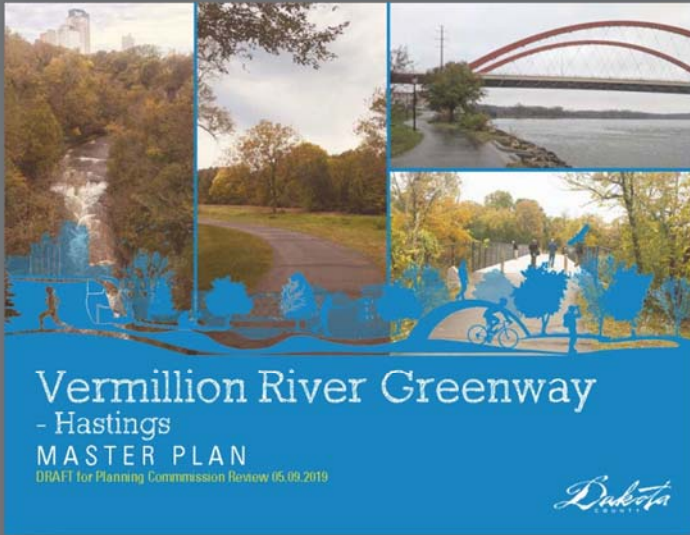


An aerial photograph of Vermillion, South Dakota, showing the city's layout and the Vermillion River. A bright cyan line traces the path of the river through the city, starting from the bottom left and moving towards the top right. The river flows through the city center, then turns north and east, eventually exiting the city limits. The surrounding area includes agricultural fields, some industrial or commercial buildings, and a large body of water in the upper right corner.

Vermillion River Greenway - Hastings

Dakota County Planning Commission
May 23, 2019

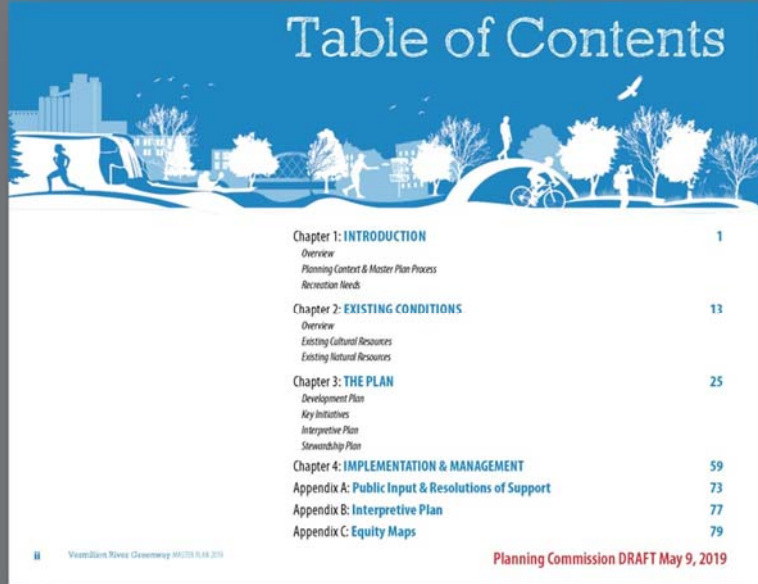
Agenda



- Overview of Draft Master Plan
- Prioritization Exercise & Discussion



Master Plan Organization



The image shows a 'Table of Contents' page for a master plan. At the top, there is a blue header with the title 'Table of Contents' in white. Below the header is a white illustration of a park scene with a person walking, a person on a bicycle, trees, and a building. The main content is a list of chapters and appendices with their corresponding page numbers. The text is as follows:


Chapter 1: INTRODUCTION	1
Overview	
Planning Context & Master Plan Process	
Recreation Needs	
Chapter 2: EXISTING CONDITIONS	13
Overview	
Existing Cultural Resources	
Existing Natural Resources	
Chapter 3: THE PLAN	25
Development Plan	
Key Initiatives	
Interpretive Plan	
Stewardship Plan	
Chapter 4: IMPLEMENTATION & MANAGEMENT	59
Appendix A: Public Input & Resolutions of Support	73
Appendix B: Interpretive Plan	77
Appendix C: Equity Maps	79

At the bottom left, there is a small logo and the text 'Vermillion River Greenway MCHP 5.8.2019'. At the bottom right, there is the text 'Planning Commission DRAFT May 9, 2019'.

1. Introduction
 2. Existing Conditions
 3. The Plan
 4. Implementation & Management
- Appendices

1. Introduction

Introduction

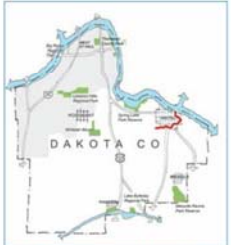


OVERVIEW

The Vermillion River Greenway-Hastings is a proposed regional trail and open space corridor that will provide a link between southwestern Hastings neighborhoods, Vermillion Falls Park, the Mississippi River Regional Trail in eastern Dakota County, and the new Point Douglas Regional Trail connecting Hastings to Prescott, Wisconsin. Much of the greenway corridor has an existing City trail facility along it today. The regional greenway designation will provide improvements, such as natural resources restoration projects, trailhead and gateway facilities, and overlooks. The greenway will serve as a destination trail for the larger surrounding area and connect to the Dakota County Greenway network. The five mile corridor stretches east and west within southern Hastings and then north to the Mississippi River and downtown Hastings. A one-mile portion of the trail corridor will be newly designed and constructed in southwestern Hastings connecting to Marshan Township. The greenway corridor's surrounding land use includes single-family residential, downtown business district and public open space.

The Vermillion River Greenway Master Plan:

- Identifies the preferred trail and greenway alignment
- Envisions improvements to water quality, habitat, recreation, and non-motorized transportation along the corridor
- Provides strategies for interpretation, resource stewardship, development, land acquisition, and operations
- Estimates project costs
- Satisfies requirements for Metropolitan Council Thruway 2040 regional destination trail and greenway planning



The Vermillion River Greenway is shown in red on the map above.

Planning Commission DRAFT May 9, 2019

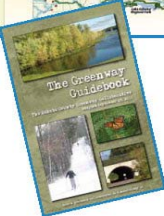

Vermillion River Greenway MASTER PLAN 1

- Corridor context
- Planning background
- Dakota County greenway vision

Dakota County Parks, Lakes, Trails and Greenways Vision, 2030

What's New?

- IDENTIFIED/EXISTING PARKS**
- NEW/PLANNED GREENWAYS**
- NEW/PLANNED TRAILS**
- NEW/PLANNED LAKES**
- NEW/PLANNED OPEN SPACE**



Dakota County Greenway Vision

In the 2008 Dakota County Park System Plan and the 2010 Dakota County Greenway Guidebook, the County has established a vision for an interconnected system of open space corridors – greenways. Greenways provide many benefits but require little land.

Greenways can protect natural areas, habitat, stream corridors, and water quality. As green corridors landscaped with native plants, greenways offer a more natural experience than traditional roadside trails.

Greenways are a great way to “bring parks to people” in developed areas, where opportunities for large regional parks may no longer exist.

Dakota County Park System Plan

The 2008 Dakota County Park System Plan established the foundation for a county-wide greenway network by envisioning regional greenways that connect parks, schools, local trails, and libraries through the non-rural portions of the county.

Dakota County Greenway Collaborative: The Greenway Guidebook

In 2010, Dakota County adopted the Dakota County Greenway Guidebook, which guides the process for greenway planning and development. The guidebook establishes a framework for a collaborative approach to governance, stewardship design, and operation of greenways.

2 Vermillion River Greenway MASTER PLAN 2019

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Dakota County Greenway Vision

Dakota County Parks, Lakes, Trails and Greenways Vision, 2030

What's New?

GREAT PLACES: Destination Parks

- * New Regional Park in Vermillion Highlands
- * More things to do in parks
 - Winter activity area
 - Gathering and celebration areas
 - Swimming and water play areas
- * More popular "park basics"
 - Enhanced picnicking
 - Biking and accessible trail loops

CONNECTED PLACES: Greenway Trails

- * "Bring parks to people" -- Linear parks connect parks, schools, lake trails, playgrounds, libraries, and the Minnesota and Mississippi Rivers.
- * Walking, biking, and in-line skating
- * Public agencies work together to create 200 miles of greenways using mostly publicly-owned land.

PROTECTED PLACES: Green Infrastructure

- * Enhance and protect park resources
- * Protect stream corridors in public/private partnerships
- * Protect natural areas and open space in public/private partnerships

DAKOTA COUNTY PARK SYSTEM and COLLABORATIVE OPEN SPACE PROTECTION

- Dakota County Parks
- Federal, State, and Other Regional Open Space
- Existing and Planned Regional Greenways
- Regional Status Discussion with Metropolitan Council
- Example City Greenways (route concepts)
- Stream Conservation Corridors and Greenways
- Destinations: City Parks, Schools, Lakes, Libraries
- Privately-Owned Protected Farmland (FNAP)
- Private/Public Protected Natural Areas (FNAP)
- Potential Rail to Trail Opportunities



Notes:
Regional greenways are intended to illustrate routes, not actual scale. City greenway routes are suggested.
Greenway design standards and master plans will be developed through greenway partnerships.



Introduction

Figure 4. Mississippi River Corridor Critical Area



- Mississippi River Corridor Critical Area

Introduction

or biking on trails.

Interest in History and Culture

As society has become more mobile, interest in local culture and history has increased. The ability to integrate cultural, historical, and environmental interpretation into the greenway will add richness to the greenway experience.

Population

Metropolitan Council studies indicate half of regional trail users live within 3/4 mile of a trail, and 75 percent of trail users live within three miles of the trail used. The 3/4 mile area around the trail is considered the core service area and the three-mile area the primary service area. Communities that fall within the Vermillion River Greenway-Hastings's core and primary service areas are all expected to see growth within the next ten years. Those communities include Hastings, Marshan Township, Denmark Township, Ravenna Township, Nininger Township, Vermillion Township. A small portion of Cottage Grove and Denmark Township in Washington County are included in the service area, as well as the city of Prescott in Wisconsin. These three latter communities are all located across the Mississippi River, which may serve as a barrier to significant use from these populations.

Use Forecasts

According to the Metropolitan Council's 2016 report, *Annual Use Estimate of the Metropolitan Regional Parks System for 2016*, an estimated 135,500 visits were made in 2016 to the Big Rivers Regional Trail. Using the Big Rivers Trail as a guideline, the Vermillion River Greenway-Hastings Trail, if opened today, could expect approximately 72,495 annual visits. This estimate was calculated based on Metropolitan Council 2016 visit estimates for the Big Rivers Regional Trail (135,500 estimated visits for 4.5 miles of trail), adjusting for the lower population of the cities in the primary service area of the Vermillion River Greenway-Hastings trail, while also considering the tourist draw that the downtown Hastings area, the Mississippi River Regional Trail, and the Vermillion River have in the region.

The 2030 population of the communities touching the greenway's three-mile service area is expected to be 15% percent greater than in 2017. Assuming use rates are stable – a conservative assumption – in 2030, annual visitation can be expected to be at least 83,569. The estimate does not

Table 11. Population forecasts for communities adjacent to the Vermillion River Greenway.

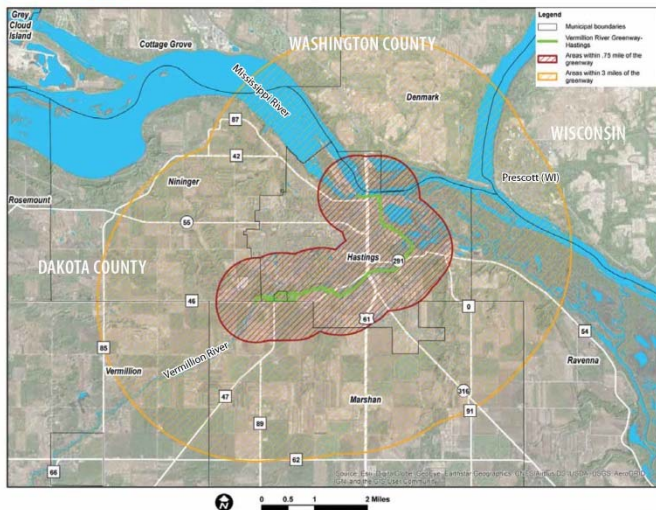
Sources: Metropolitan Council Community Profiles, (<http://stats.metr.state.mn.us/profile>) and City of Prescott website (<http://www.prescottwi.org/>) *population estimate from 2015

MUNICIPALITY	2017 ESTIMATE	2030 FORECAST	% CHANGE
<i>Core Service Area (areas within 3/4 mile of greenway)</i>			
Hastings	22,640	26,000	15%
Marshan Township	1,124	1,200	7%
Denmark Township	1,782	2,160	21%
Nininger Township	892	960	8%
Total Core	26,438	30,320	15%
<i>Primary Service Area (areas within 3 miles of greenway)</i>			
Vermillion Township	1,233	1,240	0.5%
Ravenna Township	2,373	2,430	2.4%
Denmark Township	1,782	2,160	21%
Cottage Grove	36,399	42,200	16%
Prescott, WI	4,350*	4,870	12%
Total (Core + Primary)	72,497	83,220	15%
Dakota County	411,507	474,670	15%

