

Dakota County Land Conservation Plan Engagement and Research Findings



Environmental Resources Department

Office of Planning

June 27, 2019

Tonight's Presentation



Efficient, Effective, Responsive

- 1. Introduction and Background**
- 2. Public Engagement Findings**
 - a. Methods and events
 - b. Key messages
- 3. Research Findings**
 - a. Plan inventories
 - b. Economic studies
 - c. Priority areas
- 4. Potential Land Conservation Areas and Initiatives**
- 5. Next Steps**

Introduction and Background



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Plan update purpose:

- Identify and prioritize lands for voluntary protection and enhanced natural resource management
- Guide improved coordination and collaboration with other agencies and organizations
- Evaluate potential tools and incentives
- Update program guidelines



**PROPOSED
MAJOR PARK SYSTEM
for DAKOTA COUNTY, MINNESOTA**

Land Protection History:

- New park system in 1969
- Interest in protecting non-park lands (1970 map)
- 1999: LCMR grant to study natural area and farmland protection
- 2002: Farmland and Natural Area Protection Plan adopted
- 2002: bond referendum
- 2003: first land protection

Prepared by:
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The publication of this material was financially aided through a Public Open Space and Recreation Planning and Education Grant awarded to Dakota County by the Minnesota State Planning Agency under the Urban and Rural Planning Program authorized by Section 361 of the Housing Act of 1964 as amended and administered by the Division of Local and Urban Affairs of the Minnesota State Planning Agency.

Introduction and Background



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Plan Basis, Then and Now:

Then – Farmland and Natural Area Protection Plan, 1990s:
Protecting natural areas, farmland, and farming amid rapid development

Now – Land Conservation Plan, 2019:

- Surface and ground water issues
- Decline of native species and pollinators
- Protecting-managing natural areas over the long term
- Development's return after the Recession
- Climate resilience

Public Engagement Findings



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Public Engagement: to gain insight on

- Continued land conservation efforts
- Emerging issues to address
- Five-ten year priorities and focus
- Partnership approaches
- Funding, fiscal tools and incentives
- Draft Plan vision and goals

Public Engagement Findings



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Methods and Events:

- Surveys responses: online=125, 2019 Residential=974
- Two Open Houses: 80+ participants
- USFWS, Minnesota Valley National Wildlife Refuge meeting
- MN DNR Central Region Managers meeting
- Two Workshops on Rural Land Conservation: 21 participants
- Two Workshops on Countywide Conservation: 16 participants
- City park director survey: 10 participants

Public Engagement Findings



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Key Messages:

1. Residents support land conservation efforts.
2. Locations, goals, and prioritization are increasingly important.
3. Long-term natural resource management is essential.
4. Collaboration is vital to long-term protection and management of natural resources.



Public Engagement Findings



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Support for Land Conservation and Specific Benefits: 2019 Residential Survey

Percent rating preserved land management as “Essential” or “Very Important”

Approach	Percent
1. Protecting and improving water quality	92%
2. Protecting and improving wildlife habitat	84%
3. Protecting and improving natural areas	83%
4. Increasing access for outdoor recreation	73%
5. Protecting and improving land used for agriculture/other specialty crops	71%

Public Engagement Findings



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Support for Land Conservation and Specific Benefits: 2019 Online Survey

Importance of protecting different types of land (weighted average scores on 1-5 scale)

Type of Land to Protect	Score
• Natural areas that can improve surface water quality or groundwater quality/availability	4.4
• Shoreland along lakes, rivers and streams to improve water quality	
• Unique and high quality natural areas	4.3
• Wetlands to improve surface water quality, recharge groundwater, provide wildlife habitat, and reduce flood impacts	
• Wildlife habitat for species with declining populations	4.1
• Connecting corridors for wildlife movement	3.9
• Agricultural lands that are adjacent to waterbodies and natural areas	3.8
• Larger (65+ acres) natural and/or restorable areas	
• Lower quality natural areas that could be restored to improve their quality	
• Open space or undeveloped land	3.7
• Small natural areas in more densely populated areas	
• Scenic landscapes	3.4

Public Engagement Findings



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Support for Land Conservation and Specific Benefits: Workshop Themes

Environmental Issues and Land Conservation Opportunities

Topic Area	Opportunities
Water	<ul style="list-style-type: none">• Land acquisition to protect and restore wetlands• Focus on wetlands and retaining water on the land• Promote perennial crops, crops that don't need irrigation• Promote buffers that can be hayed or planted for food, fuel, and fiber• Cities use development outlots to conserve stream buffers
Climate	<ul style="list-style-type: none">• Land protection to mitigate increased severe storm impacts
Biodiversity	<ul style="list-style-type: none">• Improve overall biodiversity, target native communities, not just individual species
Soil Health	<ul style="list-style-type: none">• Think broadly about soil health and infiltration• Promote soil regenerative agriculture (e.g., no-till and cover crops)• Add livestock back to the landscape, with appropriate management

Location and Priorities: Workshop Themes

Location of Land Conservation Efforts

Opportunities

- Preserve representative landscapes
- Incentivize urban protection and management
- Protect natural areas on school lands, cemeteries, utility corridors, etc.
- Think about land in watersheds rather than by parcels
- Plan for multi-functional connecting corridors
- Develop different urban, suburban, and rural priorities
- Protect natural areas and open space as a framework for development
- Identify development corridors away from sensitive resources
- Buffer County Parks to protect sensitive resources as development occurs nearby

Public Engagement Findings



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Long-Term Management Needs: Online Survey

Importance of restoring and managing natural resources

Land protection/management type	1	2	3	4	5	Weighted Average
a. Restore and manage natural resources on public lands	2%	2%	15%	32%	50%	4.3
a. Restore and manage natural resources on private lands protected by an easement that prevents development and protects natural resources	2%	8%	28%	29%	34%	3.9
a. Restore and manage natural resources on private lands that are not protected	5%	27%	32%	22%	15%	3.1

Collaboration: Meetings and Survey

Agency Collaboration Opportunities

Opportunities

- Help cities streamline permitting process with conservation planning
- Funding assistance for detailed public lands management plans
- Collaborative among agencies for natural resources management
- Volunteers for invasive control, counts, “BioBlitz”
- Work with County Parks on conservation education
- Increase information sharing and communication
- Wildlife management and inventory

Public Engagement Findings



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Draft Vision and Goals: Meetings

Draft Vision:

The natural resource ~~heritage~~ legacy of Dakota County is collaboratively protected, improved, and managed for current and future generations.

Definitions

Heritage: something transmitted by or acquired from a predecessor (legacy, inheritance), traditions, something possessed as a result of one's natural situation or birth (birthright)

Legacy: a gift by will of money or personal property, something transmitted by an ancestor or predecessor, a candidate for membership in an organization (e.g., children of alumni)

Public Engagement Findings



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Draft Vision and Goals: Meetings

Draft Goals

1. Protect and improve ecological functions and diversity of natural and working landscapes
2. Protect and improve water quality
3. Protect and improve biological diversity **and resilience**
4. Facilitate increased protection, restoration, and management of natural resources on private lands

Public Engagement Findings



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Draft Vision and Goals: Meetings

Draft Goals

5. Increase public sector collaboration, **public-private** partnerships, and leveraged resources
6. Increase public awareness, understanding, and participation in natural resource protection, **to build a culture of resource protection and resilience**
7. Provide additional and enhanced opportunities for the public to access natural areas for a variety of outdoor recreational opportunities

Draft Vision and Goals: Meetings

Potential new goals or objectives under existing goals:

- A. Mitigate the impacts of climate change
(new goal or objective under an existing goal?)
- B. Improve soil health and stability
(new goal or objective under an existing goal?)
- C. Preserve representative landscapes
(new goal or objective under an existing goal?)

Public Engagement Findings



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Planning Commission Questions:

1. Comments on the engagement findings
2. Comments on potential new goals:
3. Additional groups to engage in the next planning phase?

Research Findings



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Topics:

Background and Context

- Protected lands and management
- Economic benefits of conservation
- Related plans

Plan Development Findings

- Proposed Focus Areas
- Program Opportunities

Continued Research Areas for the Plan



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Protected Natural Resource Land in Dakota County

- 33,875 acres
- 73 percent allow public access
- Almost ten percent of County land area

Protection and Management Inventory



Buckthorn "Before"



Buckthorn "After"

Additional Notes

- **Many areas are protected**, additional lands merit protection and management.
- **Agencies are managing some natural resources**, but have interest in doing more and in partnerships.
- **Corridors linking natural areas are critical to ecological health**, and are partly addressed through the County Greenways.

Ecosystem Services (ES) Benefit Categories

- Regulating:** control of ecosystem processes, e.g., water purification, climate stability
- Supporting:** necessary for other services, e.g., decomposition of waste, soil formation, pollination
- Provisioning:** products obtained, e.g., crops and forest products, clean drinking water
- Cultural:** nonmaterial benefits, e.g., recreation, beauty, physical and mental health

Economic Benefits

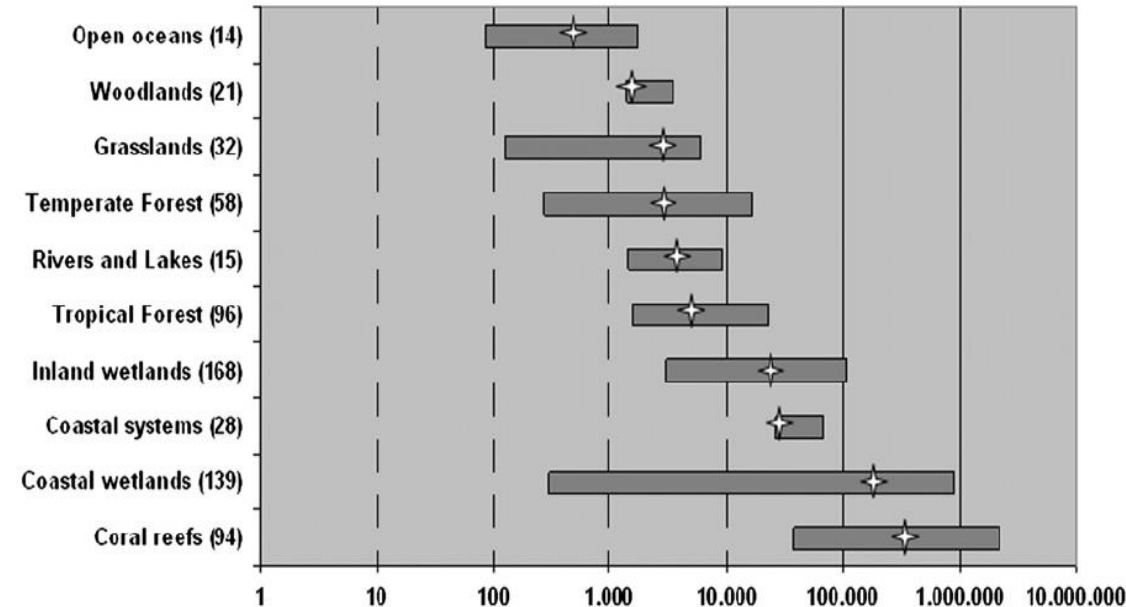


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Findings:

