



Miesville Ravine Park Reserve Long-Range Plan and Natural Resource Management Resource Plan

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Land Acknowledgement



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Overview



- Project Purpose and Process
- What is new & updated
- Natural Resources Management Plan
- Long-Range Plan
- Next Steps
- Questions and Discussion
- Planning Commission Action

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Project Purpose & Process



Update 2005 Master Plan

- Long Term and 10 Year Plans
- Interpretive Framework

Natural Resources Management Plan in a coordinated process

Process

Summer – Winter 2022: *Research and Vision*

Winter - Spring 2023: Concept development

Summer – Fall 2023: *Draft Plan*

Winter - Spring 2024: *Final Plan and Approvals*

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What's Updated and New



Long-Range Plan

- Updated – phasing to reflect County Board direction
- New - Chapter 6 – Park Development, Chapter 7 – Implementation

Natural Resources Management Plan

- New – Chapters 3 – Issues, Chapter 4 – Vision, Goals and Strategies, Chapter 5 - Implementation

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Natural Resources Management Plan



Vision from NR System Plan:

The water, vegetation, and wildlife of Dakota County Parks, greenways, and easements will be managed to conserve biodiversity, restore native habitats, improve public benefits, and achieve resilience and regionally outstanding quality, now and for future generations.

- Resilient ecosystems
- Clean water in Trout Brook
- Excellent habitat for native biota
- Low impact visitor experiences
- Engages stakeholders
- Mitigates impacts of climate change
- Achieves regionally outstanding ecological quality

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NRMP: Issues



- Legacy of post-settlement land use
- Habitat fragmentation
- Loss of ecological processes
- Invasive vegetation
- Problematic wildlife
- Riparian habitat degradation
- Erosion
 - Ravine
 - Soil
- Nutrient imbalance
- Park access
- Programmatic issues
 - Funding
 - Partnerships
 - Citizen outreach, education
- Climate Change

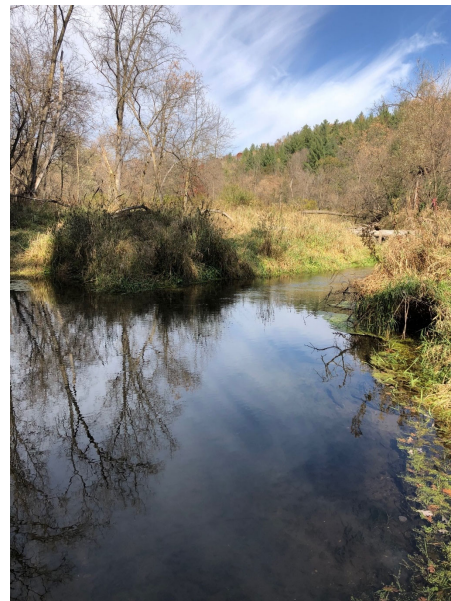
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Management Goals and Recommendations



Trout Brook and Tributaries

1. Improve hydrology and water quality in the entire watershed
2. Reconnect the stream with the floodplain
3. Support in-stream habitat
4. Restore riparian and upland vegetation



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Management Goals and Recommendations

Dakota
COUNTY

Mesic Hardwood Forests

1. Enhance native plant diversity
2. Reduce invasive vegetation cover to 5% or less, on average
3. Regenerate native tree species
4. Preserve and expand spring ephemeral areas
5. Maintain or increase oaks and basswood



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Management Goals and Recommendations

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Remnant Prairie-Savanna

1. Prairies with <5% shrub/tree cover
2. Savannas <50% tree cover
3. Restore to historical conditions, as possible
4. Connect prairie fragments
5. Conserve dry prairie specialists



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Management Goals and Recommendations

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Reconstructed Prairie and Overgrown Savanna

1. Maximize structural heterogeneity
2. Enhance plant diversity
3. Restore successional stages of target native plant communities
4. Control deer population



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Management Goals and Recommendations

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Seepage Meadows

1. Existing and historical conditions
2. Enhance plant diversity
3. Restore to native plant community as described by DNR
4. Reduce invasive cover <5%



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Management Goals and Recommendations

