

## Metropolitan Parks and Open Space Commission

Meeting date: March 5, 2020

For the Community Development Committee meeting of March 16, 2020

For the Metropolitan Council meeting of March 25, 2020

**Subject:** Vermillion River Greenway Regional Trail (Hastings) Master Plan, Dakota County, Review File No. 50219-1

**MPOSC District, Member:** District H, Todd Kemery

**Council District, Member:** District 16, Wendy Wulff

**Policy/Legal Reference:** Minnesota Statutes § 473.313; *2040 Regional Parks Policy Plan*: Chapter 5, Planning Strategy 1

**Staff Prepared/Presented:** Colin Kelly, Planning Analyst (651-602-1361)

**Division/Department:** Community Development / Regional Planning

### Proposed Action

That the Metropolitan Council:

1. Approve Dakota County's Vermillion River Greenway Regional Trail (Hastings) Master Plan.
2. Require Dakota County, prior to initiating any new development of the regional trail corridor, to send preliminary plans to the Metropolitan Council's Environmental Services Division Assistant Manager.

### Background

The Vermillion River Greenway Regional Trail (Hastings) will provide an important link between southwestern Hastings neighborhoods, Vermillion Falls Park, the Mississippi River Greenway 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 trail designation will provide improvements, such as natural resources restoration projects, trailhead and gateway facilities, and overlooks. The greenway will serve as a destination regional 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.

### Rationale

The Vermillion River Greenway Regional Trail (Hastings) Master Plan is consistent with the requirements of the *2040 Regional Parks Policy Plan*, particularly Planning Strategy 1, and other Council policies.

### **Thrive Lens Analysis**

The Vermillion River Greenway Regional Trail (Hastings) Master Plan advances the Thrive outcome of Livability by increasing access to nature and outdoor recreation, which enhances quality of life in the region.

### **Funding**

The total cost to implement the regional trail is estimated at approximately \$2,542,320 for acquisition and \$3,842,660 for development.