- Well-established research agrees that natural resource systems provide significant societal and economic benefits
- Valuation methods, contexts, and metrics vary
- Based on studies, wetlands may provide greater economic benefit than forest and grasslands

Range of Valuations for Ten Biomes in International\$/Hectare /Year



Natural Resource Plan Inventory



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County-Specific Plans:

- **Dakota County 2040 Comprehensive Plan (DC2040):** 2019
- **Dakota County Natural Resources Management System Plan:** 2017, and individual park and easement management plans
- **Dakota County Soil and Water Conservation District Comprehensive Plan,** 2016
- **Dakota County Park System Plan:** 2008, and individual master plans
- **Dakota County Farmland and Natural Area Protection Plan:** 2002

Natural Resource Plan Inventory



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State, Federal and Conservation Organization Plans:

- 20 plans reviewed, most had relevance to Dakota County, and County would have a role in implementation
- Many overlapping areas of interest and need
- Current focus areas include Species in Greatest Conservation Need and pollinators
- Climate uncertainty is recognized, response approaches are still evolving
- Most plans speak to partnership opportunities and needs

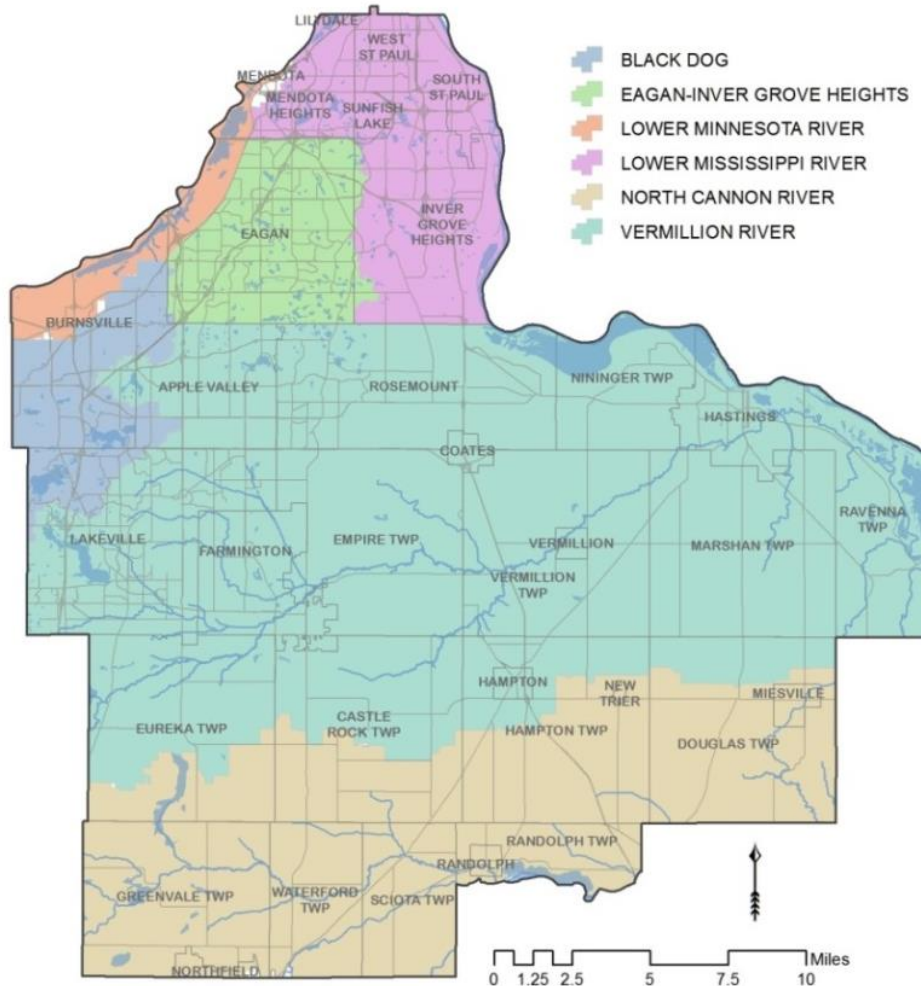


Natural Resource Plan Inventory



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Watershed Management Organizations



Local Water Plans:

- Focus on water quality and quantity, some discuss wildlife habitat
- Have limited reference to land protection, but the need exists. Most WMOs cannot acquire land interests
- Sub-watershed analyses will help identify specific areas of need

Natural Resource Plan Inventory



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City Plans:

- Land protection needs (parks and non-parks)
- Connecting corridors between natural areas
- Natural resource management:
 - Invasive species management
 - Surface water quality
 - Education to residents on range of environmental topics

Townships and Rural Collaborative Plan:

- Work with County and others to protect natural areas and corridors
- Develop / implement a natural areas protection and management plan

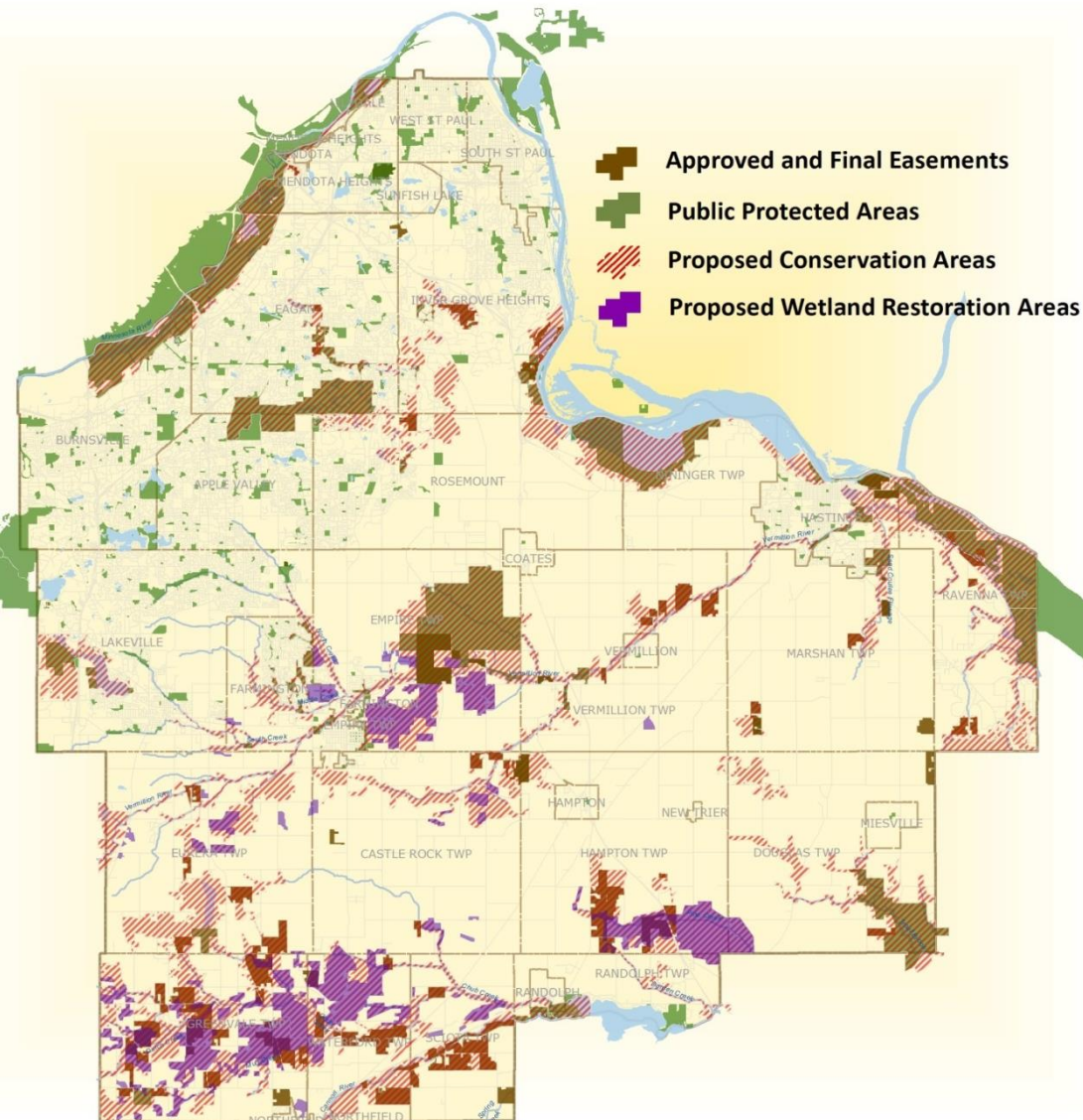
Planning Commission Questions:

1. Comments on the research findings
2. Are there other topics that should be studied?
3. Should the Plan address agricultural use, and if so, in what way?