- Greenway service area
- Demand forecast



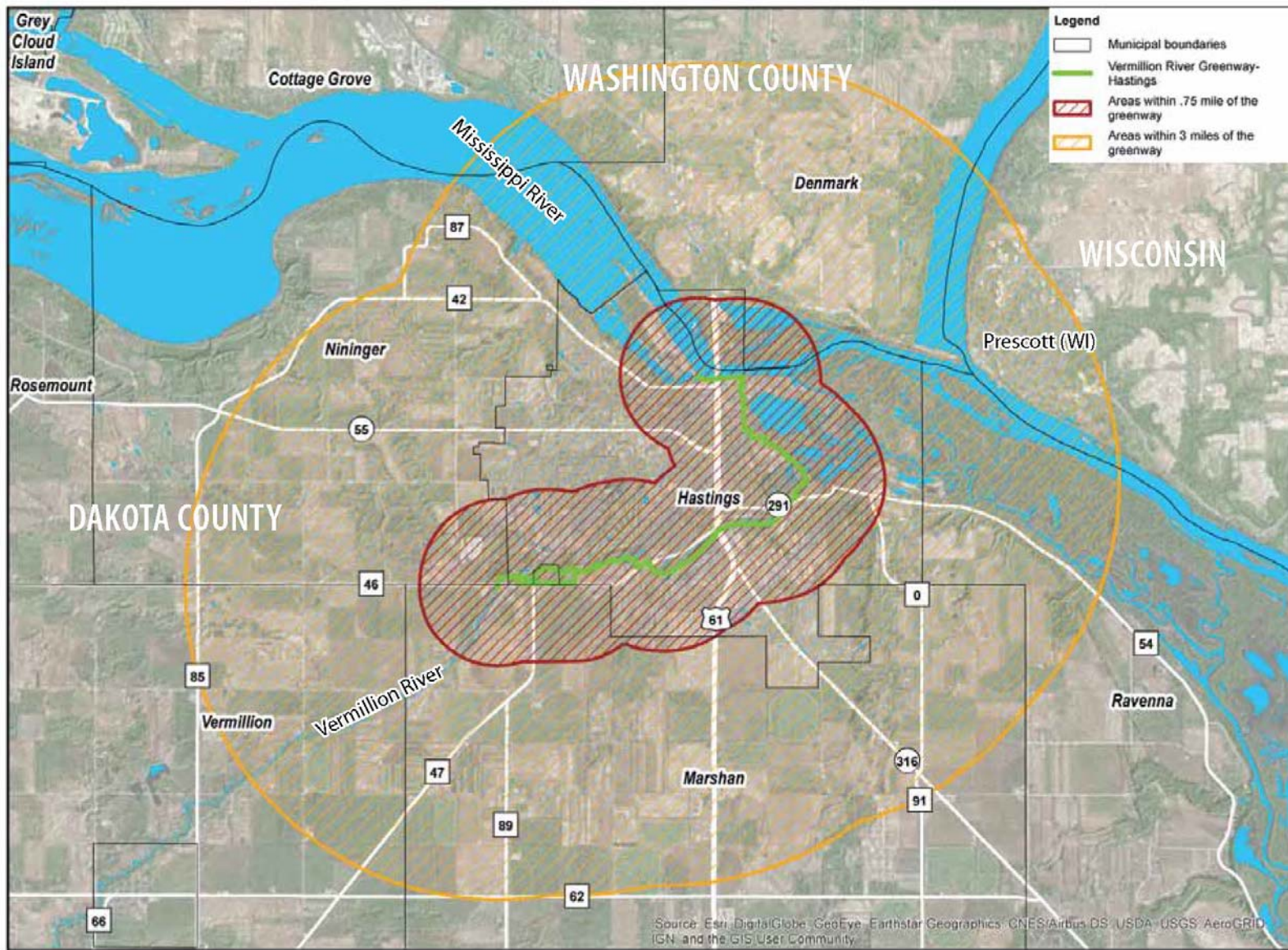
Figure 12. Core and Primary Service Areas



Introduction



Figure 12. Core and Primary Service Areas



2. Existing Conditions

GREENWAY CHARACTER AND LAND USE

Today the land along the greenway corridor consists of historic downtown Hastings retail district, early and mid-twentieth century residential neighborhoods, suburban residential neighborhoods, agricultural lands, and park land. The land most likely will maintain its historic urban character well into the future. The greenway can be broken into four segments.

Existing Trail: Mississippi River Regional Trail/Downtown Hastings to C.P. Adams Park *(Urban Section)*

A new trailhead for the Mississippi River Regional Trail and the Vermillion River Greenway serves as the beginning of the trail. The trail runs south, through downtown Hastings and alongside Bailey Street and the railroad corridor. At 8th Street, the trail meanders through an open field and Rivertown Dog park, crossing Ravenna Trail at Progress Drive and continuing across the Vermillion River to the north parking lot at C.P. Adams Park.



Existing Mississippi River Regional Trail under the recently constructed Hwy 61 bridge over the Mississippi River (looking north)



Mississippi River Regional Trail through Levee Park (looking east)



Existing trail along Bailey Street, adjacent to rail line

Existing Trail: C.P. Adams Park to Highway 61/Vermillion Street *(River Gorge Section)*

C.P. Adams Park north parking lot will serve as a neighborhood gateway for the trail. From here, the trail will follow the southern bluff of the Vermillion River, passing by the Veteran's Home and former (historic) mental hospital. The trail connects to Old Mill Park's Oak Savannah with a former rail bridge and continues through Vermillion Falls Park, and the future site of a trailhead.



Existing parking lot at C.P. Adams Park to serve as neighborhood gateway



View from the historic trestle bridge at Old Mill Park of the Vermillion River



View of Con Agra and Falls from observation shelter at Vermillion Falls Park



• Greenway character and land use

- Urban town center
- Historic neighborhoods
- River gorge
- River floodplain
- Rural river corridor

Existing Trail: Highway 61/Vermillion Street to Pleasant Drive *(Floodplain Section)*

A grade-separated crossing under Highway 61/Vermillion Street begins this trail segment, which is characterized by the native plantings along the restored floodplain of Vermillion River Linear Park. Another existing grade-separated crossing under Vermillion Road near 31st Street transitions the trail from parkland to a rural/agricultural landscape along the southern bluff of the Vermillion River to Pleasant Drive.



Grade-separated crossing under Highway 61 at Vermillion Falls Park



Neighborhood gateway of existing trail at Cannon Street



Existing trail alongside restored floodplain

New/Future Trail: Pleasant Drive to Marshan Township *(New Rural Section)*

At Pleasant Drive, the existing trail ends. Here, the trail will follow the Vermillion River closely on the north side of a handful of rural residential properties. An alternative alignment shows the trail travelling parallel to CR 46 between Pleasant Drive and General Sieben Drive. Long-term completion of the trail will connect General Sieben Drive to the boundary of Marshan Township. Potential grade-separated crossings will complete the trail network at Pleasant Drive, General Sieben Drive and at 160th Street.



Entry to existing trail at Pleasant Drive



Rural/residential landscape along 160th Street



Existing Conditions

EXISTING TRAIL CONDITIONS & ISSUES

The following pages include detailed analysis of the existing City of Hastings trail conditions, such as surface condition, trail width, curve radii, trail slope, and potential flooding issues. This analysis was completed by site analysis, video recording, and measurement by professional engineers.

Figure 16. Existing Trail Conditions (north segment)



Most of the existing trail is in good condition and at least ten feet wide. Some portions of the trail are in acceptable or poor condition and some are less eight to nine feet wide. These sections are mainly in C.P. Adams Park, Vermillion Falls Park, Vermillion River Linear Park. These sections of the trail will need to be widened to meet regional trail standards.



- Analysis of existing trail
 - Trail width
 - Pavement condition
 - Curve analysis
 - Sight lines

Figure 17. Existing Trail Conditions (south segment)



Existing Conditions

Figure 21. Existing Natural Resources (MLCCS & MCBS)

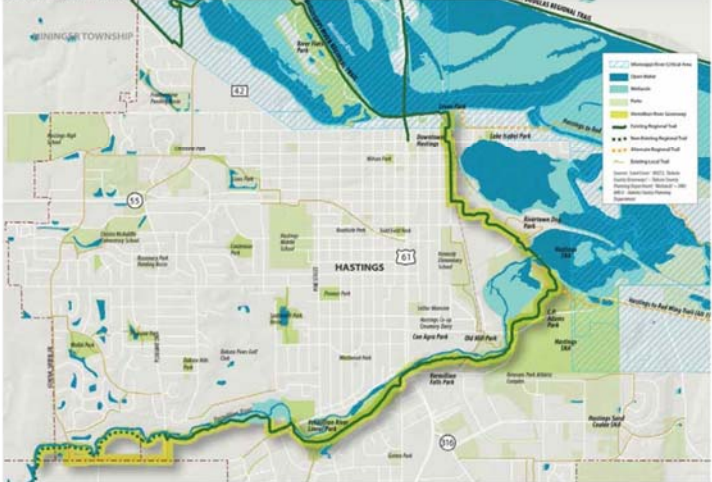


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- Natural Resources
 - MLCCS
 - MCBS
- Water Resources
 - Open water
 - Wetlands

Figure 22. Existing Water Resources



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Existing Conditions

EXISTING CULTURAL RESOURCES

The City of Hastings contains a rich history of cultural resources, some of which can be seen today in mill ruins and geologic formations. Within the greenway corridor, there are parks, historical and cultural features, recreational and community resources, both historical and current, that have provided people with access to nature for generations. These historic and cultural resources are an important part of the landscape to the people along the greenway corridor and to visitors.

Some of the featured historic resources and stories along the corridor include:

- ▶ Le Duc Mansion
- ▶ Milling along the Vermillion River
- ▶ Flooding in Hastings and the Levee
- ▶ Wildlife in the Hastings Scientific and Natural Area and within the Vermillion and Mississippi River corridors
- ▶ Historic rail trestle bridge
- ▶ Veterans Home

Figure 24. Existing Cultural and Historic Resources




- Cultural Resources
 - Le Duc Mansion
 - Milling
 - Flooding
 - Wildlife (Hastings SNA, Vermillion River, Mississippi River)
 - Rail trestle bridge
 - Veterans Home

3. The Plan

The Plan

3



OVERVIEW

The Vermillion River Greenway will integrate linear recreation, non-motorized transportation, water quality improvements, habitat preservation, and interpretation. Much of the corridor today contains an existing city trail and several city parks. The surrounding land use context consists of historic Hastings downtown and neighborhoods along with newer single-family housing development at the west end of the corridor. The plan identifies the preferred greenway alignment, alternative alignments, trailheads, gateways, and grade separated crossings.

This chapter includes four sections:

- A. Development plan — Outlines the defining recreation and transportation features of the greenway
- B. Key initiatives — Describes specific development and natural resource projects for each greenway segment
- C. Interpretive plan — Identifies interpretive themes and subthemes for the greenway and provides a framework for cultural and environmental interpretive elements
- D. Stewardship Plan — Addresses habitat stewardship and water resources

DESIGN FRAMEWORK

The Greenway Guidebook provides the framework for the greenway enhancements:

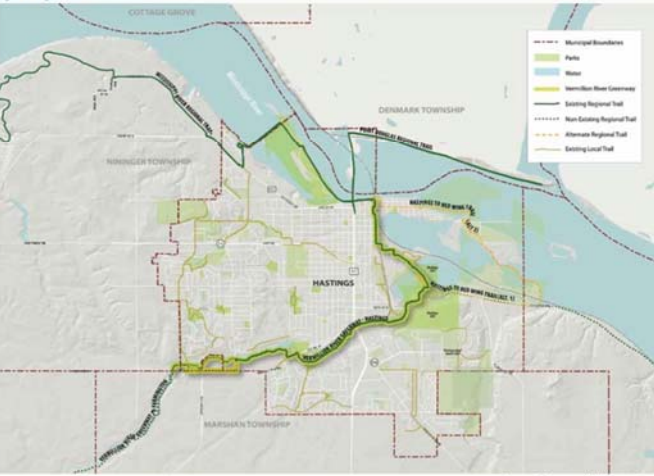
- ▶ Has regional trail for recreation and transportation that follows water and natural features
- ▶ Is maintained as a year-round facility
- ▶ Provides frequent trailheads and access points
- ▶ Has grade-separated crossings of major roads
- ▶ Has a consistent design with natural signature and high quality support facilities
- ▶ Has lighting for evening use in appropriate locations
- ▶ Links recreation destinations and activity centers
- ▶ Acts as a spine for local loop trails
- ▶ Maximizes borrowed views
- ▶ Uses wayfinding as a system-wide unifying element
- ▶ Is universally accessible
- ▶ Incorporates sustainability by using recycled materials, pervious pavement, energy efficient lighting and enabling non-motorized transportation

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- Greenway overview and framework
- Regional connections