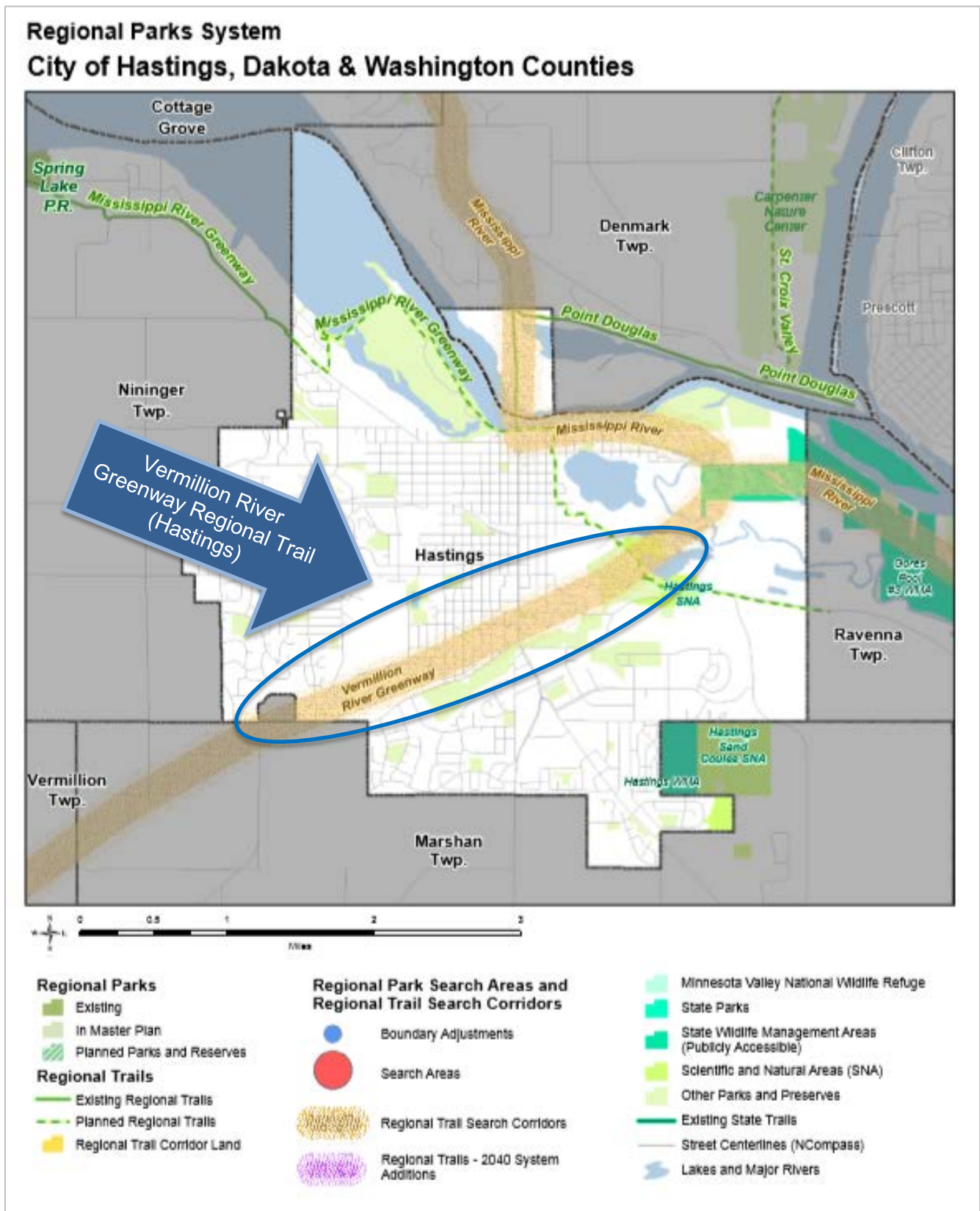
### **Known Support / Opposition**

The Dakota County Board of Commissioners adopted the Vermillion River Greenway (Hastings) Regional Trail Master Plan on October 29, 2019. There is no known opposition to the Master Plan.

Figure 1: Regional Trails Search Corridor Map (2018) and Vermillion River Greenway Regional Trail location



Figure 2: Regional Parks System: City of Hastings, Dakota and Washington counties and Vermillion River Greenway Regional Trail (Hastings) location





## **Analysis**

Planning Strategy 1 of the *2040 Regional Parks Policy Plan* requires that master plans for destination regional trails address 13 items: boundaries and acquisition costs, demand forecast, development concept, conflicts, public services, operations, partner engagement, public engagement and participation, public awareness, accessibility, natural resources, Mississippi River Corridor Critical Area, and stewardship plan. The following analyzes the master plan against those requirements.

### ***Boundaries and Acquisition Costs***

Dakota County's greenway concept incorporates recreation, transportation, and ecological, and water quality components in a 100- to 300-foot corridor secured through land protection and land stewardship. For the Vermillion River Greenway, land protection means securing land for at least the minimum 30-foot trail alignment, grade-separated crossings, and trailheads. Land stewardship in this context means creating or maintaining a healthy context in which nature can thrive within the greenway.

Sections of the Vermillion River Greenway Regional Trail corridor where land protection is needed include 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. Land protection strategies include park dedication, direct purchase, permanent easements, land donation, bargain sale, life estate, and negotiations with cities and developers.

Dakota County estimates 15.8 acres (4.35 miles) of publicly owned land and 3.6 acres (1.0 mile) of privately-owned land is needed to secure the 30-foot wide trail corridor. The estimated costs are \$2,067,120 and \$475,200 respectively for a total of \$2,542,320. An average amount of \$90 per lineal foot for a 30-foot wide corridor was used to calculate the estimated cost of securing the corridor.

### ***Demand Forecast***

Metropolitan Council studies show that half of regional trail users live within three-quarters of a mile of a trail, and 75 percent of trail users live within three miles of the trail used. The three-quarters-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 core and primary service areas of the Vermillion River Greenway Regional Trail (Hastings segment) core and primary service areas are all expected to see growth within the next 10 years. Those communities include Hastings, Marshan Township, Ravenna Township, Nininger Township, and 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, Wisconsin. These three latter communities are all located across the Mississippi River, which may serve as a barrier to significant use for these populations.

According to the Metropolitan Council's Annual Use Estimate of the Metropolitan Regional Parks System for 2017, an estimated 151,400 visits were made in 2017 to the Big Rivers Regional Trail. Using the Big Rivers Regional Trail as a guide, the Vermillion River Greenway Regional Trail (Hastings), if opened today, could expect approximately 72,495 annual visits. This estimate was calculated by considering the 2017 estimated use of the Big Rivers Regional Trail, adjusting for the lower population of the cities in the primary service area of the Vermillion River Greenway Regional Trail (Hastings), 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 Vermillion River Greenway is also more accessible to residential neighborhoods than the Big Rivers Regional Trail.