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Riparian Corridor

1. Enhance plant diversity
2. Regenerate native tree species composition and structure as described by DNR
3. Reduce invasive cover <5%
4. Target approximately 75% forest cover
5. Beaver conservation and enhancement to benefit riparian communities



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Management Goals and Recommendations

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Cliff and Rock Outcrops

1. Better describe and understand distribution, extent, and condition within the park reserve
2. Reduce woody vegetation within ROs12c communities to 0-5%
3. Enhance plant diversity to reflect that described by DNR



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Management Goals and Recommendations

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Ravines and Dry Creeks

1. Minimize erosion from ravines
2. Promote native cover
3. Reduce exotic cover
4. Control garlic mustard



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Management Goals and Recommendations

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Rare Species and Wildlife

1. Protect and provide habitat
2. Better understand requirements of each vulnerable species
3. Reduce deer and raccoon populations
4. Reduce exotic cover



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Management Goals and Recommendations



Connectivity

1. Reduce edge effects
2. Build connectivity and core habitat within and surrounding the park reserve
3. Reduce exotic cover
4. Control deer and other overabundant species



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Management Goals and Recommendations



Climate Change

1. Mitigate harmful changes to natural resources
2. Manage for resilient native plant communities



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Management Goals and Recommendations



Citizen Outreach

1. Increase public interest and support
2. Reduce labor costs; leverage in-kind and volunteer grant match
3. Site monitoring
4. Natural resource education and stewardship



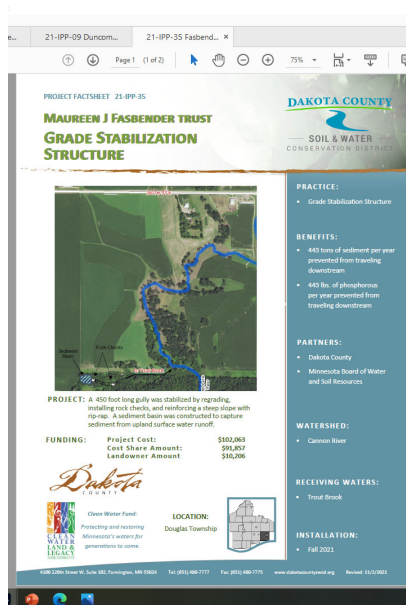
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Management Goals and Recommendations