Figure 27. Regional and Local Trail Connections



0 0.5 1 MILES

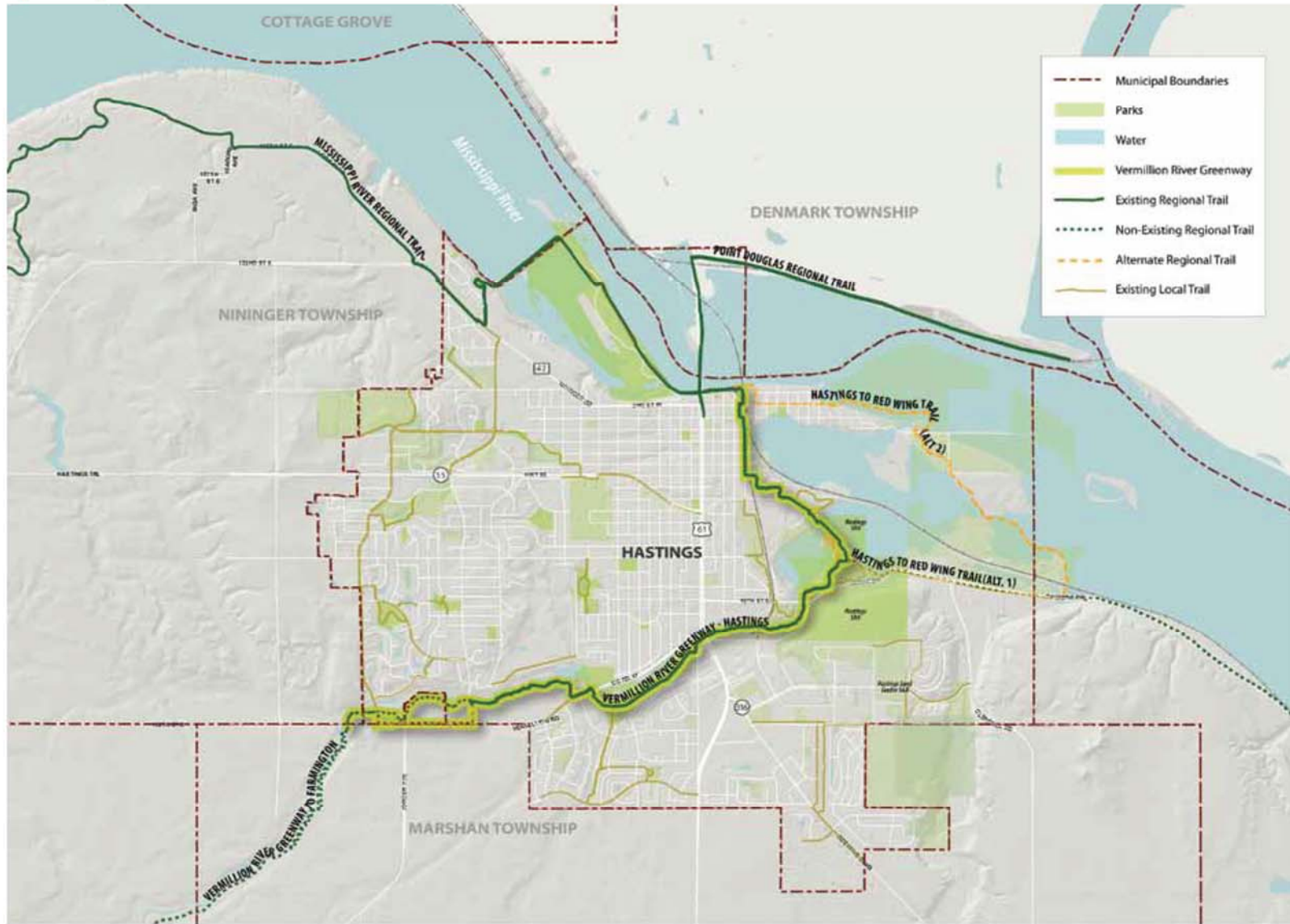
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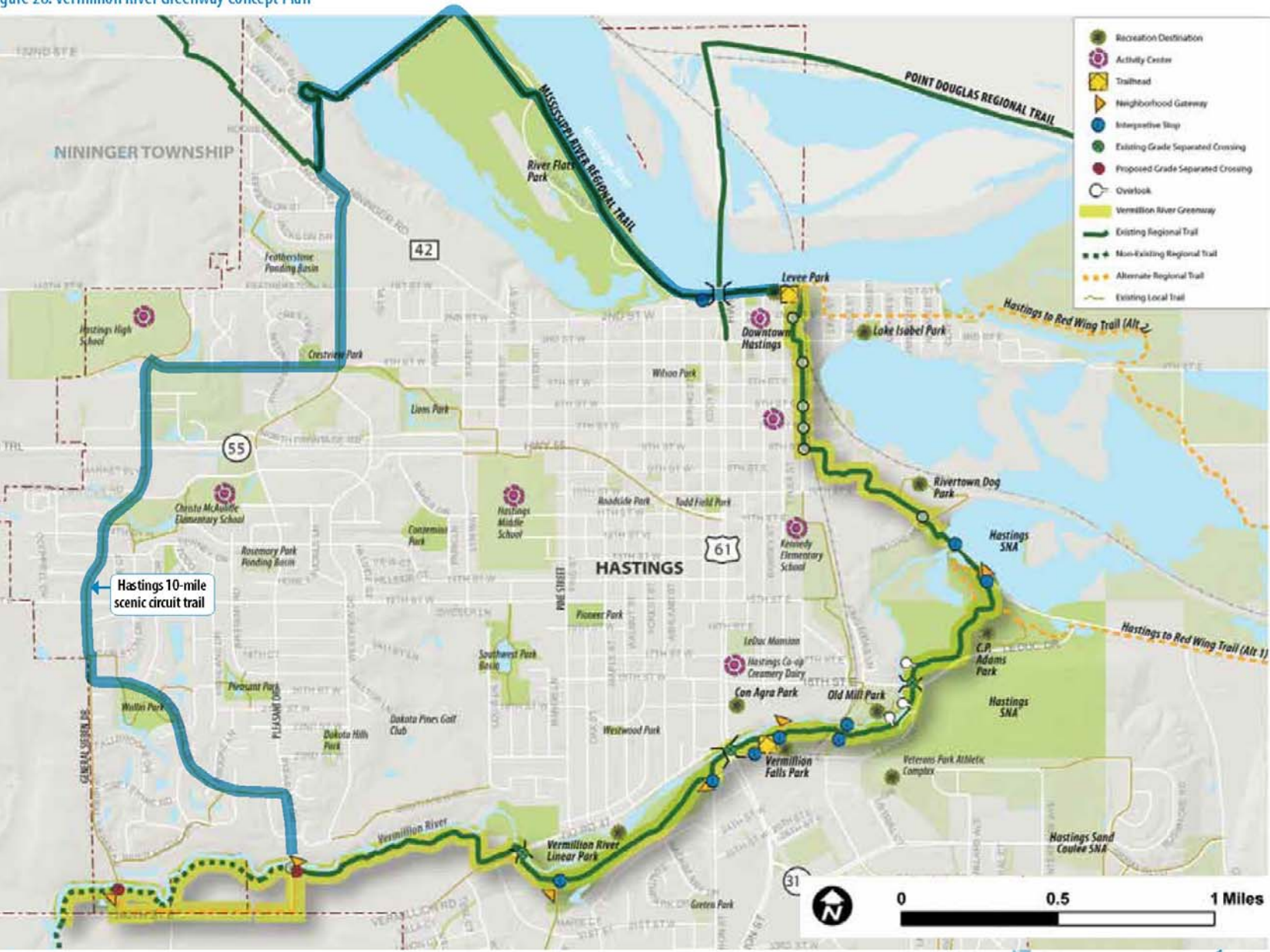
Regional Connections

Figure 27. Regional and Local Trail Connections



Concept Plan

Figure 28. Vermillion River Greenway Concept Plan

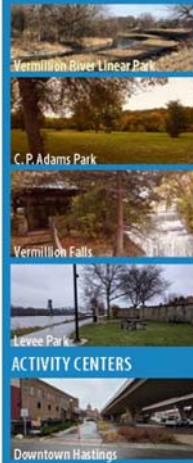


Vermillion River Greenway
 -Hastings
 MASTER PLAN



The Plan

RECREATION DESTINATIONS



80/20 TRAIL ALIGNMENT

A primary goal of the greenway trail alignment is to be at least 80 percent in an off-street greenway corridor with a maximum of 20 percent of the greenway adjacent to roads. The corridor today is mostly developed, and the existing trail exceeds the 80% goal for off-road trail. The preferred alignment for the undeveloped portion of the trail identifies the trail along the Vermillion River. However, an alternate alignment for the undeveloped portion of the trail is parallel to Co. Rd. 46, where efforts would be made to ensure an enjoyable greenway experience through the placement of the trail as far from the road edge as possible and the addition of landscaping to increase buffer space and slow traffic.

Table 29. Parallel to Road, Off-Road Trail Alignment

	Parallel to Road	Off-Road	Total
Existing Trail	8.74 mile (11%)	3.96 miles (8%)	4.7 miles
Undeveloped Trail - preferred	-	8.9 mile (100%)	8.9 mile
Undeveloped Trail - alternate	25 mile (19%)	25 mile (19%)	1.8 mile
Vermillion River Greenway - pref.	13%	87%	5.6 miles
Vermillion River Greenway - alt.	26%	74%	5.7 miles

RECREATION DESTINATIONS, ACTIVITY CENTERS, AND TRAIL CONNECTIONS

Inherent to greenways are the trails linking recreation destinations and activity centers, the social gathering places along the trail. Opportunities to stop along the trail to fish, observe wildlife, or eat lunch are some of the features that will make the Vermillion River Greenway a regional destination drawing people from a broad area. The greenway trail will be a spine for loop trails, connect to regional and local trails and roads, and will itself serve as an important transportation route. Recreational destinations along the Vermillion River Greenway corridor include: Rivertown Dog Park, C.P. Adams Park, Veteran's Park Athletic Complex, Vermillion River Linear Park, Vermillion Falls, the Old Trestle bridge, and Vermillion Falls Park.

Activity Centers are social gathering points along the greenway, which may include schools, food, entertainment, and retail opportunities. Examples include: Hastings Co-Op Creamery Dairy, LeDuc Mansion, and Downtown Hastings.

- 80/20 alignment analysis
- Recreation Destinations, Activity Centers, Trailheads, and Neighborhood Gateways

TRAILHEADS & NEIGHBORHOOD GATEWAYS

Frequent access is a priority for the Vermillion River Greenway. Two generalized types of greenway and trail access points are recommended: trailheads are intended for regional and local access; neighborhood gateways primarily are for local access at opportune locations. Typically, access points will be at recreation destinations, activity centers, and trail intersections. Here trail users will find support facilities such as water and restrooms as well as greenway information.

Trailheads are the primary greenway access points and will serve people who drive, walk, bike, or take transit to the greenway. They will occur every three to five miles and share facilities such as parking and restrooms with other facilities. Neighborhood Gateways are more frequent, local access points. They will be at convenient intervals between primary trailheads (two-to-three miles apart or closer at logical locations). Wherever possible, facilities are shared with other uses and ideally are located where there is a complementary recreation destination or activity center.

Trailheads will include:

- ▶ Water
- ▶ Motor vehicle parking
- ▶ Secure bicycle parking
- ▶ Picnic areas and/or facilities
- ▶ Wayfinding and traffic control
- ▶ Restrooms
- ▶ Interpretation
- ▶ Benches
- ▶ Food where opportune
- ▶ Shelter and shade
- ▶ Local and/or regional trail connections

Neighborhood gateways will include the following elements:

- ▶ Benches
- ▶ Local and/or regional trail connections
- ▶ Secure bicycle parking
- ▶ Wayfinding and traffic control
- ▶ Water
- ▶ Interpretation

Neighborhood gateways may also include shared facilities:

- ▶ Restrooms
- ▶ Picnicking
- ▶ Food
- ▶ Motor vehicle parking



Swing Bridge Trailhead in Lower Greenway



The parking lot off of Rawana Trail at C.P. Adams Park is recommended to be a neighborhood gateway for the Vermillion River Greenway.



The Plan

There are three existing grade-separated crossings along the Vermillion River Greenway, and two potential new grade-separated crossings. Of the existing grade-separated crossings, all are underpasses for the trail to continue under the perpendicular roadway above. The proposed grade-separated crossings are at Pleasant Drive and General Sieben Drive on the west end of the corridor. Evaluation of these potential grade-separated crossing locations were based on topography, utility information, existing infrastructure, and land ownership. Further study will need to be done to establish project cost estimates.