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 83,369. The estimate does not take into account increased use based on population increases in communities outside the primary service area, current recreation trends, and increased use resulting from better connectivity to other regional and local trails.

### *Development Concept*

The primary recreation feature of the greenway is a continuous regional destination trail. While the greenway varies in width from 100 feet to more than 300 feet throughout the corridor, this section focuses on the design of the 30-foot trail corridor to create a safe, amenity-rich trail for year-round use.

The regional trail within the greenway corridor will be a continuous multi-purpose bituminous trail designed in accordance with applicable American Association of State Highway Transportation Officials (AASHTO) guidelines, Minnesota Department of Transportation bicycle design guidelines, and Dakota County trail standards. The trail will be a minimum of 10 feet wide with a two-foot grass clear zone on each side.

A primary goal of the greenway trail alignment is for the greenway corridor to be at least 80 percent off-street 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 percent 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 County Road 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 to slow traffic.

Frequent access is a priority for the Vermillion River Greenway Regional Trail. 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.

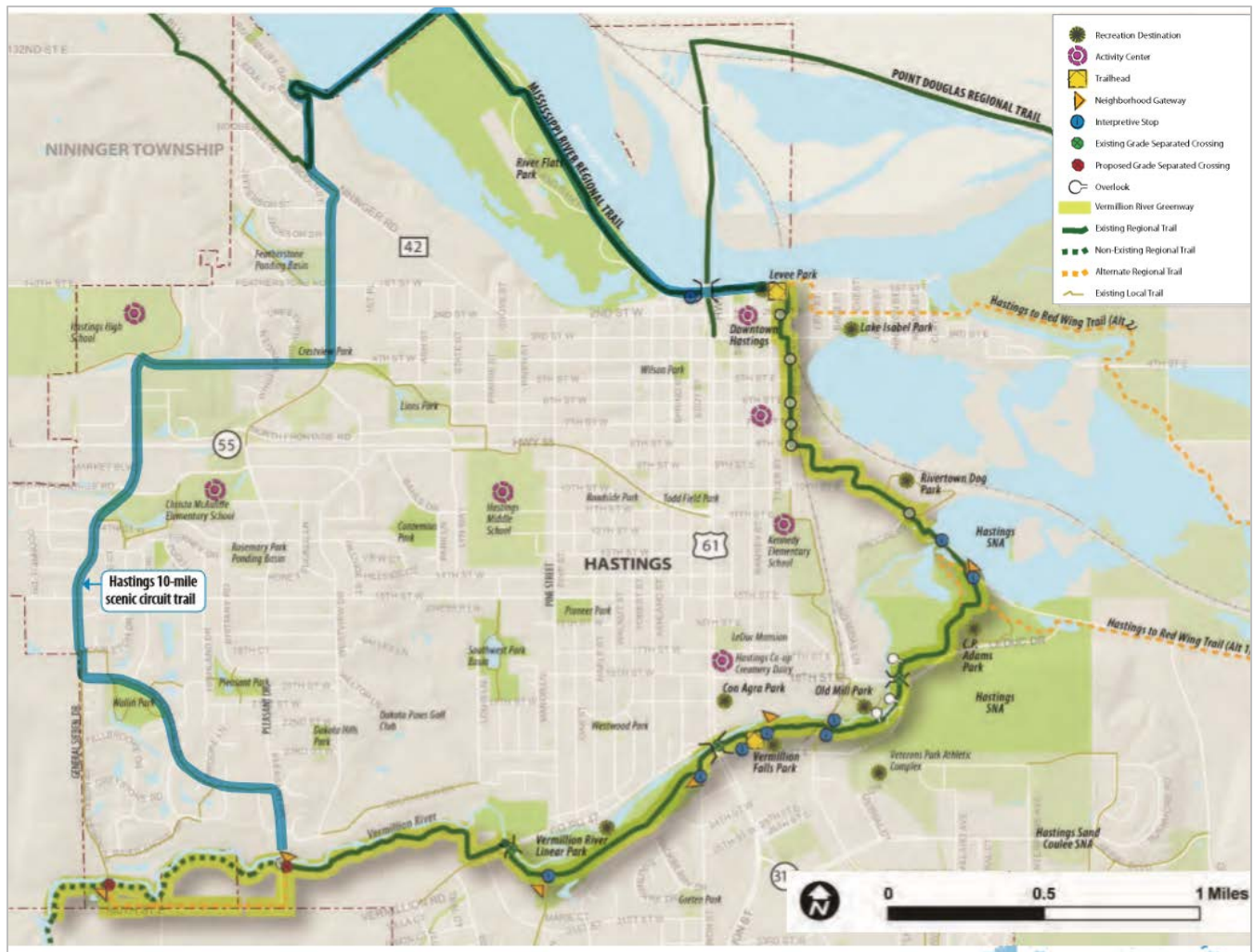
Grade-separated crossings are a critical component of Dakota County's greenway system. Grade separation promotes safety by reducing conflicts with motorized traffic and allows for more efficient and enjoyable trail experience for users of all abilities. To that end, grade-separated crossings are suggested at the major intersections along the Vermillion River Greenway.