Proposed Focus Areas



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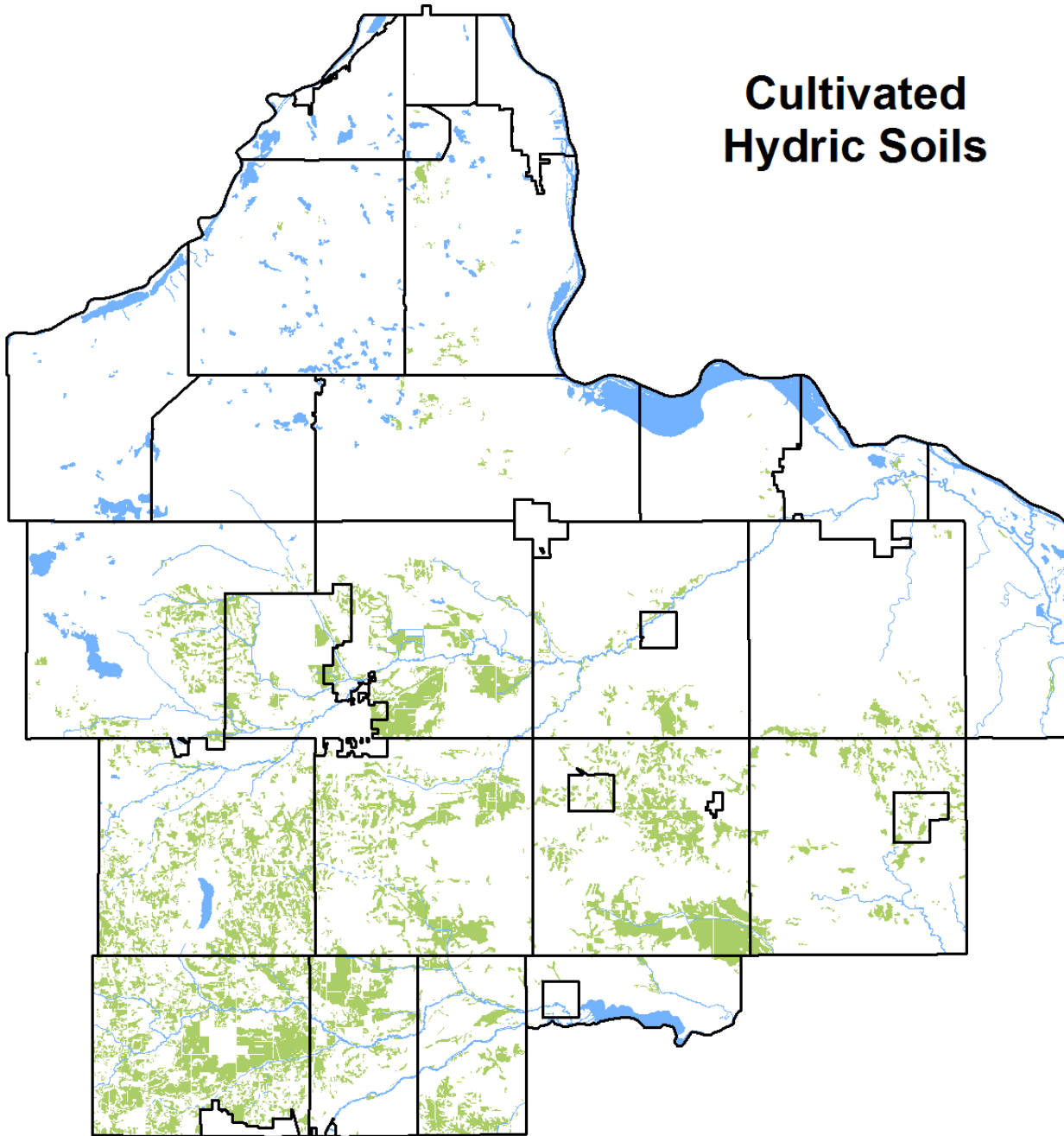
Conservation Focus Areas:

- Lakes, Rivers and Streams
- Potential Wetland Restoration Areas
- Protected Public and Private Land
- Land Cover
- Natural Resource Quality and Restoration Potential
- Land Ownership
- Size and Connectivity

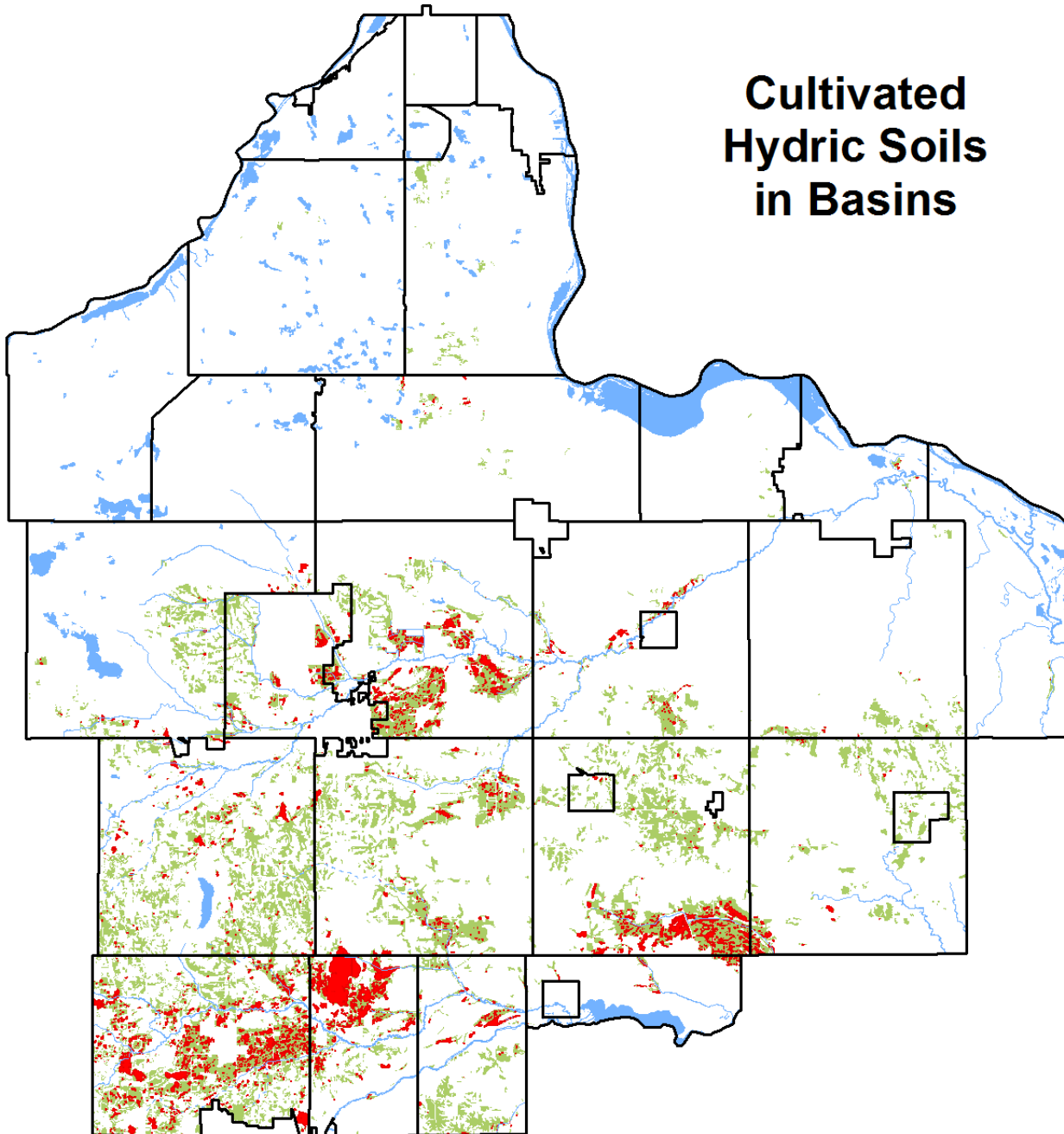
80,204 acres, including existing public lands and existing easements