Table 32. Proposed Grade-Separated Crossings

ID#	LOCATION	RECOMMENDATION	IMPORTANCE FOR USER SAFETY AND EXPERIENCE	ESTIMATED CONSTRUCTION COST	DESCRIPTION
4	Pleasant Drive	Tunnel	High (vehement route)	Cost not evaluated	The existing Pleasant Drive bridge over the river does not allow sufficient space for a trail to be underpass. A new tunnel would likely need to be constructed under Pleasant Drive south of the river.
5	General Sieben Drive	Retain existing bridge over river	High	Cost not evaluated	See Appendix B



Existing grade-separated crossing at Vermillion Falls Park under Highway 61

Figure 32. Grade-Separated Crossings Map



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- Grade-separated and at-grade crossings

AT-GRADE CROSSINGS

When grade-separated crossings are not possible on collector roads or higher, crossings should occur at controlled intersections with road users stopping at traffic lights or stop signs. In some instances, mid-block crossings may be appropriate and should be designed with pedestrian/cyclist safety and visibility in mind, as shown in the images on this page. On lower volume local roads, crossings might not be controlled with traffic lights or stop signs. In these cases, features such as pavement marking, refuge islands, and bumpouts should be applied to reduce crossing distances for trail users and increase visibility for trail users and road users.

ACCESSIBILITY

Dakota County is committed to offering universal accessibility at all trail facilities. The primary paved trail and all access points suggested in the master plan are located and planned for universal accessibility to provide all visitors with a meaningful experience.



Typical At-grade, Mid-Block Road Crossing with Median Refuge



At-grade trail crossing at 2nd Street E



Typical Mid-Block Road Crossing with Median Refuge

SUSTAINABILITY

Environmental sustainability is at the core of the greenway concept improving ecological function, habitat creation, wildlife movement, stormwater infiltration, and carbon sequestration, as well as facilitating non-motorized recreation and transportation, are all greenway objectives.

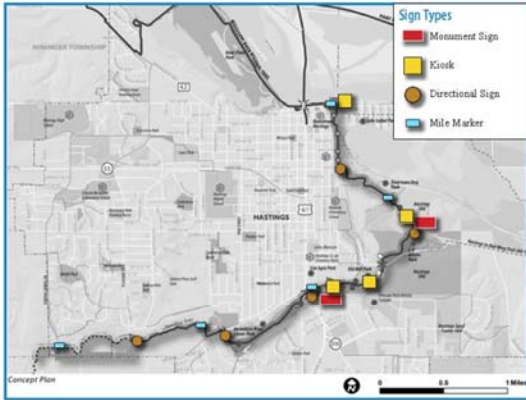
Greenways will be assembled in environmentally sustainable ways and designed to minimize impact on natural systems. Recommended strategies include:

- ▶ Protecting and restoring natural systems
- ▶ Emphasizing native plant species
- ▶ Energy-efficient lighting and use of timed lighting
- ▶ Use of recycled materials and pervious pavement
- ▶ Reducing maintenance costs by promoting self-sustaining wildlife and plant communities and treating stormwater on-site



The Plan

Figure 36. Wayfinding Signage Plan



- Wayfinding signage plan

WAYFINDING

Wayfinding is the way people navigate from place to place. For the Dakota County greenway system, a consistent wayfinding system is essential for orientation, navigation, and safety. Signage should be consistent across the system and should guide greenway users to local services, cultural destinations, transportation connections, activity centers, recreation destinations, cities, neighborhoods, and other landmarks.

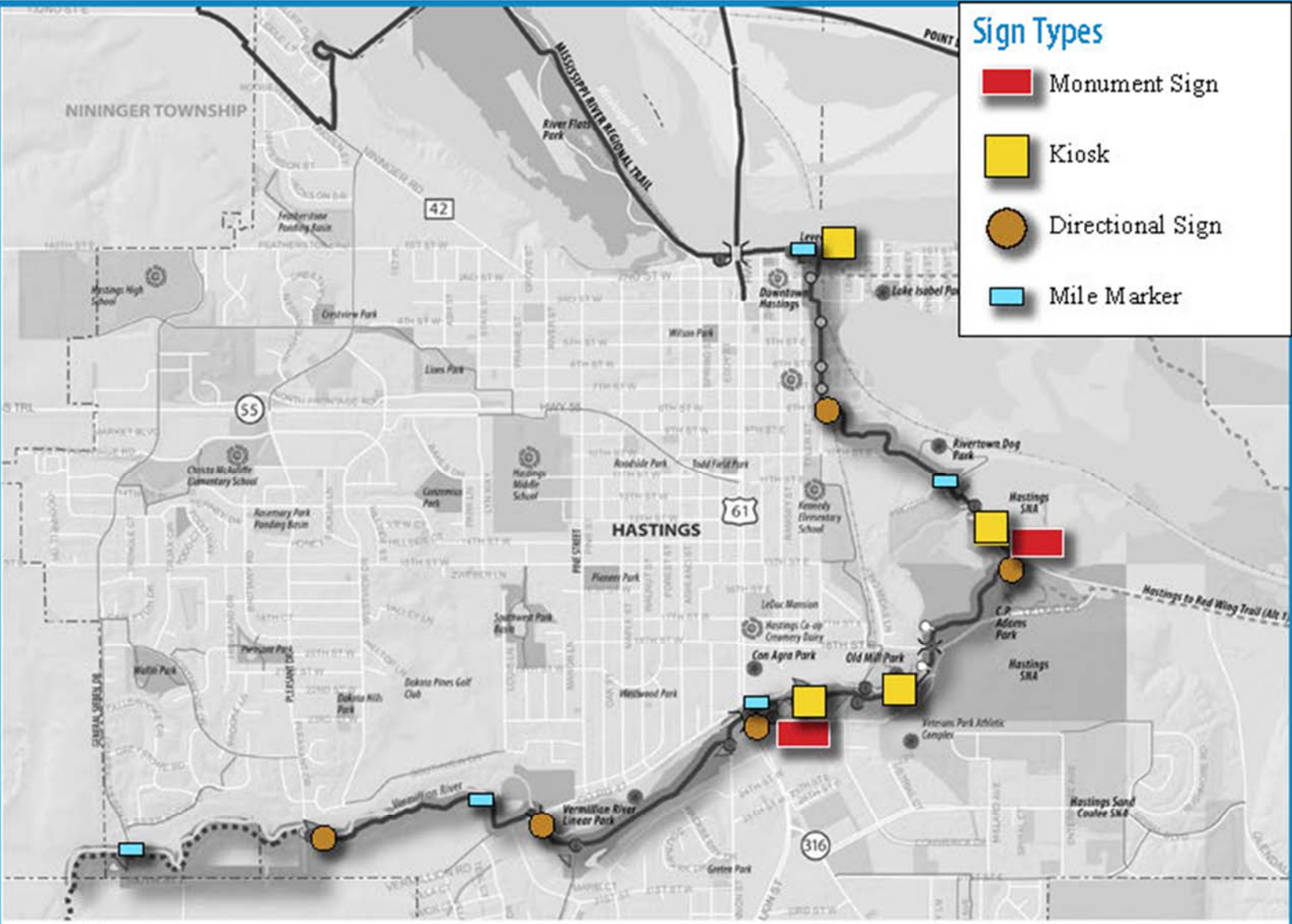


Wayfinding Signage Plan

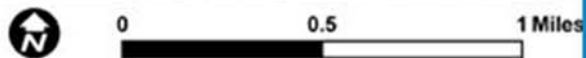
Vermillion River Greenway -Hastings

MASTER PLAN

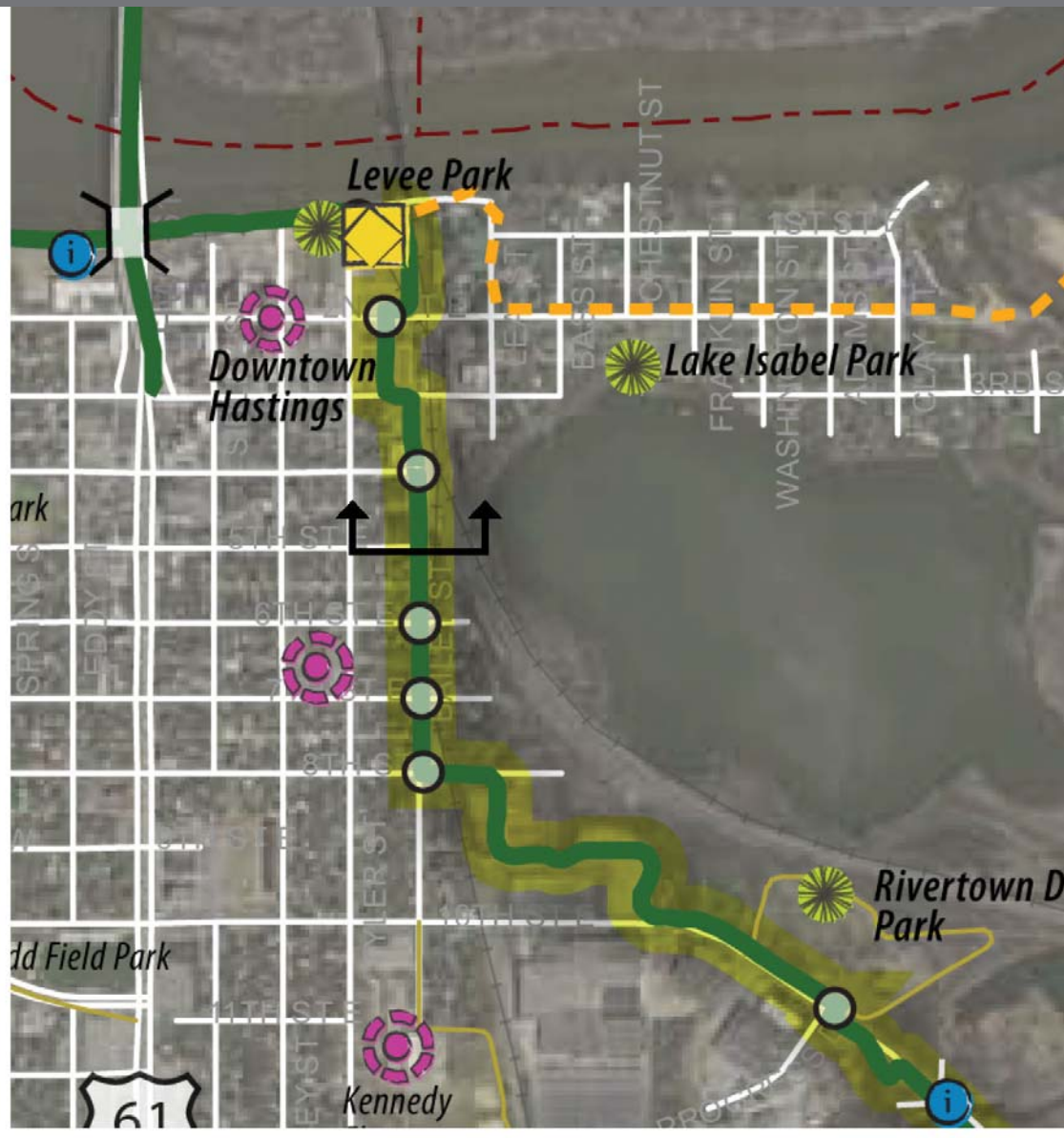
- Sign Types**
- Monument Sign
 - Kiosk
 - Directional Sign
 - Mile Marker