There are three existing grade-separated crossings along the Vermillion River Greenway Regional Trail, 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 (Figure 3). 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.

Wayfinding is another critical component of Dakota County's greenway system and will be consistently implemented along the Vermillion River Greenway Regional Trail. Wayfinding is essential for orientation, navigation, and safety. This signage will also be consistent with other elements of the

Dakota County park system, and will guide greenway users to local services, cultural destinations, transportation connections, activity centers, recreation destinations, cities, neighborhoods, and other landmarks.

Figure 3: Vermillion River Greenway Regional Trail (Hastings) Concept Plan

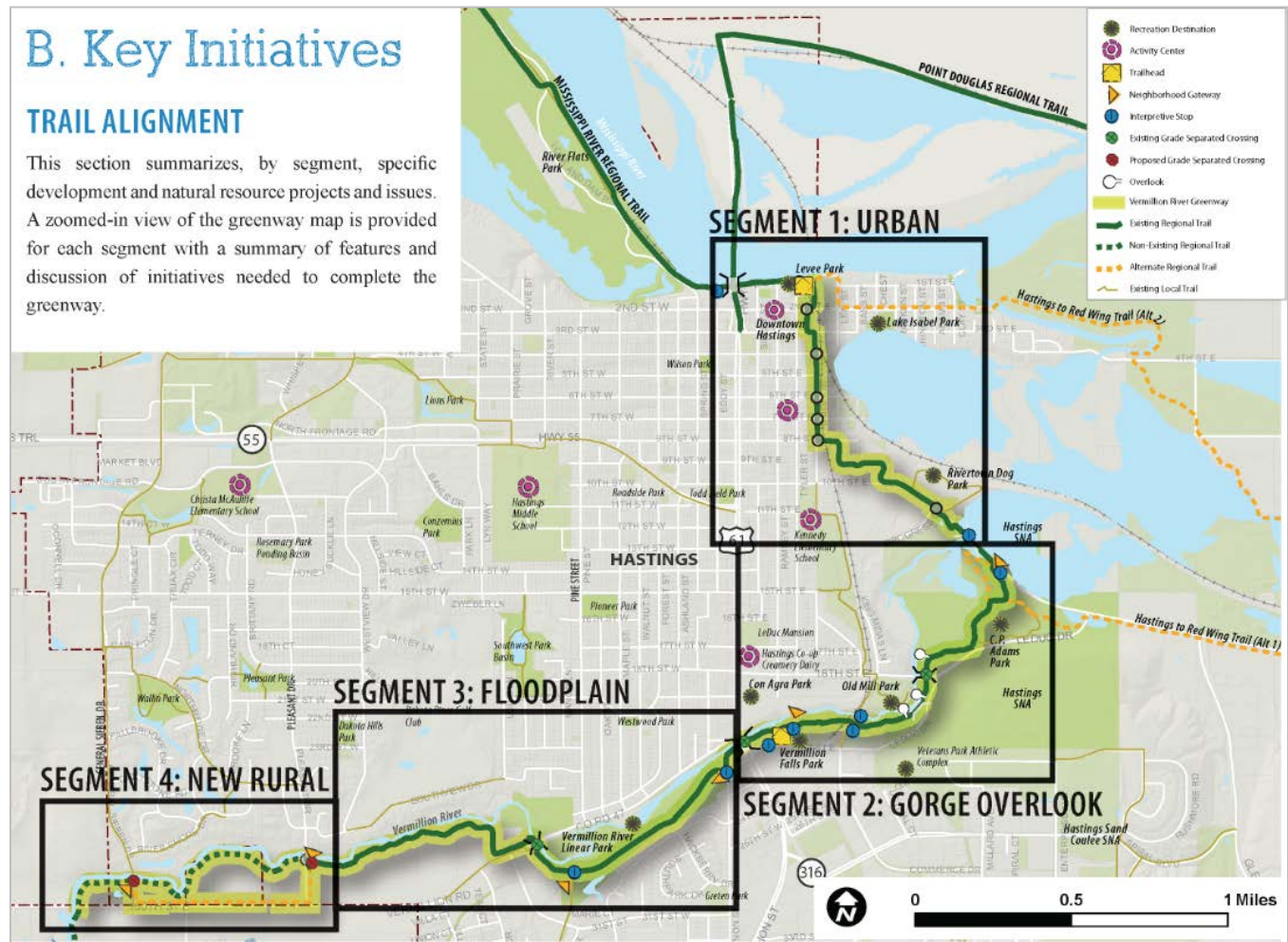


To clearly articulate planned improvements along the regional trail corridor, the master plan outlines key initiatives in four segments (Figure 4), beginning in Hastings:

- Segment 1: Urban Section
- Segment 2: Gorge Overlook
- Segment 3: Floodplain
- Segment 4: New Rural Section



Figure 4: Vermillion River Greenway Regional Trail (Hastings) Segment Map





### Segment 1: Urban Section

Segment 1 is 1.6 miles in length and is 60% off-road (i.e., not directly parallel to an adjacent roadway). It starts at Levee Park, then continues south through downtown Hastings and along the rail corridor to Ravenna Trail, Rivertown Dog Park and C.P. Adams Park. (Figure 5)

Levee Park has been recently updated by the City of Hastings and is a popular location for city events, river viewing, and trail use. The location of Levee Park at the confluence of the Mississippi River Greenway Regional Trail and the Vermillion River Greenway Regional Trail makes it an ideal location for a trailhead. Existing features include a restroom building, parking lot, and picnic facilities. Future upgrades could include Dakota County trail signage and interpretation.