50,182 acres net total of unprotected land

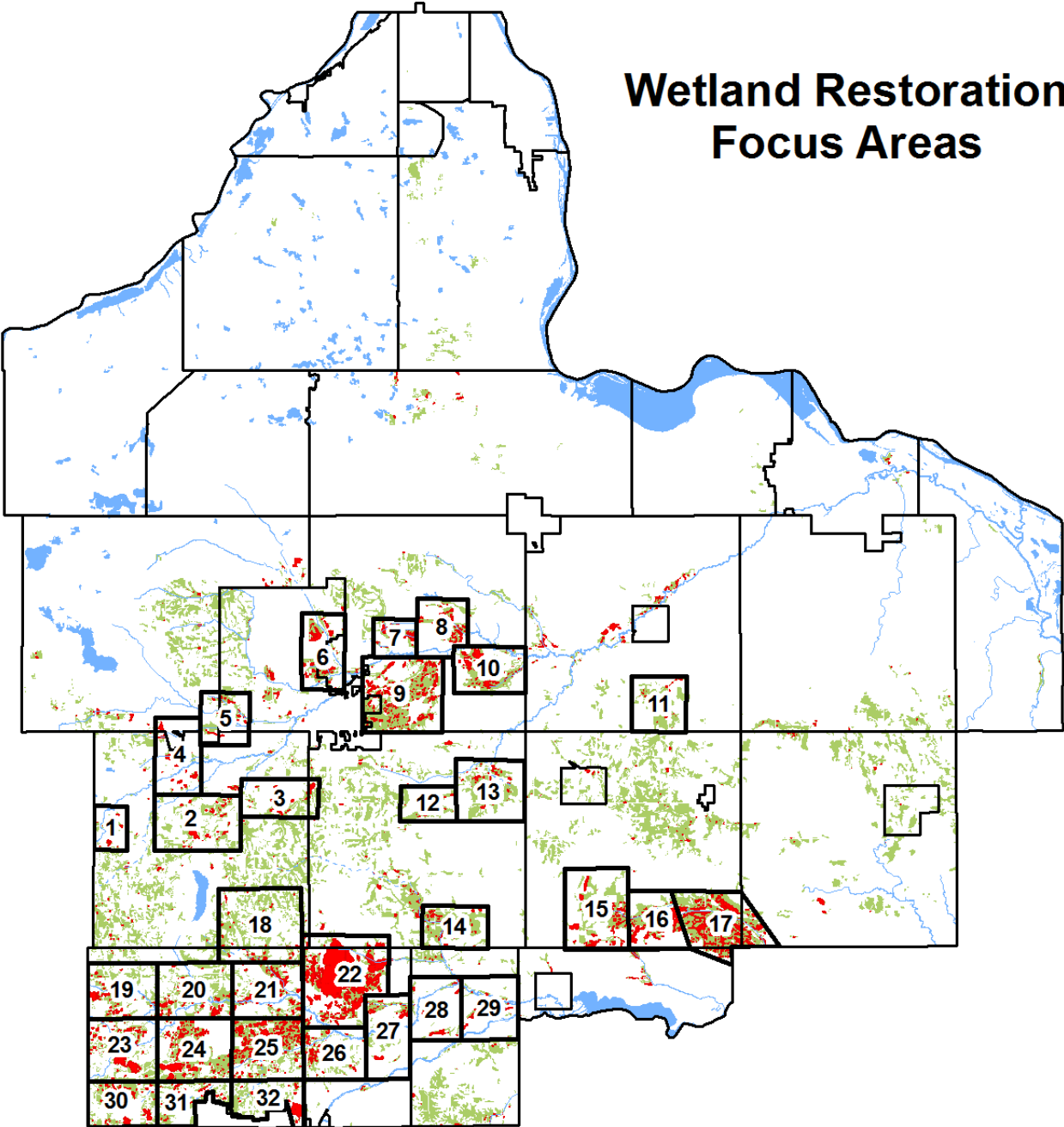
Cultivated Hydric Soils

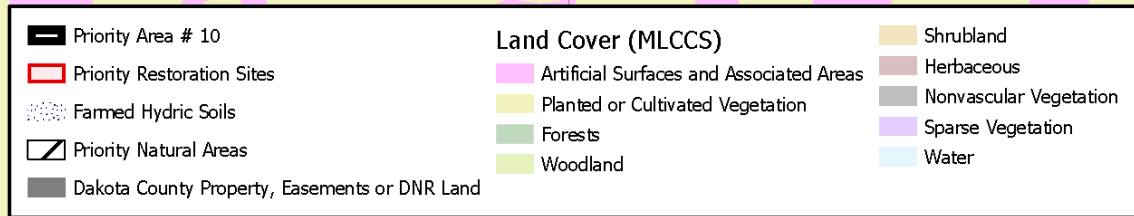
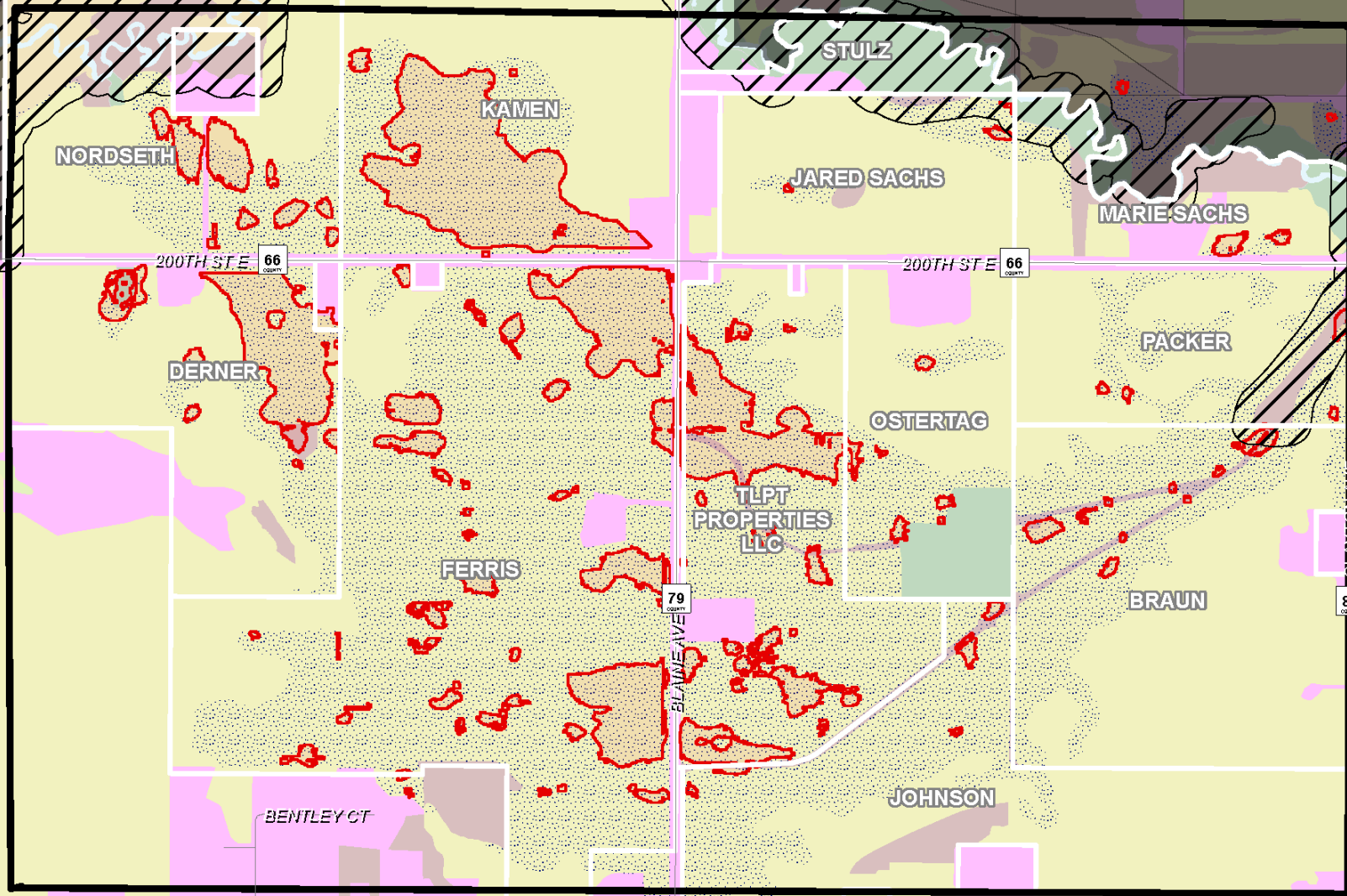


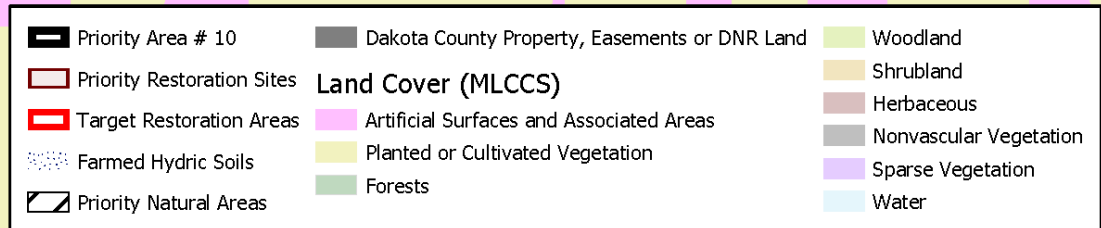
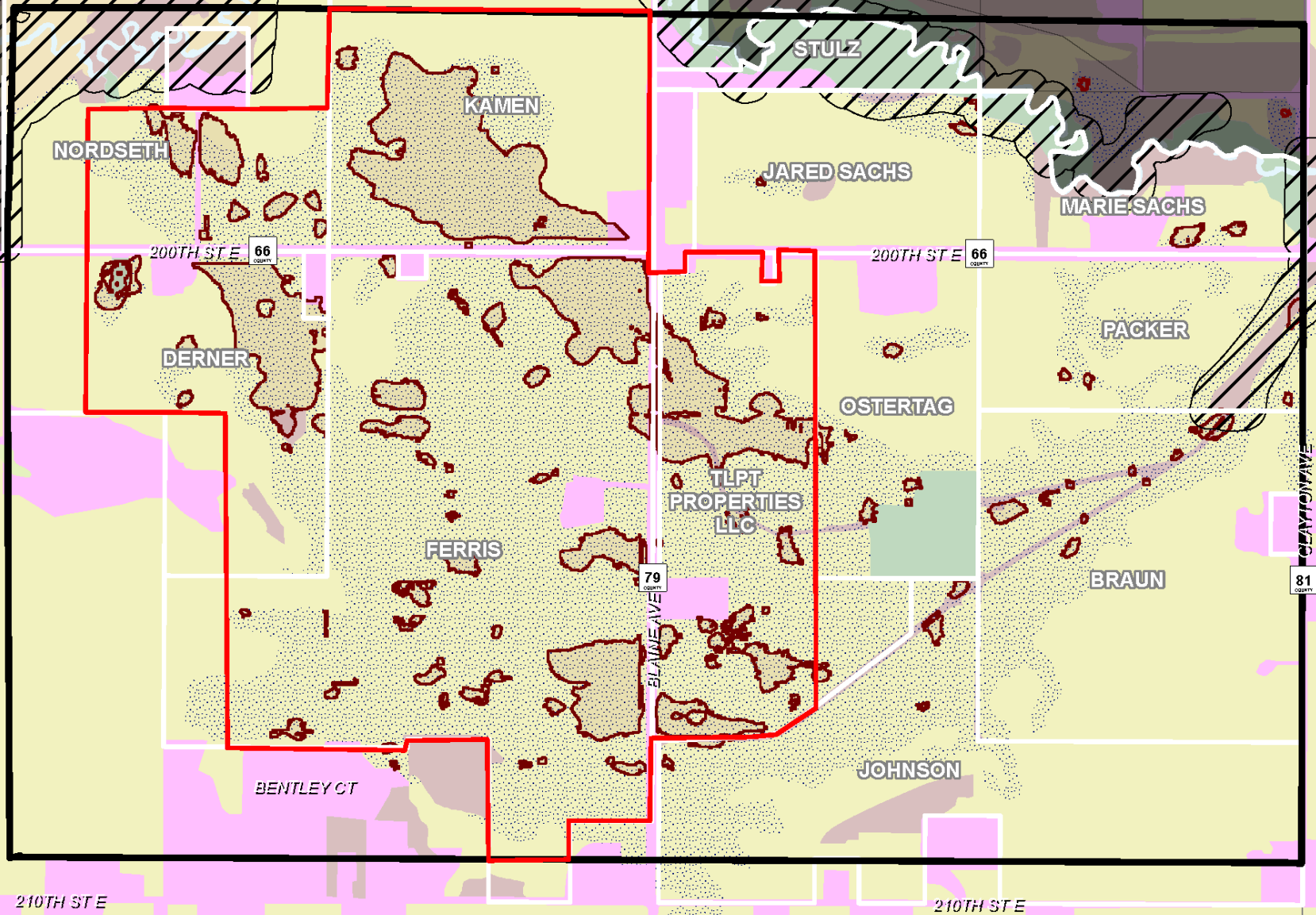
Cultivated Hydric Soils in Basins



Wetland Restoration Focus Areas







Proposed Focus Areas



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Proposed Wetland Restoration Areas:

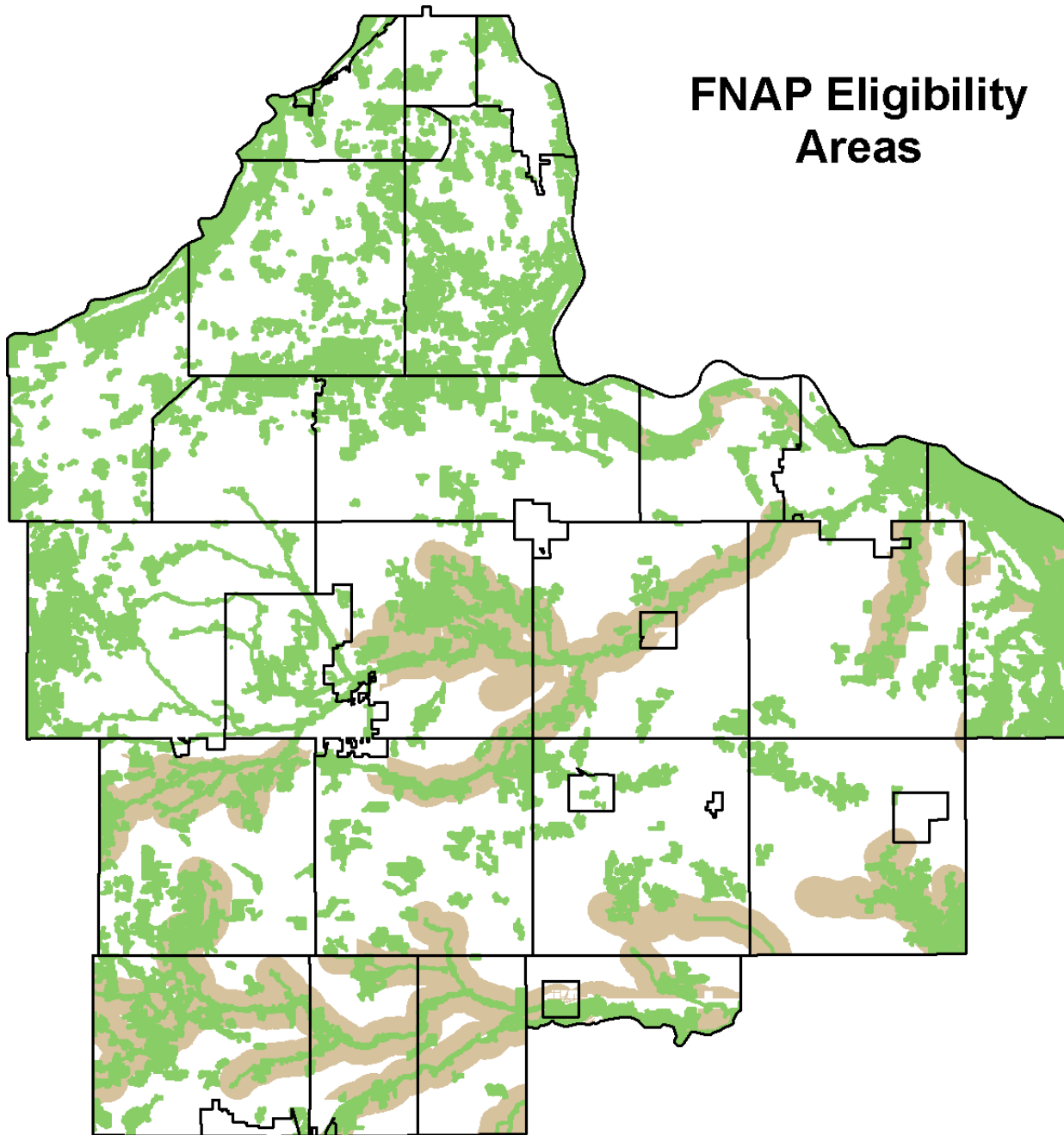
- Focused on larger drained basins (cultivated)
- Refined to basins with relatively fewer landowners



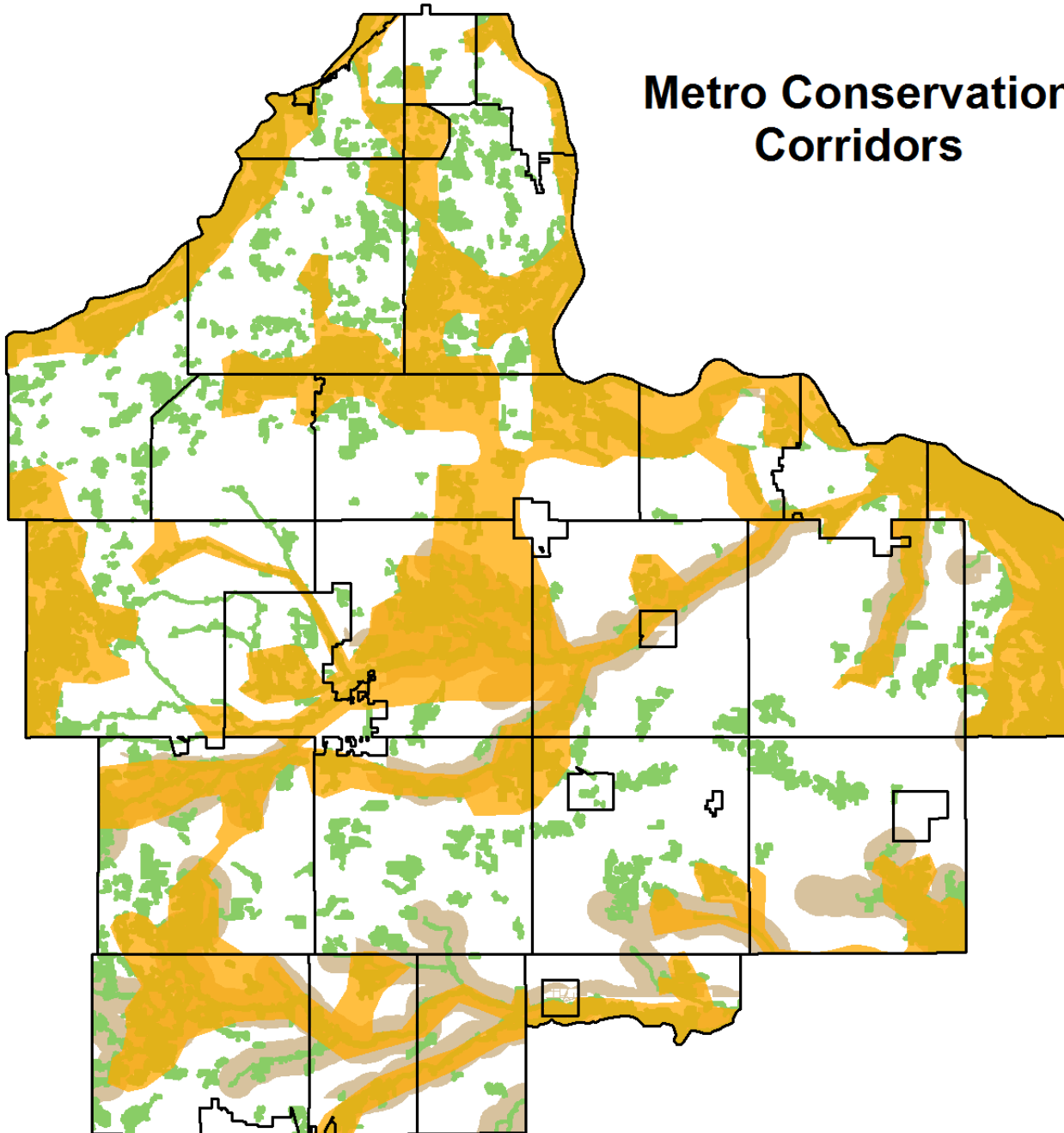
14,246 acres of proposed wetland restoration areas

Note: the location and impact of underground drain tile in a major unknown. As a result, basin boundaries are subject to significant change upon further study.