Concept Plan



Segment 1 - Urban



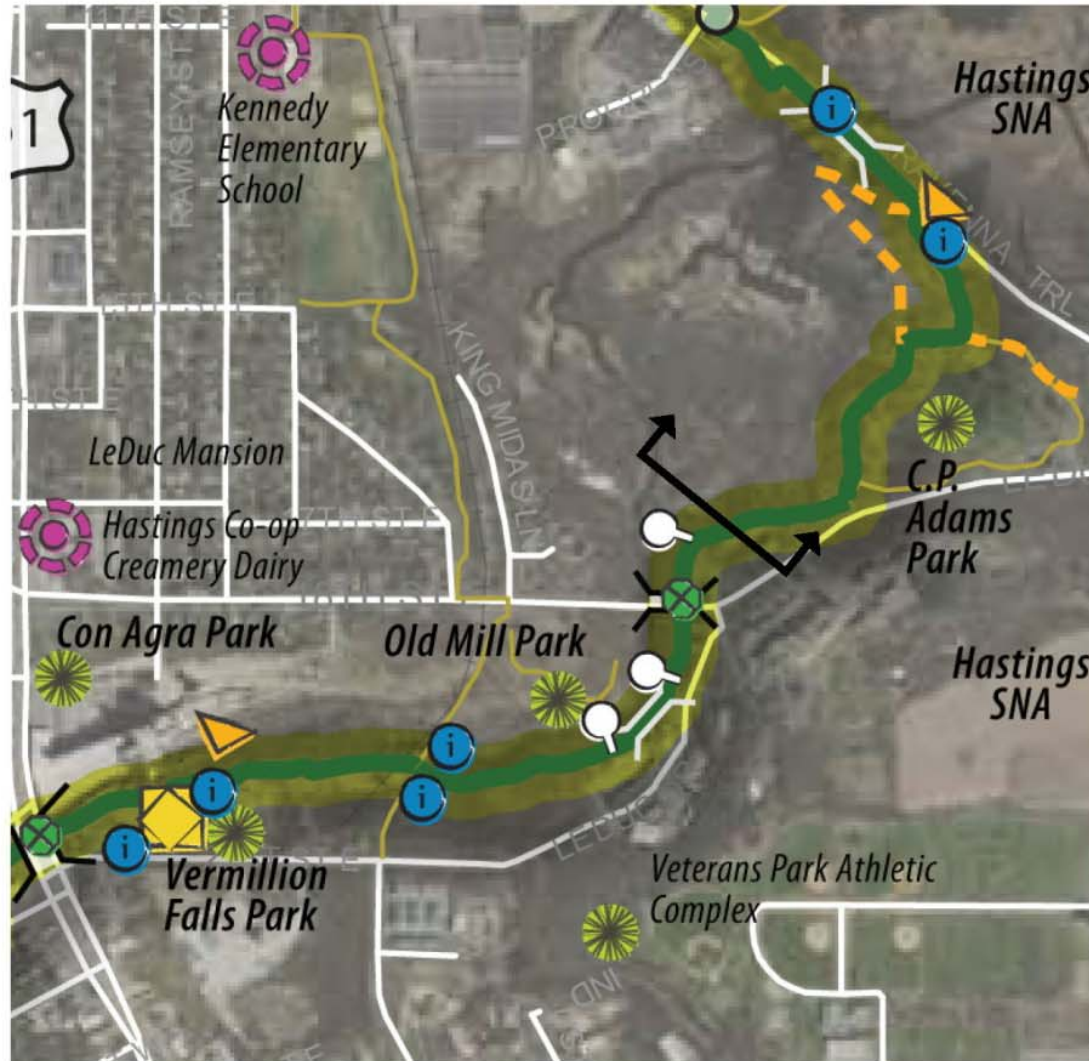
Segment 1 - Urban

Figure 39. Typical Urban Section



Segment 2 – River Gorge

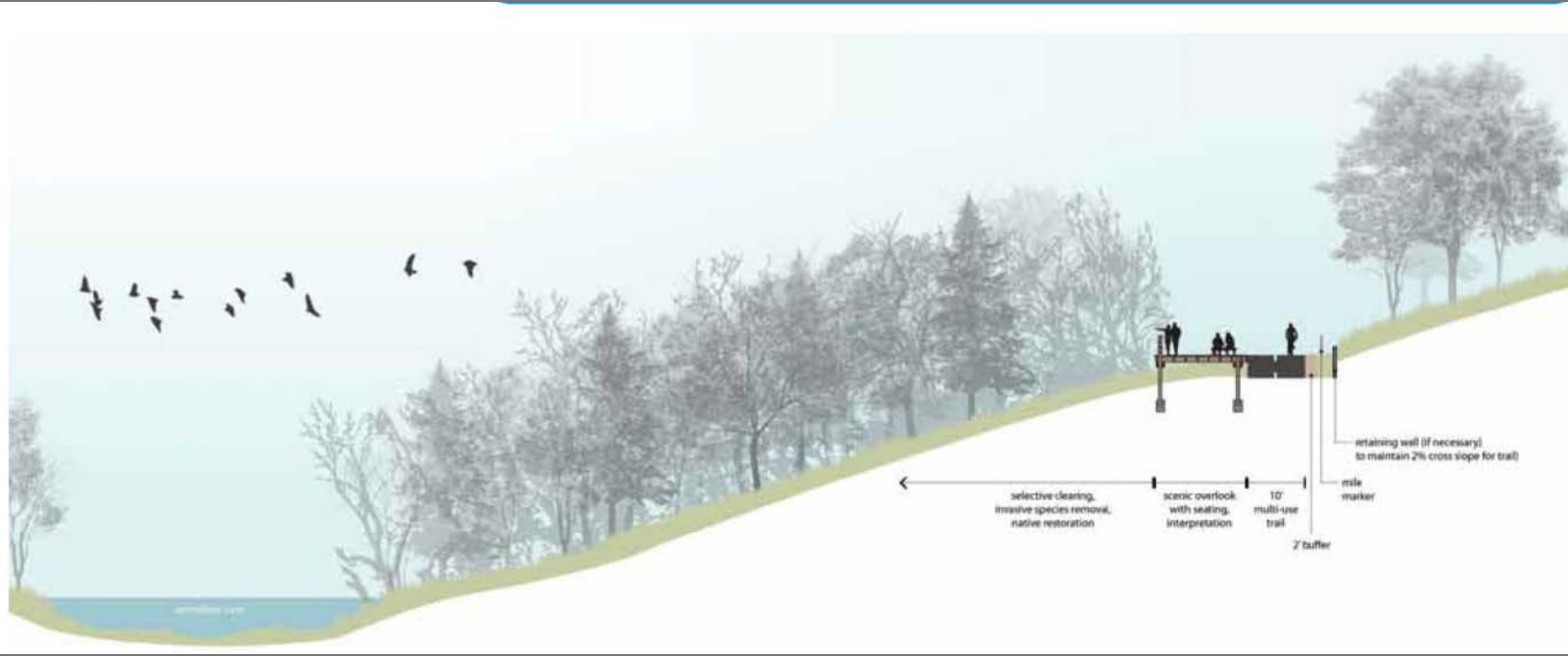
-  Recreation Destination
-  Activity Center
-  Trailhead
-  Neighborhood Gateway
-  Interpretive Stop
-  Existing Grade Separated Crossing
-  Proposed Grade Separated Crossing
-  Overlook
-  Vermillion River Greenway
-  Existing Regional Trail
-  Non-Existing Regional Trail
-  Alternate Regional Trail
-  Existing Local Trail



Vermillion River Greenway
-Hastings
MASTER PLAN



Segment 2 – River Gorge



Trailhead- Vermillion Falls Park



Vermillion River Greenway
-Hastings
MASTER PLAN

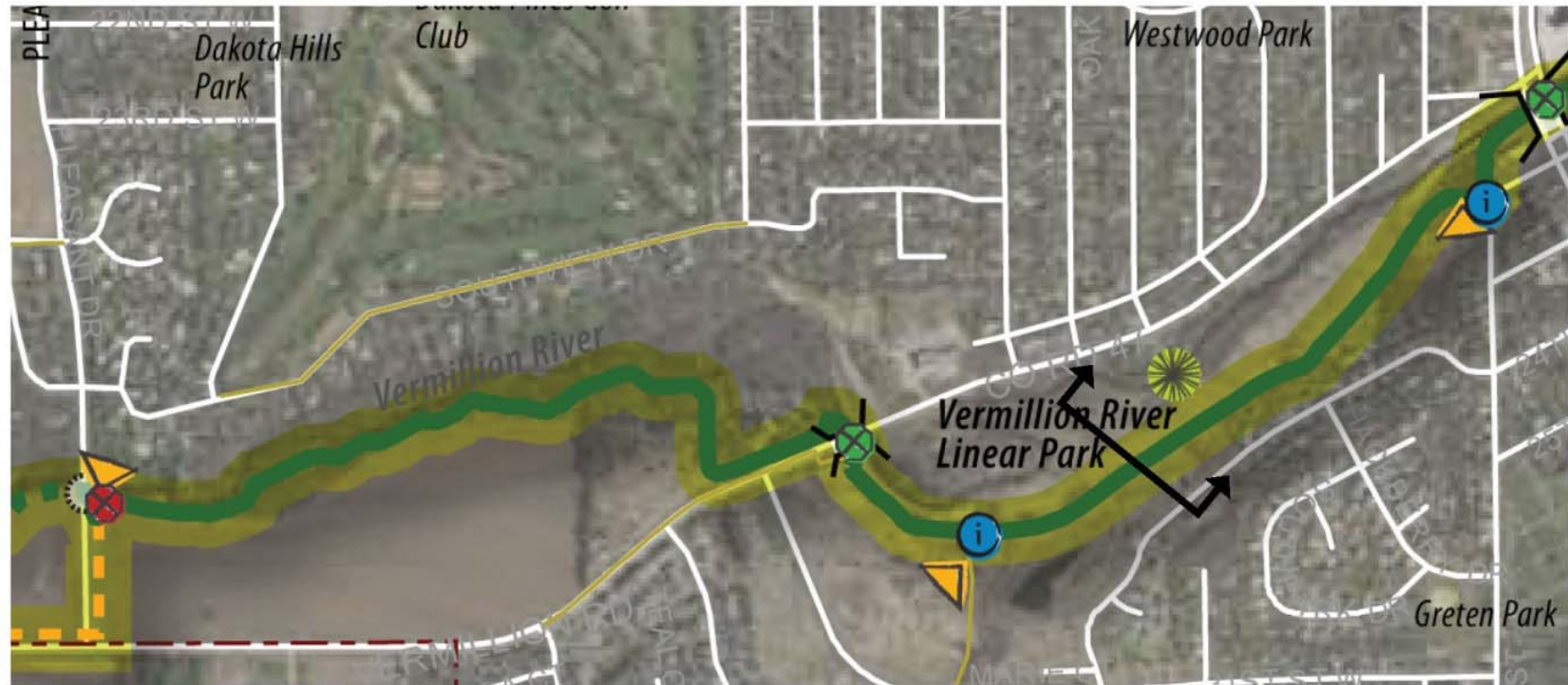


Segment 3 - Floodplain

- Recreation Destination
- Activity Center
- Trailhead
- Neighborhood Gateway

- Interpretive Stop
- Existing Grade Separated Crossing
- Proposed Grade Separated Crossing
- Overlook

- Vermillion River Greenway
- Existing Regional Trail
- Non-Existing Regional Trail
- Alternate Regional Trail
- Existing Local Trail



Vermillion River Greenway
-Hastings
MASTER PLAN



Segment 3 - Floodplain



Figure 44. Floodplain Restoration Section

Segment 4 - Rural



Figure 46. Vermillion River Greenway: Segment 4

The Plan

C. Interpretive Plan

The interpretive plan identifies an approach to interpretation, general themes for the corridor, and specific locations and stories along the trail that should be represented in interpretive stories.

Various nodes are identified with a location, a story, and potential interpretive methods.

The full interpretive plan can be found in Appendix B.

Figure 50. Proposed Experience Nodes along the Vermillion River Greenway

- 1 Vermillion River Bottoms
- 2 Vermillion River + BSA
- 3 forgotten history - Andrew
- 4 Ramsey Hill Estate + Thorsle Bridge
- 5 VTP - Water Power + Milling
- 6 Vermillion Park Park, Ice Dam
- 7 The Lanes
- 8 Ephemeral / Transient: River Life



- Cultural Resources Interpretive Plan



Node Location



Images



Story

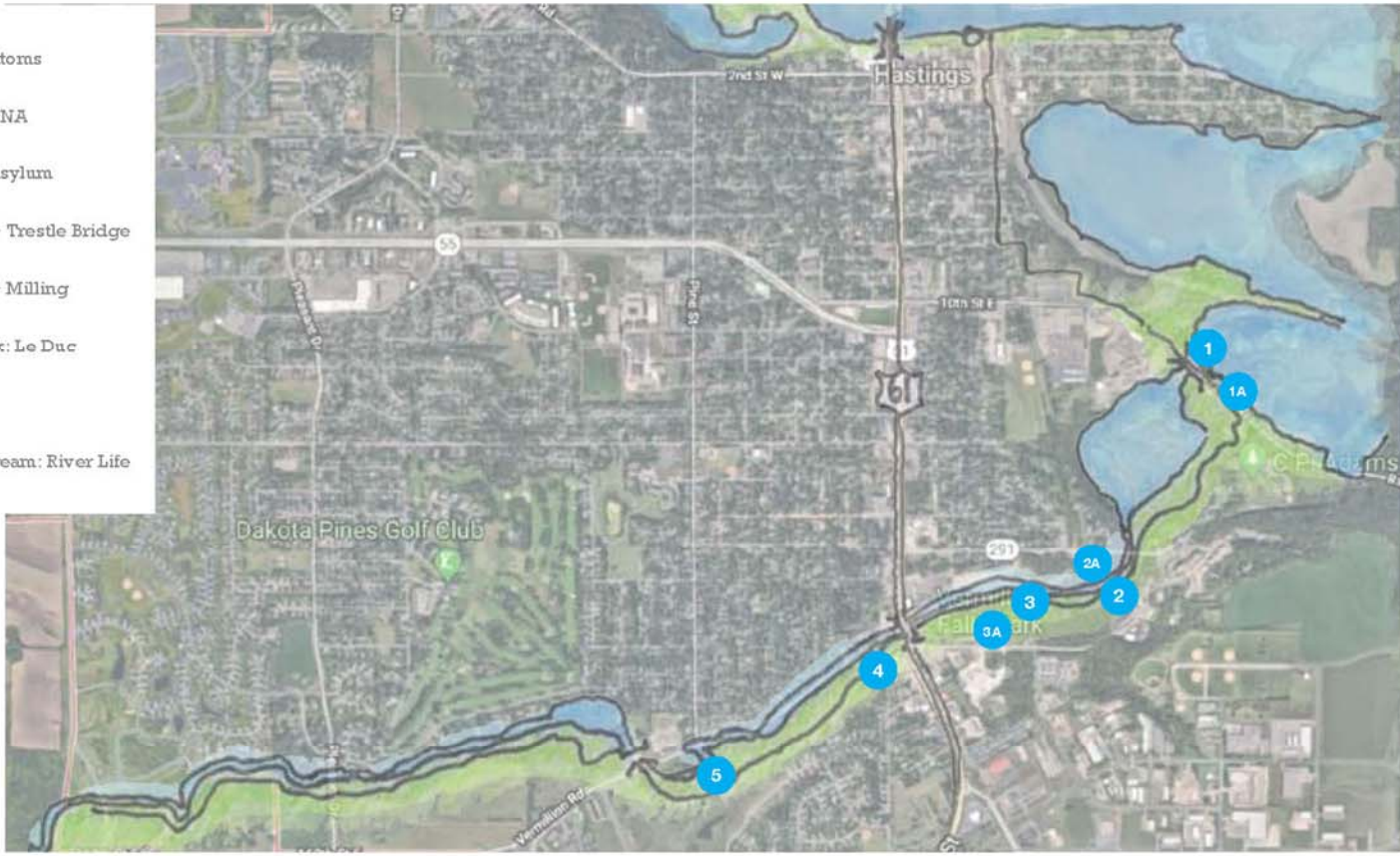


Interpretive method precedents



Interpretive Nodes

- 1 Vermillion River Bottoms
- 1A Vermillion River + SNA
- 2 Forgotten History: Asylum
- 2A Ramsey Mill Ruins + Trestle Bridge
- 3 VFP: Water Power + Milling
- 3A Vermillion Falls Park: Le Duc
- 4 The Levee
- 5 Upstream / Downstream: River Life