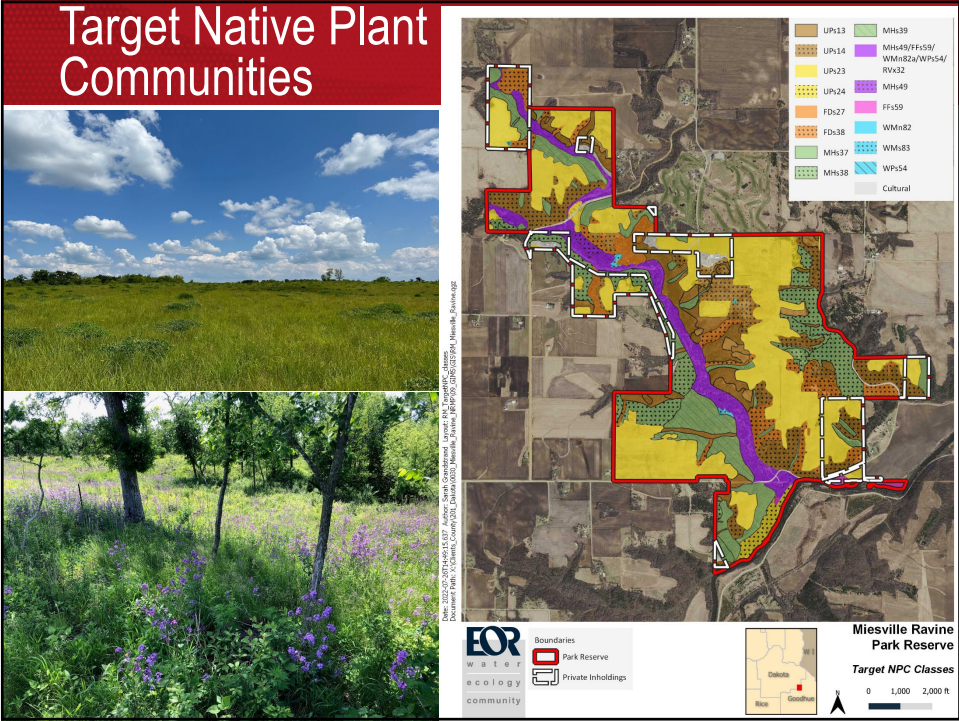


Partnerships

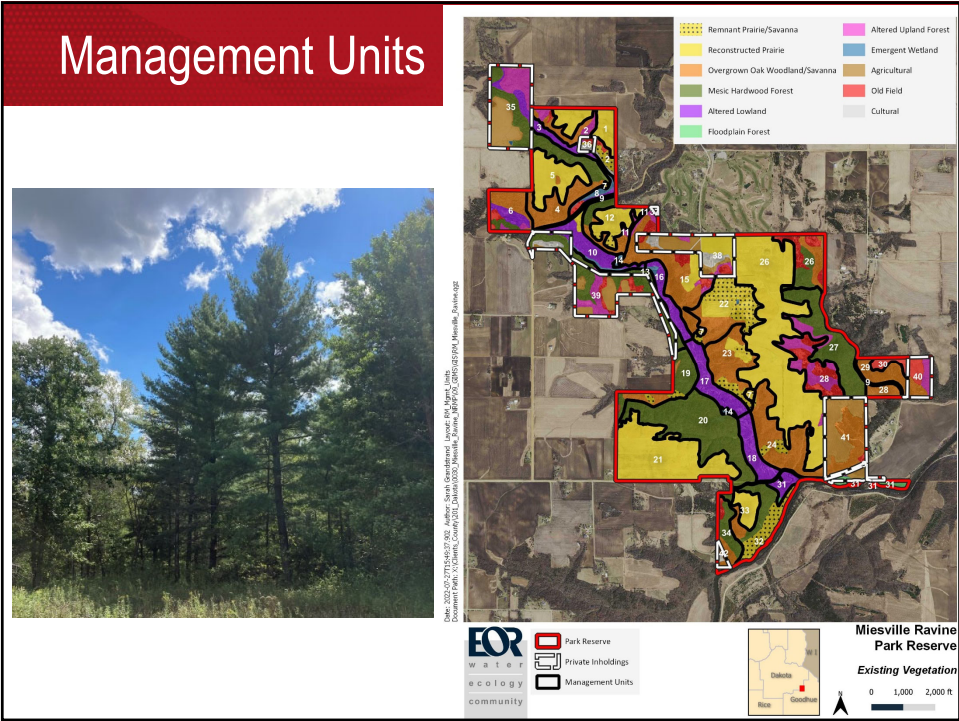
1. Partner to share resources, leverage funds, and collaborative efforts
2. Volunteerism
3. Private landowners in the greater watershed



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Implementation Priorities



Maintenance 1

245 acres

Years 1-5 = \$560,000

Years 6-20 = \$112,000

Restoration 1

383 acres

Years 1-5 = \$2,300,000

Years 6-20 = \$460,000

Maintenance 2

434 acres

Years 1-5 = \$273,000

Years 6-20 = \$55,000

Restoration 2

783 acres

Years 1-5 = \$3,680,000

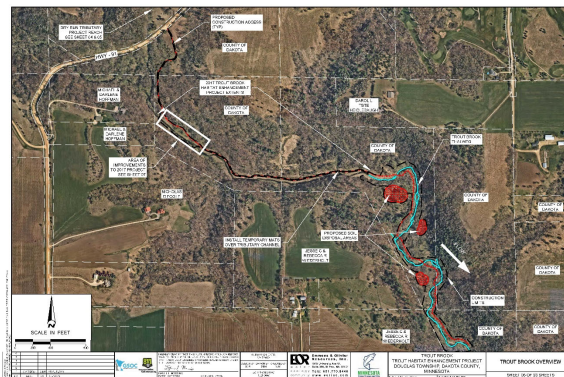
Years 6-20 = \$368,000

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Trout Brook Restoration



| Reach Description | Stream Length (linear feet) | Construction Cost |
|--|-----------------------------|-------------------|
| Tributary (perennial flow north of CR91) | 1,100 | \$49,500 |
| Trout Brook (upstream of CR91 to spring) | 2,300 | \$195,500 |
| Trout Brook (management unit 23) | 5,000 | \$425,000 |
| Trout Brook (management unit 27 downstream to Orlando) | 3,650 | \$310,250 |
| Total Construction Cost | Blank | \$980,250 |
| Engineering Fees (lumped into single project) | blank | \$275,000 |
| Total | 12,050 linear feet | \$1,255,250 |