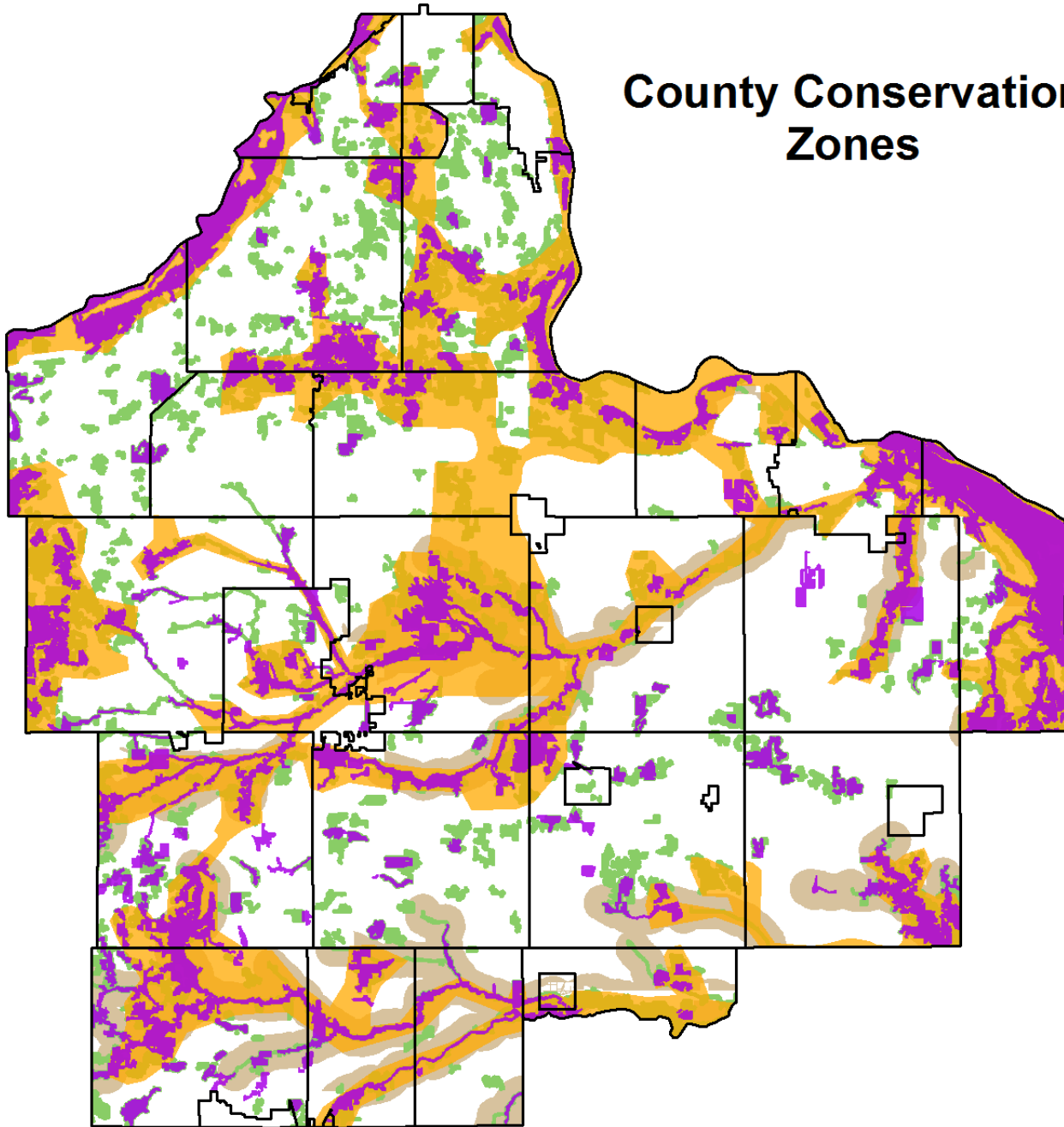
FNAP Eligibility Areas



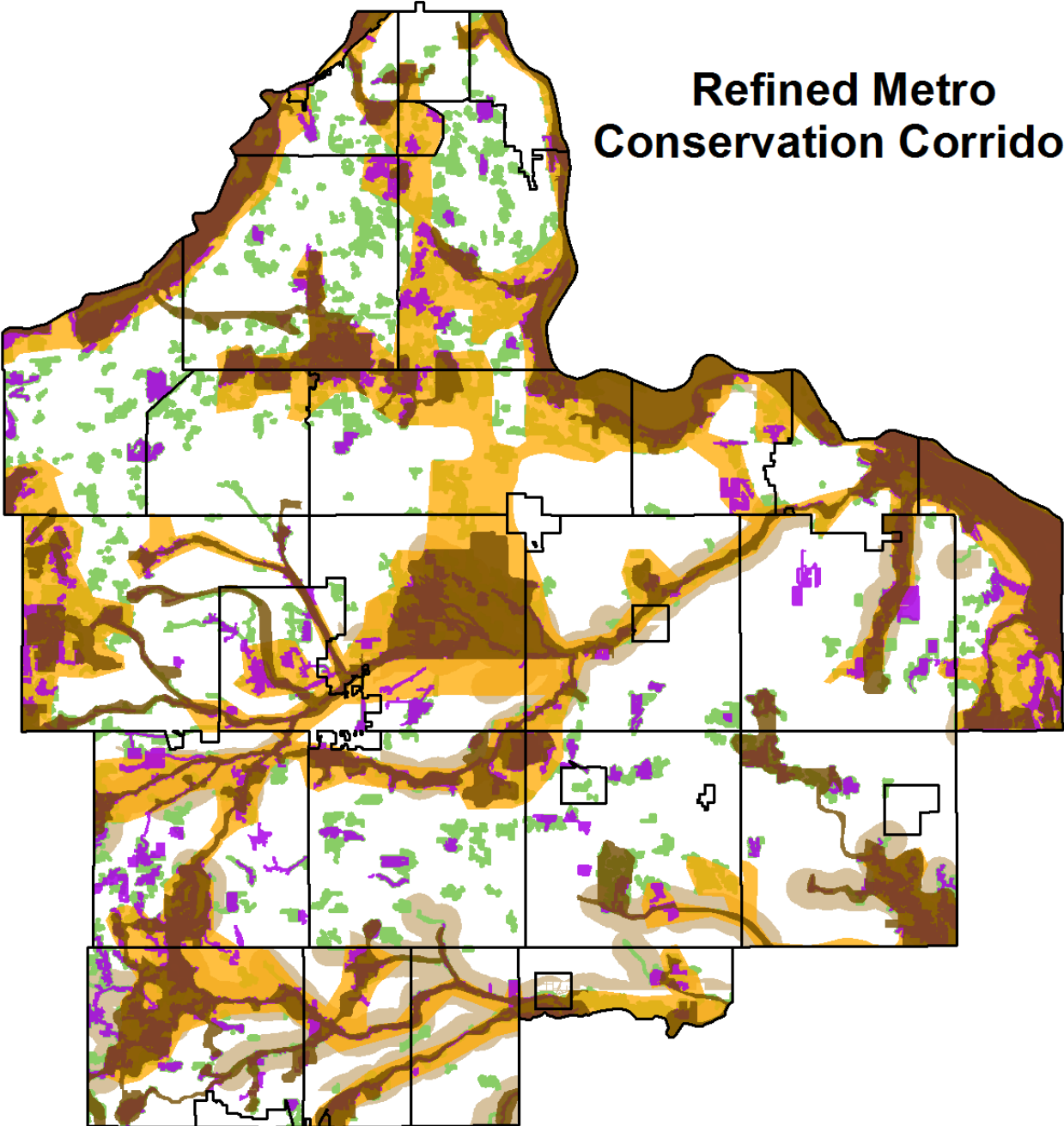
Metro Conservation Corridors



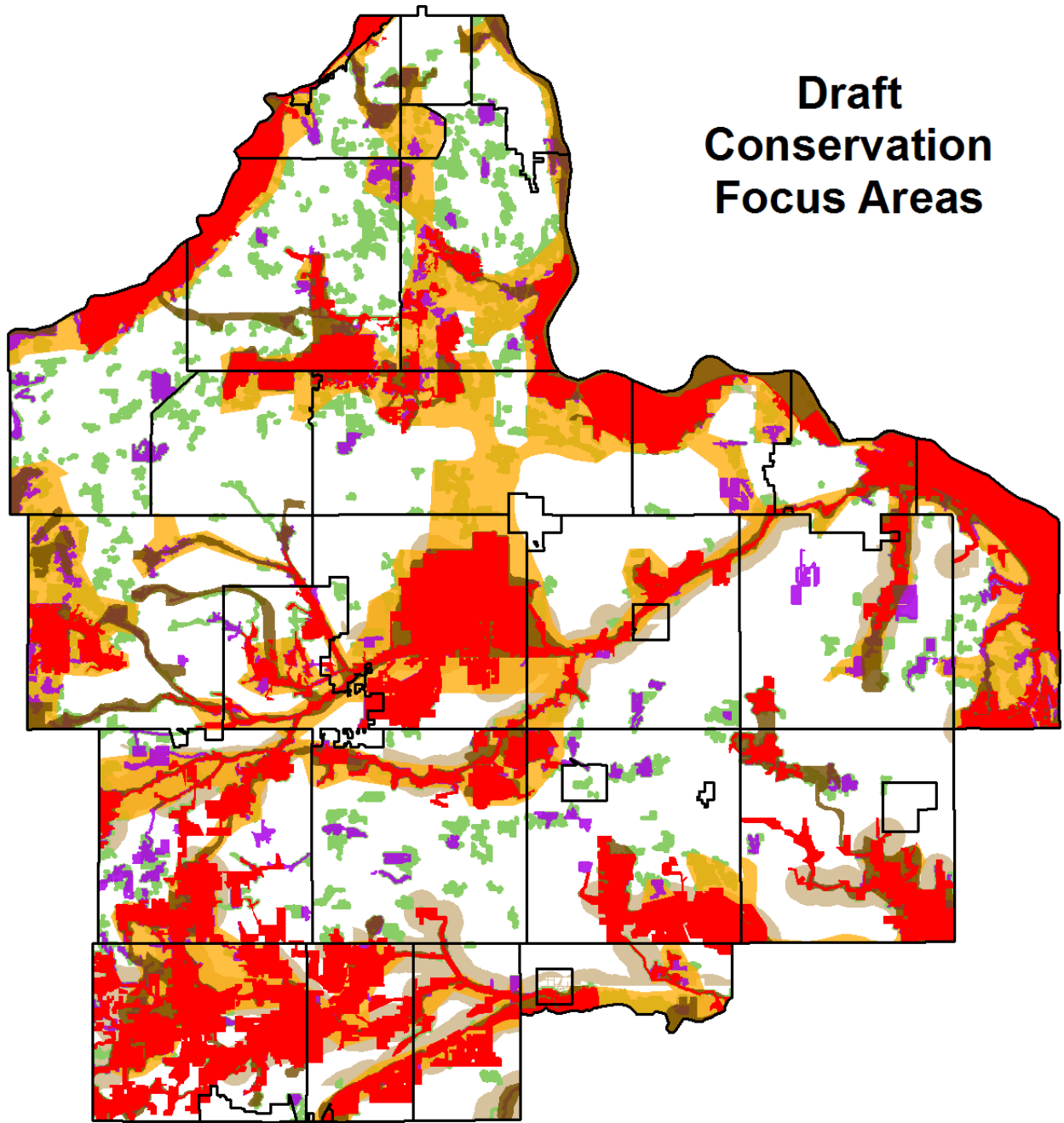
County Conservation Zones

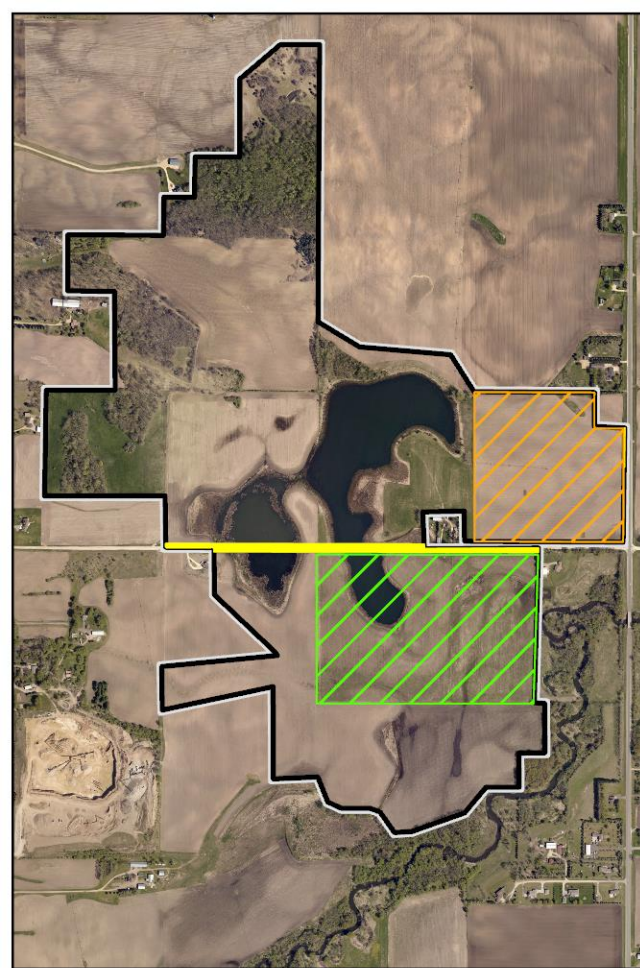


Refined Metro Conservation Corridors

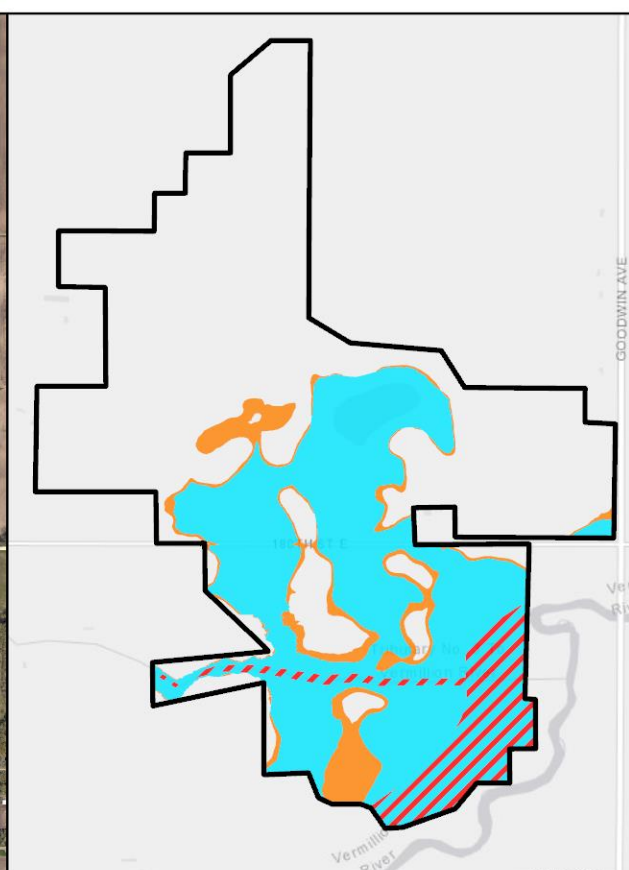


Draft Conservation Focus Areas

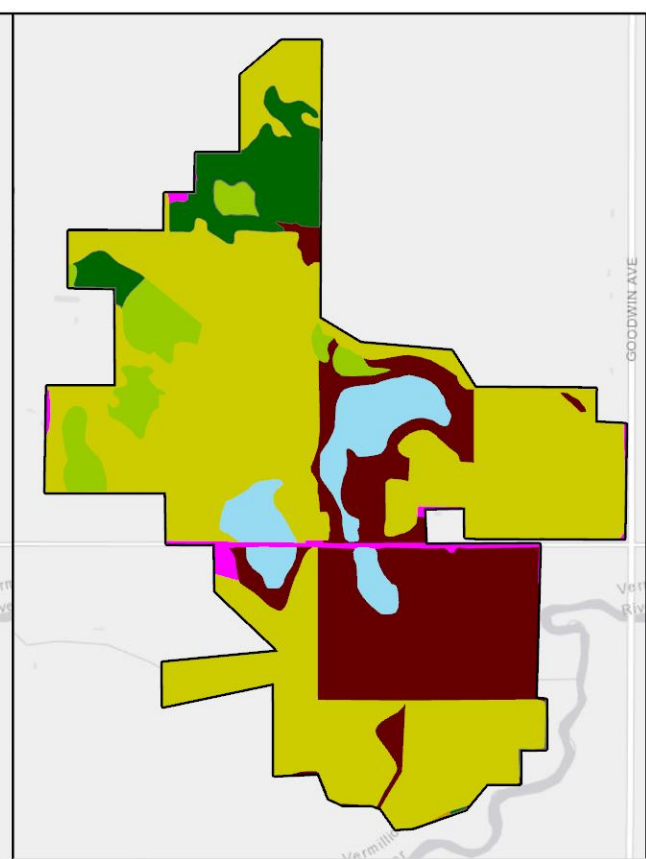




- Farmland Easement (34.9 acres)