Vermillion River Greenway
-Hastings
MASTER PLAN



Interpretive Nodes

VERMILLION STORIES

1

NODE 1. VERMILLION RIVER BOTTOMS



Proposed location of node

1A

NODE 1A. VERMILLION SNA



Proposed location of node

Node Location

VERMILLION STORIES

1

NODE 1. VERMILLION RIVER BOTTOMS

Cultural and Natural History Stories:
Stop, Look, Listen: Birding the Vermillion
Who's Missing? Bird Migration
Floodplain Forest
Please Don't Disturb: Preserving the SHA

As the glaciers melted 10,000 years ago, a braided-stream system diminished the Mississippi River. The main river channel was separated into smaller, intersecting channels. The Vermillion River Bottoms is a remnant of that river system. Here, the Mississippi and the Vermillion run parallel to each other, separated by a 17.4 x 2.5-mile area of floodplain forest. One of the most beautiful spots along the Mississippi River National Recreation Area, the Vermillion River Bottoms remains a largely untouched example of the floodplain forests that once extended from Texas to the Gulf of Mexico. The area is home to a diversity of wildlife, including rare birds, fish and mussels.

The city of Hastings is a designated IBA, or Important Birding Area. And this spot along the backwaters of

the Vermillion is part of a critical migratory corridor for waterfowl, songbirds, and raptors. If you listen carefully on a late spring morning, you can hear the voices of many forest songbirds, such as the Wood Thrush, Great-crowned Flycatcher and Indigo Bunting. Each spring, migrating waterfowl can be spotted in the wetlands beyond Bullfrog Pond, including the rare Tricolored Heron. A total of 150 bird species have been recorded breeding or migrating through the area, which extends southeast to include the lower Cannon River. Two species of special concern in southeastern Minnesota—red-chested towhees and ovenbird warblers—are included in this site.

The backwaters of the Vermillion are a destination and haven for many songbirds and waterfowl.

Story

VERMILLION STORIES

1

NODE 1. VERMILLION RIVER BOTTOMS: IMAGES



From top left: bunting, flycatcher, great blue heron, goldfinch, heron, pelican, warbler, wood thrush, falcon.

Interpretive Opportunities:
 Exhibits of Birds
 Map: Visualizing the Intersections of the Mississippi and Vermillion Floodplains

Images

VERMILLION STORIES: EXHIBIT PRECEDENTS

1

NODE 1. VERMILLION RIVER BOTTOMS

Precedent:



Interpretive method precedents

Vermillion River Greenway -Hastings

MASTER PLAN

The Plan

D. Stewardship Plan

The linear nature of the greenway will require natural resource management strategies that are geographically targeted, cooperative, and realistic. Restoration and protection efforts should be focused near trailheads, as these locations will provide the greatest opportunity for greenway users to see the results of stewardship and provide a high-quality user experience. Given the linear nature of the greenway, stewardship activities should be in cooperation with adjoining landowners, public and private. Cooperative stewardship activities likely will be easier with other public agencies, but this should not preclude the possibilities of stewardship work on adjoining private lands. All stewardship actions should be evaluated through the lens of sustainability — determine if the stewardship effort is economically and ecologically sustainable over the long term.

Table 52. Natural Resource Conservation & Habitat Investment Strategies

HABITAT PRESERVE	HABITAT CORRIDOR
 <p>Top priority habitat restoration/management</p> <ul style="list-style-type: none"> Has adequate patch size/shape to sustain native plant community Contains existing remnant of native plant community Has landscape potential Has design surrounding uses Effective contains natural values 	 <p>Second priority habitat management</p> <ul style="list-style-type: none"> Provides connection between habitat preserves Has adequate width to sustain native plant ground layer Grades allow for rainwater infiltration Effective natural values
NATURAL LANDSCAPES	DESIGNED LANDSCAPES
 <p>Lowest landscape investment priority</p> <ul style="list-style-type: none"> Primary task is to control invasive plants Managed as a natural, low-maintenance landscape 	 <p>High landscape investment</p> <ul style="list-style-type: none"> Managed urban landscapes Limited habitat value Relatively small area

• Stewardship Plan

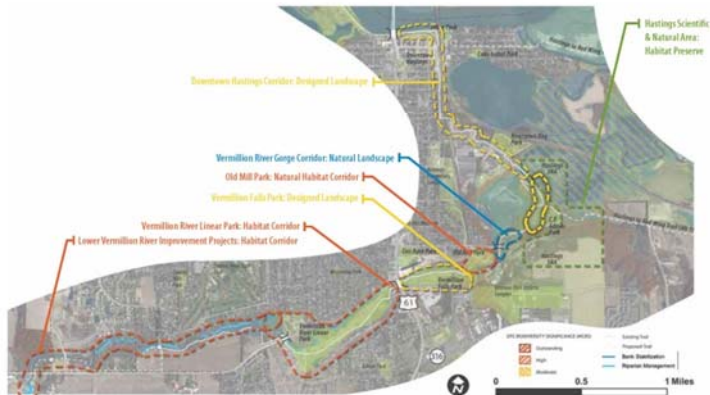


Figure 53. Stewardship Plan



Stewardship Plan

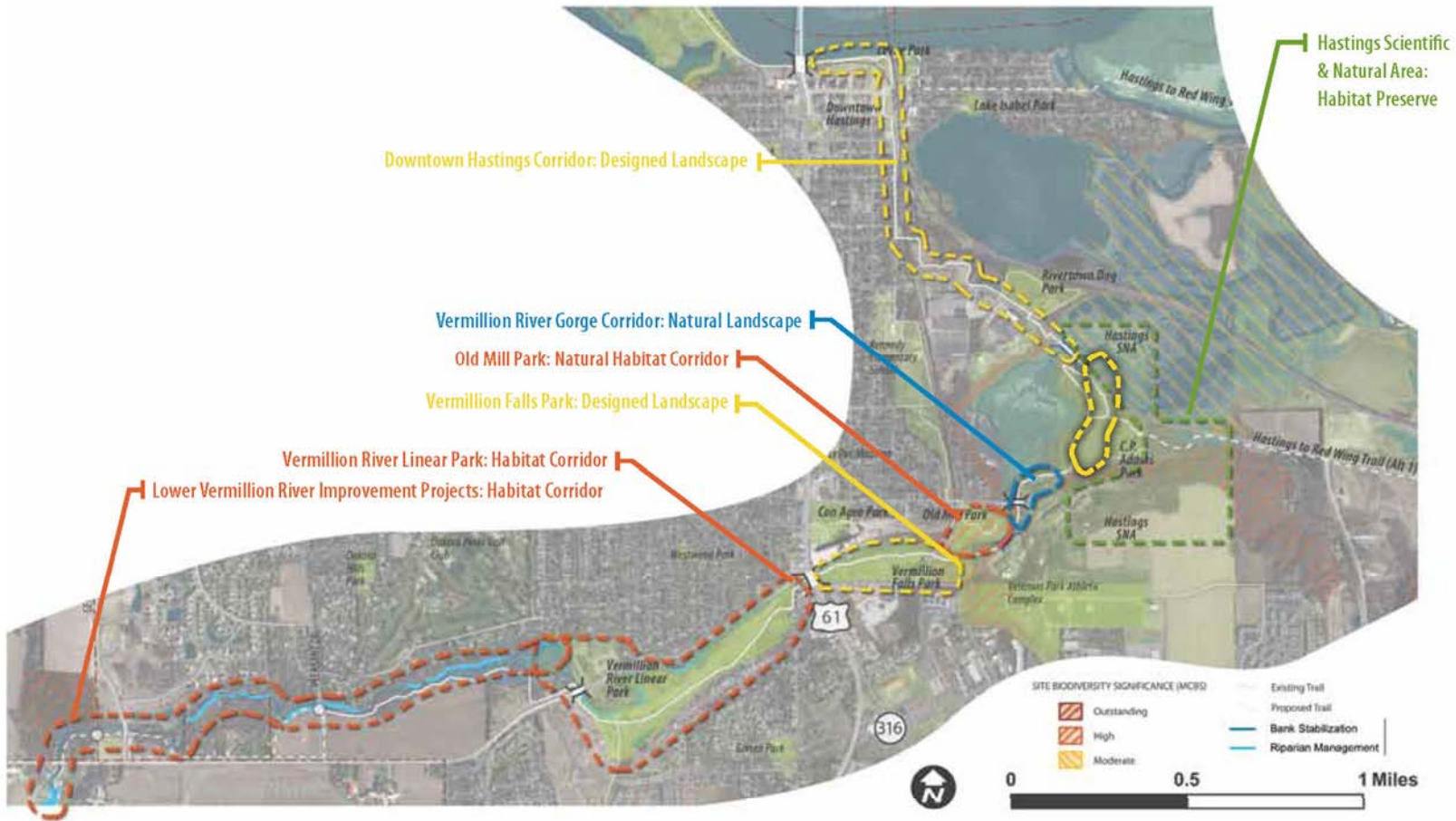


Figure 53. Stewardship Plan

4. Implementation

PHASING AND PRIORITIES

The majority of the Vermillion River Greenway-Hastings trail is already in place. Regional trail improvements will include adding amenities, landscaping and restoration, and interpretation, in addition to construction of the one-mile segment that is not yet developed. The improvements will be implemented in phases. Greenway segments have been prioritized into 5-year, 10-year, and long term projects (Table 60). It is anticipated that 5-year projects will be built in advance of 10-year projects, but the master plan remains flexible so that any project can be implemented as partnership or funding opportunities arise.

First priority (5-year) projects are those that will improve upon the existing trail in the northern and eastern part of the corridor and provide recreation facilities for the more populated areas along the trail. Of foremost importance is securing land or easements for the 30-foot corridor as opportunities arise. After land has been secured, improving the portions of existing trail to regional standards is the first priority. This includes re-routing and/or reconstructing segments of trail that do not meet standards for condition or safety, improved street crossing conditions, and continuous wayfinding signage. Recreation, water quality, non-motorized transportation, and natural resource elements should be integrated into the greenway at the time of other improvement projects and as opportunities and needs arise.

Second priority (10-year) projects will complete the full trail build out along the entire corridor and provide amenities that will enhance the greenway experience. These are things, such as trailhead development and enhancements to existing trails, such as landscaping, habitat restoration interpretation, wayfinding, benches, trash receptacles, etc.

Grade separated crossings will be installed as funding, partnership, or construction opportunities arise.

In cases where alternative trail alignments are identified, these will be lower priority than the preferred route, but they will be constructed as opportunities and partnerships arise.

Table 60. Vermillion River Greenway-Hastings Priority Projects

Project ID	Project Description	Priority	Potential Partner/Trigger
A	Trailhead at Levee Park - minor improvements to existing facilities	Existing/5-year	
B	Greenway improvements from downtown Hastings to Ravenna Trail Gateway	Existing/5-year	
B2	NI improvements - urban signature (30' wide corridor)	5-year	
C	Trail reconstruction to meet greenway standards (Bierbohn Dog Park segment)	5-year	
D	Neighborhood Gateway at Ravenna Trail	5-year	
E	Trail reconstruction to meet greenway standards (C. F. Adams Park)	5-year	
E2	NI improvements - urban signature (30' wide corridor)	5-year	
F	Trail reconstruction to meet greenway standards (Vermillion Falls Park to Caspary Street)	5-year	
F2	NI improvements - urban signature (30' wide corridor)	5-year	
G	Trailhead at Vermillion Falls Park	10-year	City master plan and park redevelopment
H	Neighborhood Gateway at Con Agra Park	10-year	
I	Trail reconstruction to meet greenway standards (Vermillion River Linear Park)	5-year	
I2	NI improvements - habitat corridor (300' wide corridor)	5-year	
J	Neighborhood Gateway at Vermillion River Linear Park	10-year	
K	Neighborhood Gateway at Pleasant Drive	10-year	
L	Grade-separated crossing of Pleasant Drive -- needs further evaluation	long term	
M	Greenway improvements from Ravenna Trail to Pleasant Drive	Existing/5-year	
N	Land Protection for corridor along Vermillion River from Pleasant Drive to General Seiben Drive	5-year	
N	Greenway construction (trail and amenities)	10-year	
MN2	Natural Resource Improvements - habitat corridor (100' wide corridor)	10-year	VWQPO projects
O	Neighborhood Gateway at General Seiben Drive	10-year	
P	Grade-separated crossing of General Seiben Drive	long term	
Q	Trail west of General Seiben Drive	long term	
R	River Overlooks and Access	5-year	

• Phasing and Priorities



Figure 61. Vermillion River Greenway Priority Projects



Implementation

LAND PROTECTION AND STEWARDSHIP

Dakota County's greenway concept incorporates recreation, transportation, ecological and water quality components in a 100- to 300-foot corridor secured through two approaches:

Land protection —protecting land essential to make the greenway usable. For the Vermillion River Greenway, this means securing land needed for the trail corridor, grade separated crossings, and trailheads.