Figure 5: Vermillion River Greenway Regional Trail (Hastings): Segment 1

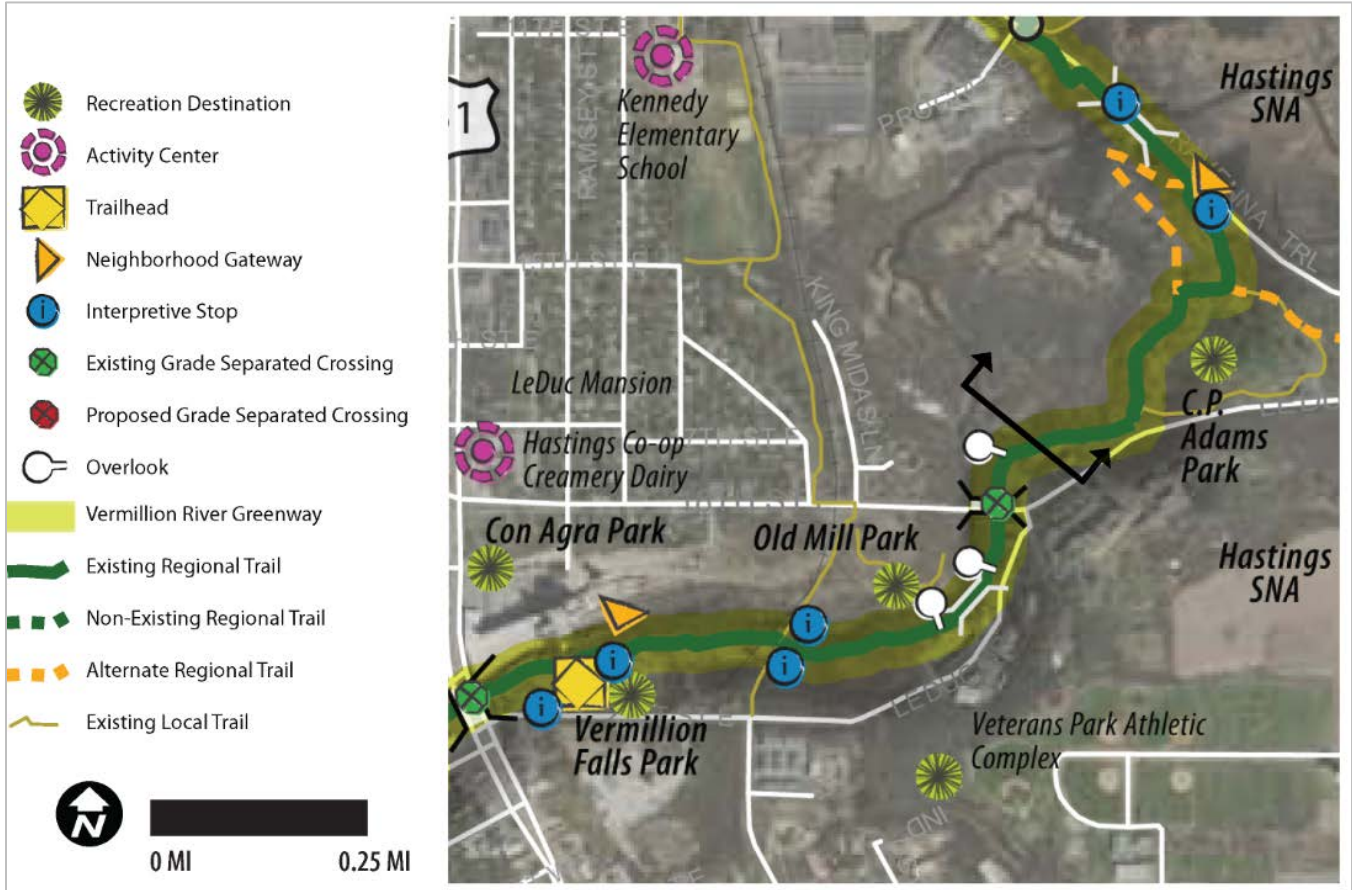


## Segment 2: Gorge Overlook

Segment 2 is 1.35 miles in length and is 100% off-road. It follows the Vermillion River gorge from the falls to the outlet of the river at Ravenna Trail where it begins to pour into the Mississippi River (Figure 6). This segment offers dramatic views of the Vermillion River, opportunities to view ruins of the former mills, and a restored rail trestle bridge that serves as a trail connection to the north side of the river.

The trailhead concept at Vermillion Falls Park shows a re-designed parking lot with trail connections to a re-aligned Regional Trail. Trailhead amenities include a future Americans with Disabilities Act accessible restroom, bike racks, and areas with native prairie restoration. Wayfinding and interpretation are integrated into the park at key locations. An additional stairway, path and overlook will connect trail and park users to the river.

Figure 6: Vermillion River Greenway Regional Trail (Hastings): Segment 2



### Segment 3: Floodplain

Segment 3 is 1.75 miles in length and is 94% off-road. It starts at the Highway 61 underpass and leads west along the river and floodplain (Figure 7). The trail winds behind homes and along the levee that was constructed as a result of severe flooding in the 1960s. The experience on this segment allows some views of the river, but also passes through prairie restoration areas.

Figure 7: Vermillion River Greenway Regional Trail (Hastings): Segment 3





## Segment 4: New Rural Section

Segment 4 is 0.9 mile in length and is 100% off-road. The new trail segment begins at Pleasant Drive and will follow the south edge of the Vermillion River (Figure 8). This alignment has been identified on City trail planning maps and in the City's comprehensive plan. If the trail were to follow the river, easements or fee title acquisition would be needed on several private properties that are adjacent to the river. This alignment would be in an entirely off-road corridor which would provide a more natural experience for trail users.

