areas easily enough to effectively remove them. There is ice so a boat is not useable. "At the very least" allow us access to the perimeter roads where we could access the salt and Mississippi rivers along with the CA. Again, when there's 3 or 4 inches of ice, there are no ducks. Please consider allowing "greater access" to the natural resources that Ted Shanks offers for fur trappers after duck season is closed. Thank you
Hiking trails and bird watching are important to me.
I would like to see 1 or 2 more primitive camping sites: limited to one tent, 2 to 4 person.