- Natural Area Easement (53.7 acres)
- Right-of-Way (3.7 acres)



- 0.2 PCT ANNUAL CH
 - ZONE A
 - ZONE AE
 - ZONE AE - FLOODWAY
- Total = 156.0 acres

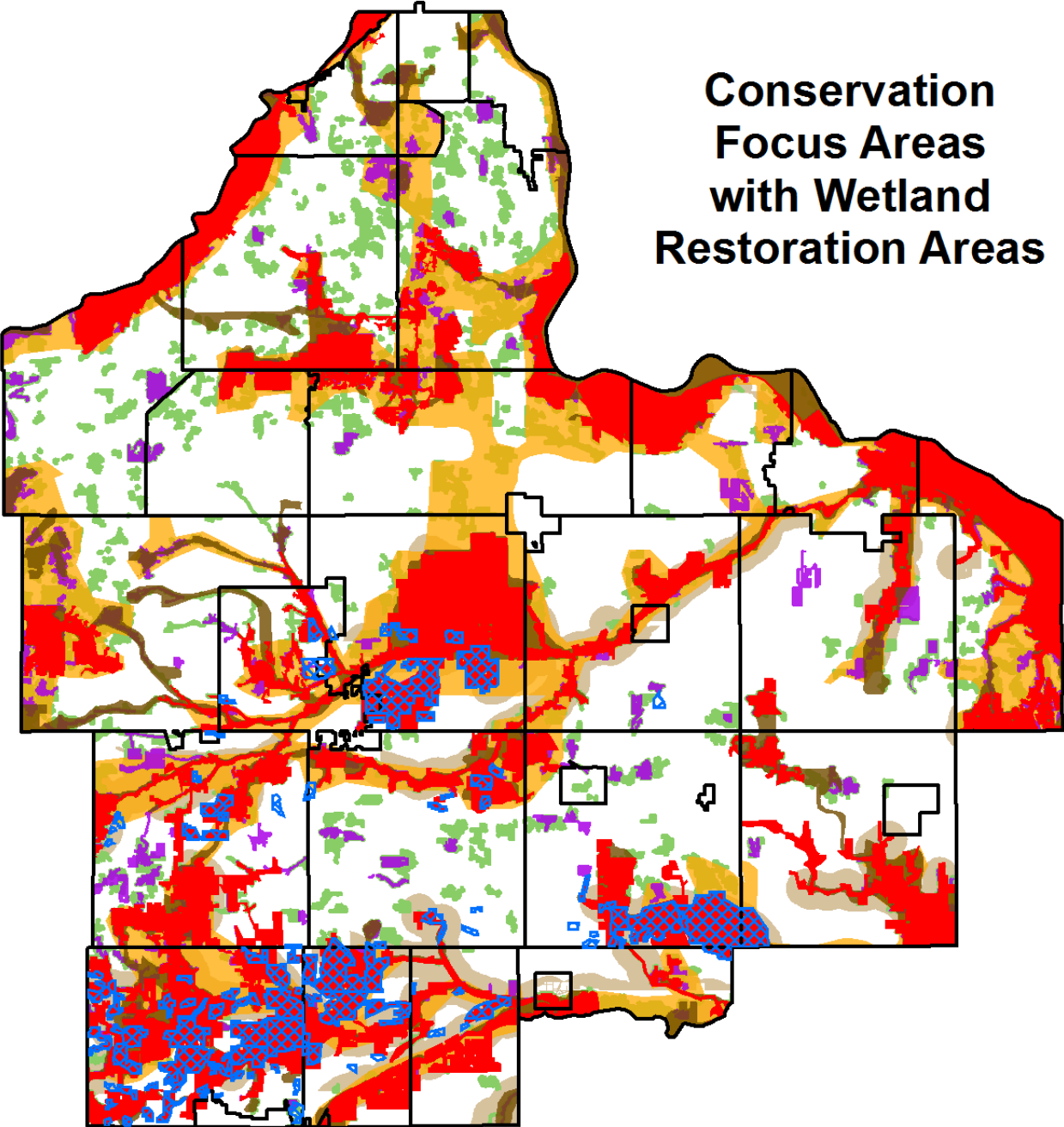


- Artificial Surfaces and Associated Areas (4.4 acres)
- Woodland (19.1 acres)
- Planted or Cultivated Vegetation (206.9 acres)
- Shrubland (0.1 acres)
- Herbaceous (78.4 acres)
- Water (23.1 acres)
- Forests (23.2 acres)