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Wildlife and Monitoring



| Task | Cost YR 1-5 | Cost YR 6-20 | Total 20 YR Cost |
|---|-------------|--------------|------------------|
| Continued deer management | \$25,000 | \$110,000 | \$135,000 |
| Beaver conservation | \$5,000 | \$5,000 | \$10,000 |
| Blanding's turtle assessment | | | \$5,000 |
| Rare species reintroduction assessments | | | \$20,000 |
| Fish habitat assessment | | | \$8,000 |

| Task | Cost |
|---|---------|
| Map garlic mustard park-reserve wide | \$5,000 |
| Map spring ephemerals | \$5,000 |
| Assess and map priority prairie remnants | \$5,000 |
| Seepage meadow floristic inventories and geomorphic assessments | \$6,500 |
| Map cliff and rock outcrop plant communities | \$5,000 |
| Ravine assessment and catchment delineation | \$8,000 |

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Master Plan (6) and Implementation (7)



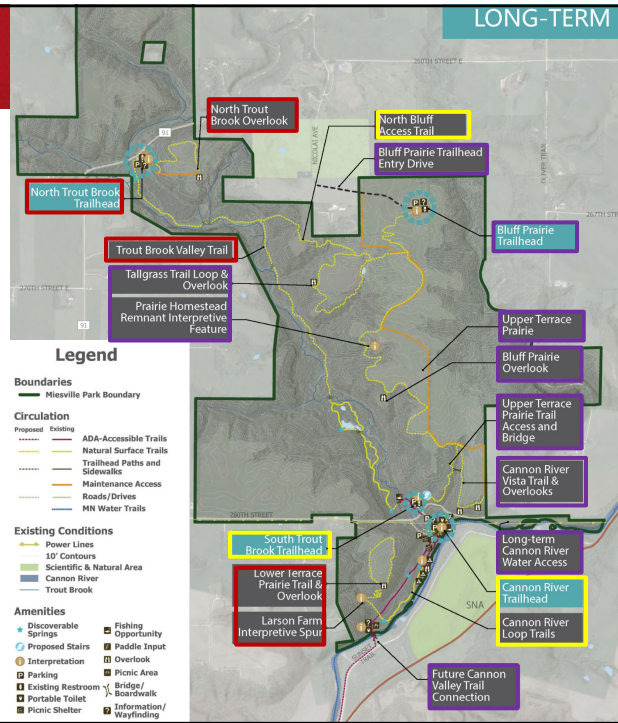
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Long-term

- Natural resources restoration and management
- Two new trailheads
- 11 miles hiking trails
- ADA Cannon River trail
- Improved picnicking
- Improved Cannon River access
- Connection to Cannon Valley Trail
- Rustic camping
- East Cannon River water access & Picnic area