Land stewardship —the care of native landscapes and habitat within the greenway.

Land Protection

It is essential that Dakota County secure lands for the minimum 30-foot trail alignment and trailheads. Sections of the Vermillion River Greenway corridor where protection is needed are shown on Figure 63. Two categories of land are shown: publicly owned land (City of Hastings and road right of way) and privately owned land. For land owned by other public agencies, Dakota County will need to permanently protect the trail corridor and trailheads for regional trail use with easements or joint powers agreements. For land that is privately owned, the County will need to secure the land with a trail easement or acquire the trail corridor for public use. Table 63 summarizes the approximate number of acres of land needed for protection. Land protection strategies include: park dedication, direct purchase with resale of land not required for the trail, permanent easements, land donation, bargain sale, life estate and negotiations with cities and developers. Table 62 highlights several techniques for protecting land in different ownership scenarios.

Table 62. Land Protection and Stewardship Tools

TOOL	DAKOTA COUNTY RIGHT OF WAY		OTHER PUBLIC LAND		CONCRETE PRIVATE LANDS	
	30' Regional Trail Easement or Trailhead	100' 100' Greenway	30' Regional Trail Corridor or Trailhead	100' 100' Greenway and Trailhead	30' Regional Trail Easement or Trailhead	100' 100' Greenway
County Easement			✓	✓	✓	✓
County Fee Title			✓		✓	
Other Public Agency Acquisition						✓
Easement Agreement	✓	✓	✓	✓		
Stewardship Partnerships				✓		✓

Land Stewardship

The natural resource objective for the greenway system is to maintain or create a healthy context within which nature can thrive. The first stewardship priority is restoring continuous habitat within the greenway corridors. The second is habitat restoration and protection of the most sensitive lands, including uplands that link greenways to the broader landscapes. Generally, Dakota County will not be the lead agency in stewardship activities outside the 30-foot trail corridor and trailheads, but will work as steward partners with local jurisdictions, agencies, and private landowners and provide funding and expertise.



- Land Protection and Stewardship
- Public and private ownership

Table 63. Protection & Stewardship Partnership Lands (for 30 ft wide trail corridor)

SEGMENT	Public ROW/Ex. Easement	Private	TOTAL	EST. COST
1-3	10,400,000 (9,150 acres)	—	10,400,000	\$2,080,000
4 - pref.	10,400,000 (10,000 acres)	10,000,000 (10,000 acres)	20,800,000	\$4,160,000

Table 63 summarizes the approximate length and number of acres of land needed for protection for the trail. Land protection strategies include: park dedication, direct purchase with resale of land not required for the trail, permanent easements, land donation, bargain sale, life estate and negotiations with cities and developers. An average amount of \$40 per lined foot for a 30-foot wide corridor was used to calculate the estimated cost of securing the corridor.

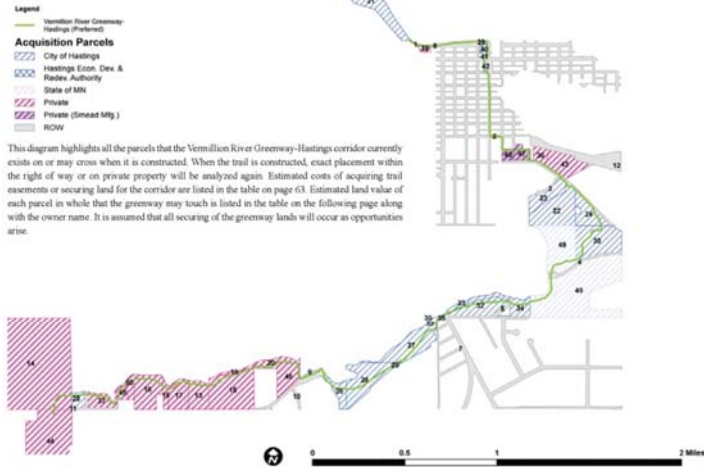
Figure 63. Property Ownership



Implementation

- Acquisition Parcels and Easements

Figure 64. Acquisition Parcels & MPCRA Remediation Sites



This diagram highlights all the parcels that the Vermillion River Greenway-Hastings corridor currently exists on or may cross when it is constructed. When the trail is constructed, exact placement within the right of way or on private property will be analyzed again. Estimated costs of acquiring trail easements or securing land for the corridor are listed in the table on page 63. Estimated land value of each parcel in whole that the greenway may touch is listed in the table on the following page along with the owner name. It is assumed that all securing of the greenway lands will occur as opportunities arise.



Table 65. Acquisition Parcels

ID	Ownership Category	Owner Name	Estimated Land Value*	Notes
1	Private	BALLEN LINDEN	1,020,000.00	
12		BALLEN LINDEN & BELLARD	2,900,000.00	
13		BALLEN LINDEN & BELLARD	2,500,000.00	
14		BALLEN LINDEN	1,100,000.00	
15	Private	BALLEN LINDEN	2,550,000.00	
16		BALLEN LINDEN	2,000,000.00	
17		BALLEN LINDEN	1,200,000.00	
18		BALLEN LINDEN	1,000,000.00	
19		BALLEN LINDEN	1,000,000.00	
20		BALLEN LINDEN	1,000,000.00	
21		CITY OF HASTINGS	1,400,000.00	
22		CITY OF HASTINGS	2,200,000.00	
23		CITY OF HASTINGS	1,000,000.00	
24		CITY OF HASTINGS	700,000.00	
25		CITY OF HASTINGS	2,400,000.00	
26		CITY OF HASTINGS	1,100,000.00	
27		CITY OF HASTINGS	2,500,000.00	
28	City of Hastings	CITY OF HASTINGS	2,200,000.00	Work with City of Hastings to transfer ownership of parcels to Hastings County as needed/required/ask.
29		CITY OF HASTINGS	1,100,000.00	
30		CITY OF HASTINGS	1,400,000.00	
31		CITY OF HASTINGS	1,000,000.00	
32		CITY OF HASTINGS	2,400,000.00	
33		CITY OF HASTINGS	1,000,000.00	
34		CITY OF HASTINGS	2,400,000.00	
35		CITY OF HASTINGS	1,000,000.00	
36	Private	COMPTON TRAIL DEVELOPMENT	1,170,000.00	
37	Private	CLARK WILSON & ASSOCIATES/CLARK WILSON	1,200,000.00	Parcels that easement from private land, purchase or lease agreement.
38		WICHITA COUNTY	1,400,000.00	
39		HASTINGS ECONOMIC DEVELOPMENT AUTHORITY	1,200,000.00	
40	Hastings Econ. Dev. & Redevel. Authority	HASTINGS ECONOMIC DEVELOPMENT AUTHORITY	1,400,000.00	Work with City of Hastings to transfer ownership of parcels to Hastings County as needed/required/ask.
41		HASTINGS ECONOMIC DEVELOPMENT AUTHORITY	1,200,000.00	
42		HASTINGS ECONOMIC DEVELOPMENT AUTHORITY	1,070,000.00	
43		WETA HOLDINGS/STREETS INC.	2,870,000.00	
44		WETA HOLDINGS	1,400,000.00	
45	Private	WETA HOLDINGS/STREETS INC.	1,400,000.00	When current trail easement exists for parcels, work with City and landowners to transfer easement to Hastings County as needed/required/ask.
46		WETA HOLDINGS/STREETS INC.	1,000,000.00	
47	Private (limited Mtg.)	WETA HOLDINGS/STREETS INC.	1,000,000.00	If not easement exists, purchase of full easement from landowners as needed/required/ask.
48	State of MN	STATE OF MN	1,000,000.00	Purchase
49	Private	WETA HOLDINGS/STREETS INC.	1,000,000.00	Purchase
50	Private	WETA HOLDINGS/STREETS INC.	1,000,000.00	Purchase

*This table shows the Estimated Land Value of all the parcels that the greenway corridor touches. In order to accommodate the ideal 100-foot wide trail corridor, it is not anticipated that the County will purchase the entire parcel. It is expected that securing easements on portions of these parcels will cost less than the amount shown in this table.



Implementation

Table 70. Vermillion River Greenway Capital Development Cost Estimates

Project ID	Project Description	Priority	Potential Partners/Triggers	Estimated Cost (Construction, Engineering, and Administration)		
				10-year	30-year	Long-term
A	Trailhead at Levee Park - minor improvements to existing facilities	Leading/5 year		\$50,000		
B	Greenway improvements from downtown Hastings to Ramona Trail Gateway	Leading/5 year		\$703,540		
B2	Mill improvements through Hastings neighborhoods - urban separation (30' wide corridor - 5.8 acres)*	5 year		\$50,000		
C	Trail reconstruction to meet greenway standards (Beverton Day Park segment)	5 year		\$32,500		
D	Neighborhood Gateway at Ramona Trail	5 year		\$45,000		
E	Trail reconstruction to meet greenway standards (C.P. Adams Park)	5 year		\$43,125		
E2	Mill improvements through C.P. Adams Park - urban separation (30' wide corridor - 1.2 acres)*	5 year		\$12,000		
F	Trail reconstruction to meet greenway standards (Vermillion Falls Park to Carson Street)	5 year		\$62,000		
F2	Mill improvements along the river gorge - natural habitat separation (100' wide corridor - 11.0 acres)*	5 year		\$110,000		
G	Trailhead at Vermillion Falls Park	30 year	City master plan and park involvement		\$300,000	
H	Neighborhood Gateway at Lee Aggs Park	30 year			\$45,000	
I	Trail reconstruction to meet greenway standards (Vermillion River Linear Park)	5 year		\$99,625		
I2	Mill improvements in the river floodplain - habitat corridor (100' wide corridor - 73.9 acres)*	5 year		\$100,000		
J	Neighborhood Gateway at Green River Linear Park	30 year			\$45,000	
K	Neighborhood Gateway at Pleasant Drive	30 year			\$45,000	
L	Grade-separated crossing of Pleasant Drive - needs further evaluation	30 year			\$500,000	
M	Greenway improvements from Ramona Trail to Pleasant Drive	Leading/5 year		\$40,095		
N	Land Protection for corridor along Green River from Pleasant Drive to General Selden Drive	30 year		\$100,710		
O	Greenway construction (trail and amenities)	30 year		\$32,500		
MNO	Natural Resource improvements along the trail river - habitat corridor (100' wide corridor - 71.1 acres)*	30 year	NRNRP projects	\$100,000		
P	Neighborhood Gateway at General Selden Drive	30 year			\$45,000	
Q	Grade-separated crossing of General Selden Drive	long term				\$50,000
R	Trail head of General Selden Drive	long term				\$17,500
R	River overflows and access (E)	30 year			\$400,000	

*\$10,000 per acre used for a general Natural Resource (NR) improvements cost estimate	1 year total	\$1,203,910	
	30 year total	\$2,471,250	
	Long-term total		\$302,500
	TOTAL	\$3,644,660	

- Cost Estimates and Partnership Projects
- Operations and Maintenance Budgets

Table 71. Vermillion River Greenway Natural Resources Collaborative Project Opportunities

Year	Description	Partner Opportunities	Size	Cost Estimate
Levee Park and Urban trail corridor				
2020-2025	Existing stormwater filtration and native landscaping along trail edges and in parks	City of Hastings		\$50,000
C.P. Adams Park and Vermillion River gorge				
2020-2025	Slope and bluff restoration, address stormwater outlet at MNDOT facility	City of Hastings MNDOT		\$150,000
Hastings SNA				
2020-2030	Support efforts to restore and preserve natural resources within the Hastings SNA	MNDNR		
Old Mill Park, Vermillion Falls Park, Vermillion River Linear Park				
2020-2030	Support ongoing restoration efforts within city parks	City of Hastings; FMR		
2018-2023	Old Mill Park - long term maintenance	City of Hastings; FMR		\$18,485
2018-2023	Vermillion Linear Park - long term maintenance	City of Hastings; FMR	61 acres	\$11,600
2020+	Vermillion Linear Park - future prairie restoration	City of Hastings; FMR	30 acres	\$120,000
Vermillion River banks				
2020-2030	Support river bank restoration and stabilization efforts	Vermillion River Watershed JPO		

OPERATIONS AND MAINTENANCE BUDGETS

Annual operations and maintenance (O&M) for the 30-foot trail corridor including gateways, are shown in Table 71a. Grade separated crossings will be inspected and maintained annually as part of the County's existing inspection and maintenance programs. Trailheads for the Vermillion River Greenway are joint use facilities located at regional trail intersections and existing parks. Trailhead facilities such as restrooms, picnic shelters, and parking will be open to trail users, park users, and the general public and be maintained according to joint powers agreements between Greenway Collaborative partners. The County's annual operations and maintenance costs will vary based on joint powers agreements and facilities needed at each location. Similarly, natural resource restoration projects in the larger greenway corridor will be coordinated with Greenway Collaborative partners who, in most cases, will be responsible for on-going stewardship.