180th St Marsh

Total Acres: 355.3
of Landowners: 17

**Conservation
Focus Areas
with Wetland
Restoration Areas**



Proposed Focus Areas

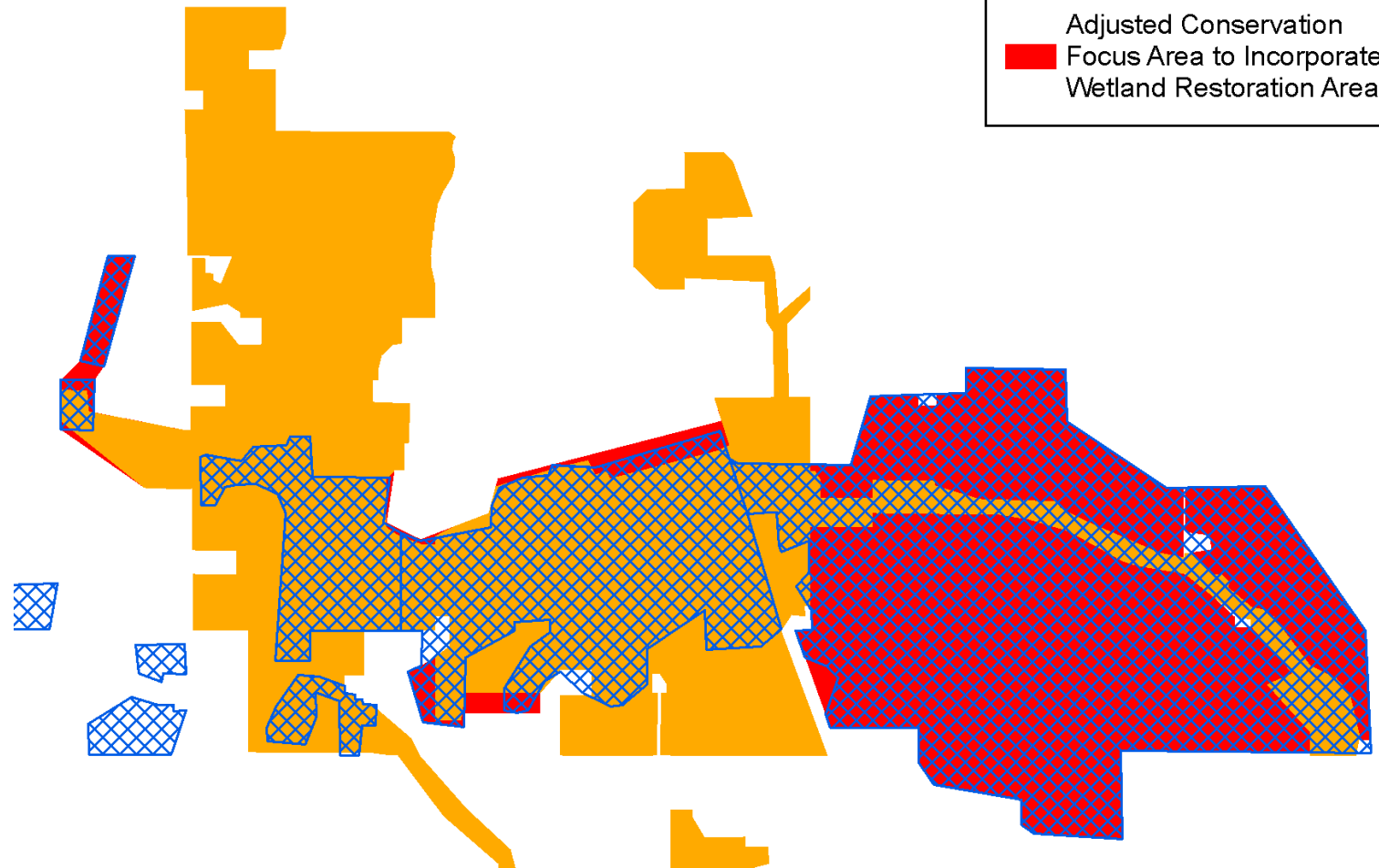


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Proposed Wetland Restoration Areas:

Included within Conservation Focus Areas as protected

-  Wetland Restoration Areas
-  Original Conservation Focus Area
-  Adjusted Conservation Focus Area to Incorporate Wetland Restoration Areas



Proposed Focus Areas



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Planning Commission Questions:

1. Comments on the proposed Conservation Focus Areas?
2. Do the Conservation Focus Areas/Potential Wetland Restoration Areas reflect the right priorities for land protection and long-term management?
3. Are there other areas of the County that should be included?

Potential New Initiatives



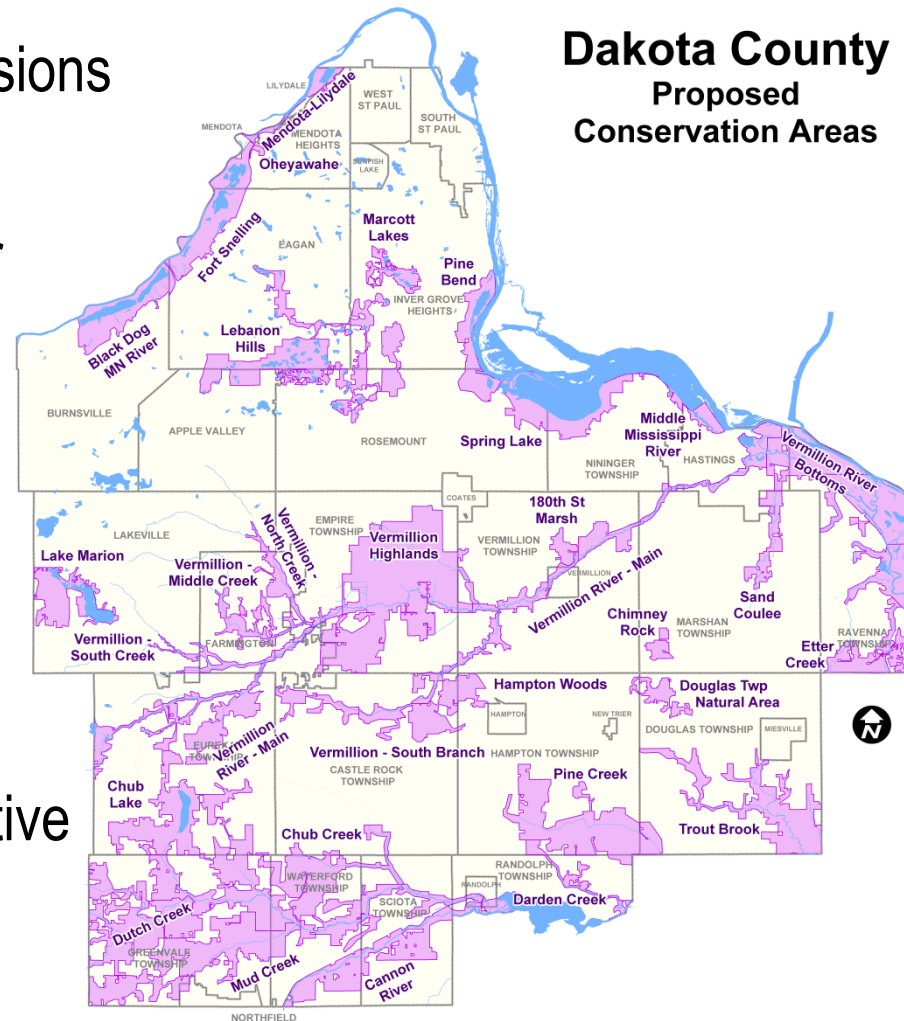
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1. Create Conservation Focus Areas (CFA)

- Build from previous conservation visions and investments
- Framework for outreach, landowner collaboration, goals, and priorities
- Will lead to refined boundaries

2. Develop City Conservation Collaborative

- Modeled after Greenway Collaborative



Potential New Initiatives



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3. Create a Dakota County Conservation Trust

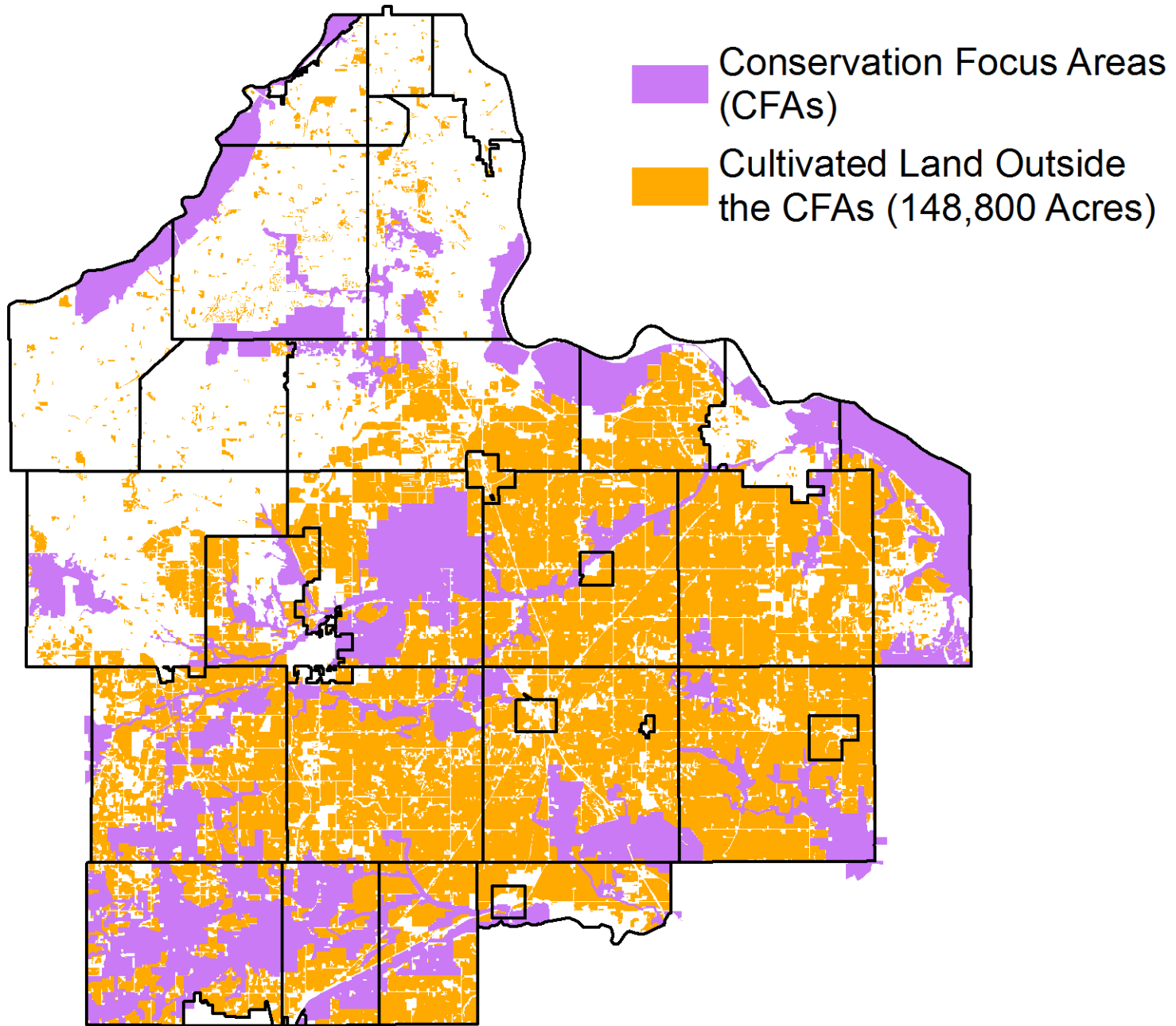
- Private funding for resource management on protected private lands
- Likely to be a third-party entity

4. Assist in Implementation of Groundwater Plan

- Land protection and management for improved water retention and wetland restoration
- May involve land use changes to protect sensitive infiltration areas outside of CFAs

5. Improve Conservation in Agricultural Use Areas

- Protection and management of lands within or affecting CFAs
- Various incentives could be considered



Potential New Initiatives



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Planning Commission Questions:

1. Comments on the potential new initiatives and continuing research?
2. What are your thoughts about potential program opportunities?

Continuing Research



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- **Program criteria:** for current priority areas
- **Outreach:** for more proactive engagement of landowners
- **Program Needs:** staffing and budget needs
- **New Policies:** for some potential approaches
- **Five and Ten Year Priorities:** for land protection, resource management, and partnerships
- **Potential Grants and Other Funds:** available and potential new sources
- **Conservation Trust:** a potential entity to hold and disburse private funds for stewardship on protected private lands

Next Steps:



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July 9	Report findings to County Board-PDC
August	Potential Agriculture Roundtable
August- October	Develop draft plan document
November- December	Draft plan review with Planning Commission
December- January	Draft plan review with County Board-PDC

Thank you!