Phasing

- 5-year
- 10-year
- Long-term



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10-year

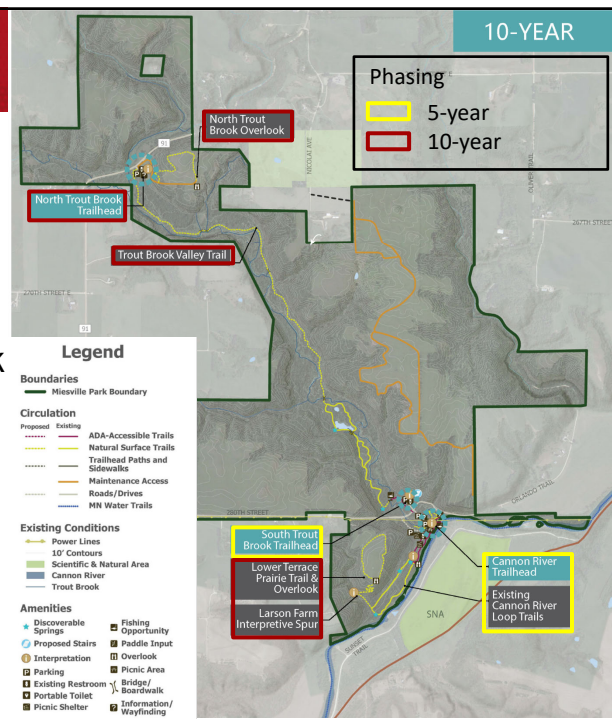
Trailhead improvements

- South Trout Brook
- Cannon River

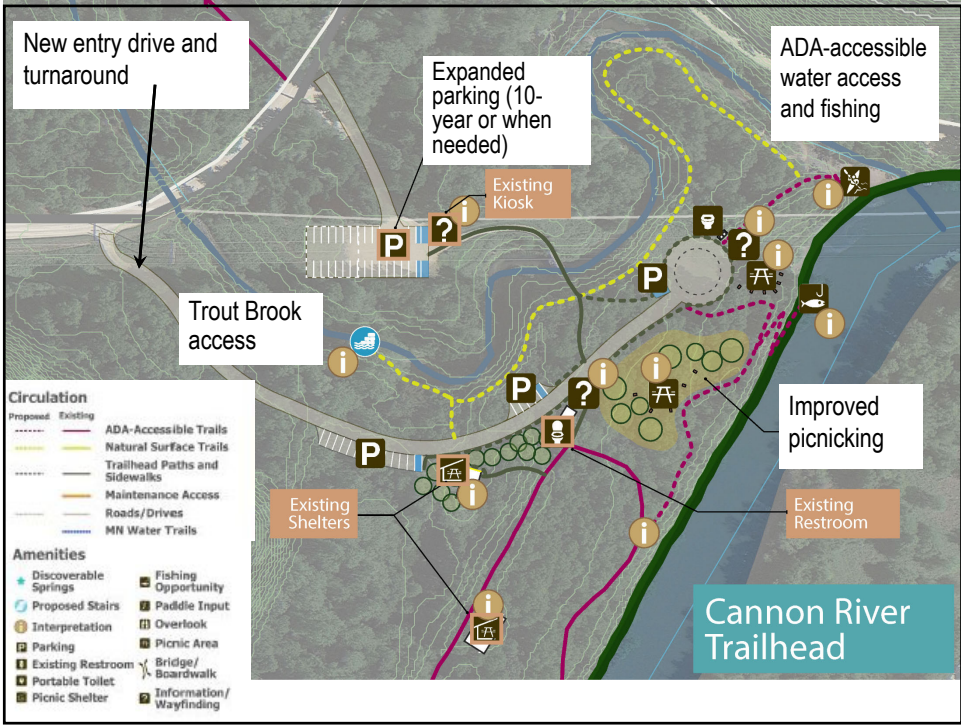
New North Trout Brook Trailhead

Trail access to


- Lower Terrace Prairie
- Trout Brook Valley
- North Trout Brook
- Cannon River



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| Cost Estimate | |
|---|--------------|
|  | |
| Phase | Total Cost |
| 5 year | \$ 1,609,000 |
| 10 year | \$ 2,118,000 |
| Total | \$3,727,000 |
| Long Term | \$11,375,000 |

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Interpretive Themes & Guidelines



From the soaring views at the blufftop to the deep ravine with its meandering brook, Miesville Ravine Park Reserve nourishes our relationship to the land and waterways, to the plants and animals who live here, and to each other

1. People: We all thrive here
2. Place: An oasis for nature
3. Stewardship: Caring for the future

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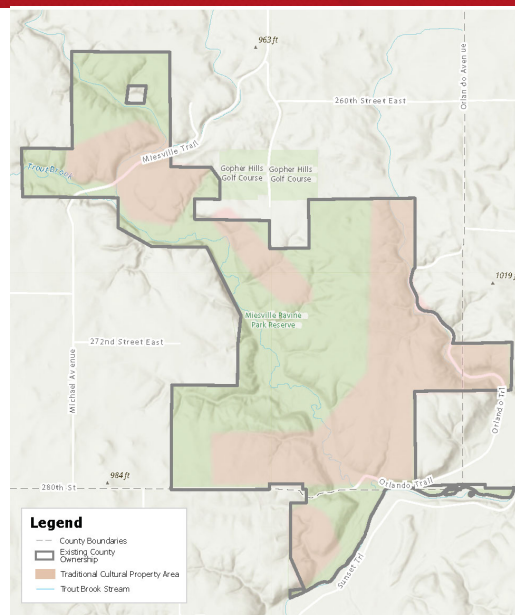
Cultural Stewardship