Table 71a. Vermillion River Greenway-Hastings Estimated Annual Operations and Maintenance Costs

Task	Annual Per Mile Cost	Total Trail Length Cost
10' trail pavement maintenance (includes blowing, sweeping, and plowing)	\$1,750	\$9,328
30' trail corridor maintenance (includes trash pick up, mowing and trimming, sign maintenance)	\$1,500	\$7,995
10' pathing and mill and overlay of trail surface (per year, based on 20 year life cycle)	\$5,250	\$27,983
Total Annual O & M		\$45,306

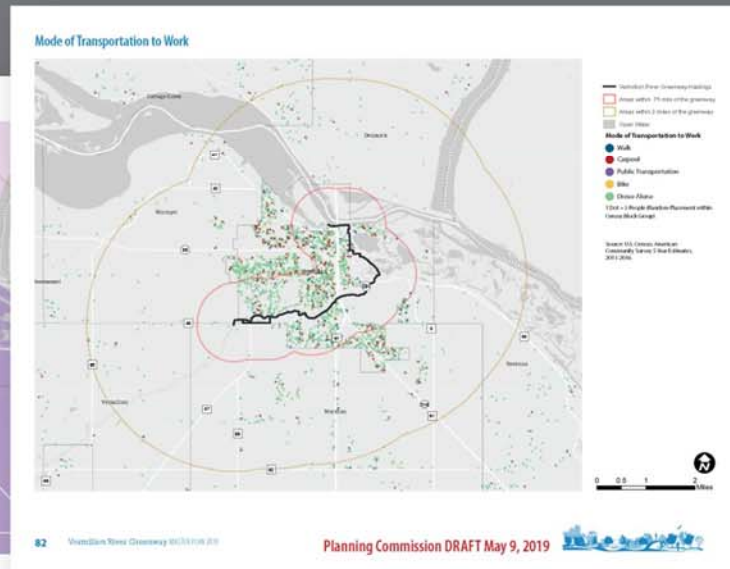
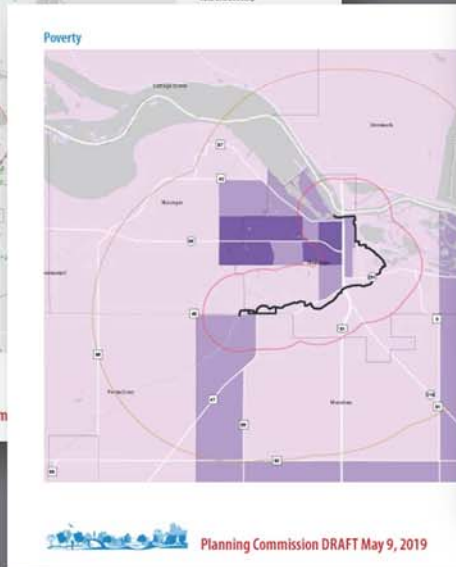
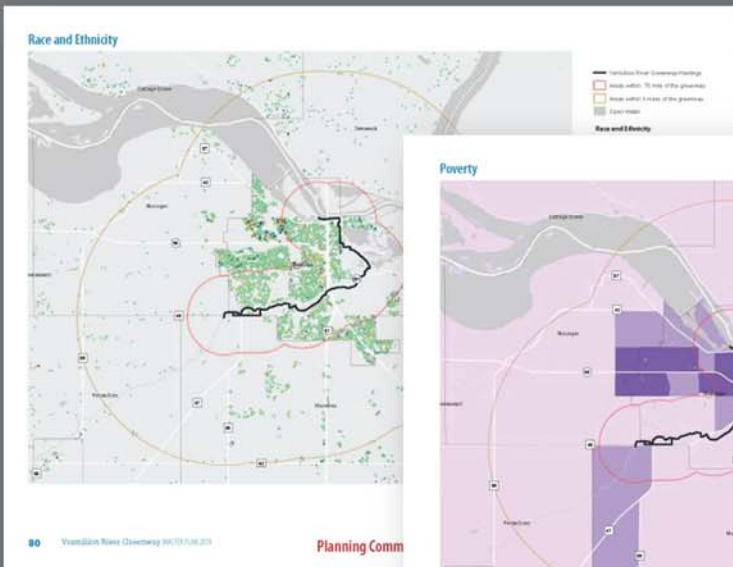


Appendices

A. Public Input and Resolutions of Support

B. Interpretive Plan

C. Equity Maps



Prioritization Exercise

Vermillion River Greenway Capital Development Cost Estimates & Priority Level Worksheet

Project ID	Project Description	Cost Estimate	Potential Partners/Triggers	Check the box for which priority level you think the projects fit.		
				5-year	10-year	Long term
Staff Recommendation for Existing and First Priority Projects (5-year)						
A	Trailhead at Levee Park - minor improvements to existing facilities (signage, landscaping, benches)	\$50,000				
B	Greenway improvements (signage, benches, landscaping, lighting, etc.) from downtown Hastings to Ravenna Trail Gateway	\$193,565				
B2	NR improvements through Hastings neighborhoods - urban signature (30' wide corridor - 5.8 acres)*	\$58,000				
C	Trail reconstruction to meet greenway standards (Rivertown Dog Park segment)	\$12,500				
D	Neighborhood Gateway at Ravenna Trail	\$45,000				
E	Trail reconstruction to meet greenway standards (C.P. Adams Park)	\$43,125				
E2	NR improvements through C.P. Adams Park - urban signature (30' wide corridor - 1.2 acres)*	\$12,000				
F	Trail reconstruction to meet greenway standards (Vermillion Falls Park to Cannon Street)	\$62,000				
F2	NR improvements along the river gorge - natural/habitat signature (100' wide corridor - 11.0 acres)*	\$110,000				
I	Trail reconstruction to meet greenway standards (Vermillion River Linear Park)	\$99,625				
I2	NR improvements in the river floodplain - habitat corridor (100' wide corridor - 10.9 acres)*	\$109,000				
M	Greenway improvements from Ravenna Trail to Pleasant Drive	\$409,095				
R	River overlooks and access (3)	\$ 600,000				
Staff Recommendation for Second Priority Projects (10-year)						
G	Trailhead at Vermillion Falls Park	\$300,000	City master plan and park redevelopment			
H	Neighborhood Gateway at Con Agra Park	\$45,000				
J	Neighborhood Gateway at Vermillion River Linear Park	\$45,000				
K	Neighborhood Gateway at Pleasant Drive	\$45,000				
L	Grade-separated crossing of Pleasant Drive -- needs further evaluation	\$500,000				
N	Land Protection for corridor along Vermillion River from Pleasant Drive to General Sieben Drive	\$330,750				
N	Greenway construction (trail and amenities)	\$367,500				
MN2	Natural Resource improvements along the rural river - habitat corridor (100' wide corridor - 19.3 acres)*	\$193,000	VRIWPO projects			
O	Neighborhood Gateway at General Sieben Drive	\$45,000				
Staff Recommendation for Long Term Projects (20-year)						
P	Grade-separated crossing of General Sieben Drive	\$50,000				
Q	Trail west of General Sieben Drive	\$119,500				

- Worksheet identifies projects
- Staff recommendation for prioritization
- Partnership Natural Resource projects

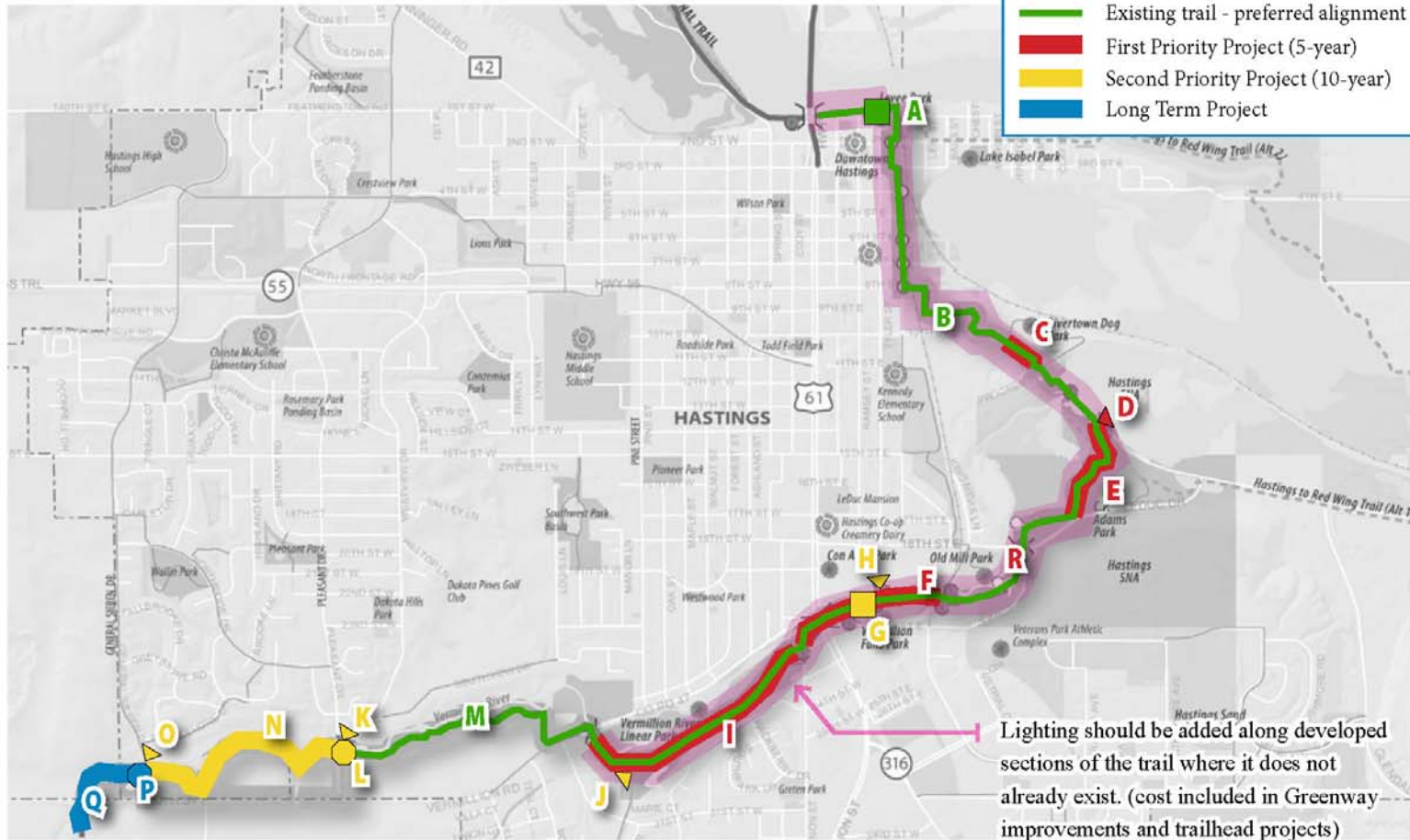
Vermillion River Greenway Natural Resources Collaborative Project Opportunities

Year	Description	Partner Opportunities	Size	Cost Estimate	Check the box for which priority level you think the projects fit.		
					5-year	10-year	Long term
Levee Park and Urban trail corridor							
2020-2025	Existing stormwater filtration and native landscaping along trail edges and in parks	City of Hastings		\$50,000			
C.P. Adams Park and Vermillion River gorge							
2020-2025	Slope and bluff restoration, address stormwater outlet at MNDOT facility	City of Hastings MNDOT		\$150,000			
Hastings SNA							
2020-2030	Support efforts to restore and preserve natural resources within the Hastings SNA	MNDNR					
Old Mill Park, Vermillion Falls Park, Vermillion River Linear Park							
2020-2030	Support ongoing restoration efforts within city parks	City of Hastings; FMR					
2018-2023	Old Mill Park - long term maintenance	City of Hastings; FMR		\$18,485			
2018-2023	Vermillion Linear Park - long term maintenance	City of Hastings; FMR	61 acres	\$11,600			
2020+	Vermillion Linear Park - future prairie restoration	City of Hastings; FMR	30 acres	\$120,000			
Vermillion River banks							
2020-2030	Support river bank restoration and stabilization efforts	Vermillion River Watershed JPO					



Discussion

Vermillion River Greenway-Hastings Implementation Projects



Vermillion River Greenway
-Hastings
MASTER PLAN



Next Steps

- Public review of Draft Master Plan
- Local government presentation – City of Hastings
- County Board review