Establish a partnership with Indigenous communities

Work with the Indigenous communities to convey the significance of the site and to encourage appropriate respect

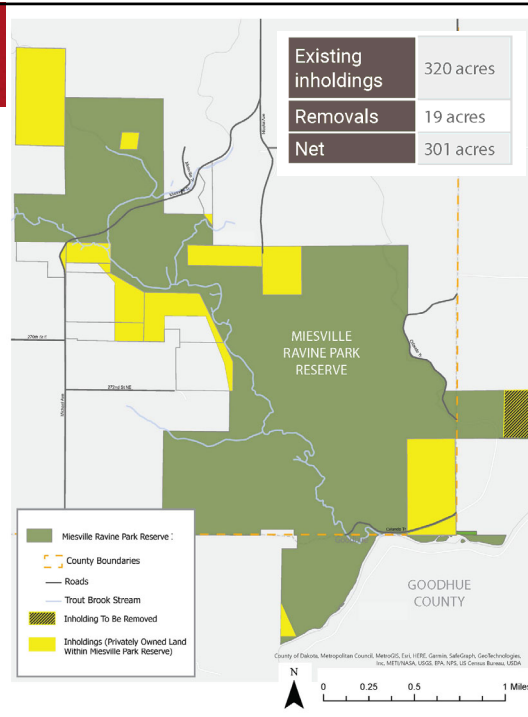
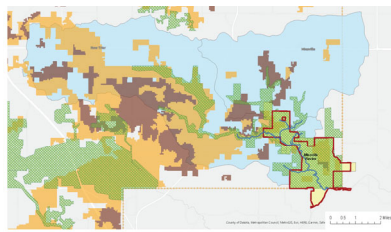
Acquire additional understanding for priority cultural areas



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Boundary

- Private inholdings
- Stewardship land



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Business and Operations Analysis



- Estimates staffing requirements and operational costs
- Purpose is to understand annual cost implications of future improvements
- Provides a snapshot based on assumptions regarding maintenance standards, level of visitor services, and visitor services revenue
- Adaptive tool, the assumptions can be changed

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Operations Cost Estimates



| | 2022 | 5 Year Plan | Net Increase Over Current | 10 Year Plan | Net Increase Over 5 Year |
|----------|-----------|--------------|---------------------------|---------------|--------------------------|
| Dollars | \$288,700 | \$374,000 | 30% | \$498,700 | 33% |
| Staffing | | .96-1.82 FTE | | 1.39-2.36 FTE | |

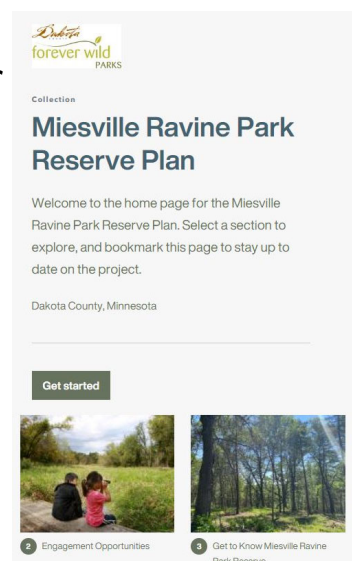
- Dollars includes staffing and non operational staffing expenses
- Considers visitor services, natural resources management, grounds maintenance, and law enforcement

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Public Review



- Late September - October
- Community open house – October
- Stakeholder outreach
- Draft plans with ability to comment on the project website
- Social media



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Next Steps

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- **September– October** – Public review
- **December** – Planning Commission, seek recommendation for adoption
- **January 2024** - PDC considers adoption
- **Winter/spring** – Metropolitan Council considers adoption for Long-range plan



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Discussion

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Requested Action



Recommendation to the Physical Development Committee of the Whole to release the Miesville Ravine Park Reserve Long-Range Plan and the Miesville Ravine Natural Resources Management Plan for public review.