Figure 8: Vermillion River Greenway Regional Trail (Hastings): Segment 4



The Vermillion River Greenway Regional Trail Master Plan prioritizes capital development over three time horizons: five-, 10-, and 20-years. Taken together, the estimated cost to develop the Vermillion River Greenway Regional Trail, including engineering and construction is \$3,842,660 over the next 20 years.

### Conflicts

The surrounding land uses and the greenway are generally compatible and no significant conflicts are anticipated to affect the viability of master plan recommendations. Minor conflicts will occasionally arise from private encroachment or neighboring residents' sensitivity to greenway, recreation or maintenance uses. Dakota County will work with individual landowners to resolve these issues case by case.

### Public Services

No significant new public services will be needed to accommodate the greenway. Proposed trailheads and neighborhood gateways are served by the existing road network. If utilities are not accessible at gateways and trailheads, options such as solar powered lighting, portable toilets or wells will be considered. Stormwater will be treated on site. Accommodations for later installation of continuous trail lighting will be considered at initial trail construction.

### Operations

Like other aspects of the greenway, management and operations will be a collaboration between the County, city, and other partners. Responsibilities will vary by greenway segment. While this master plan defines general responsibilities for each greenway segment, formal joint powers agreements between Dakota County and collaborating agencies will be needed to outline specific agency responsibilities. These agreements will detail who has control of the trail right-of-way as well as who will operate and maintain the trail and how they will do it.



The Dakota County Parks Department will be the lead agency for coordinating greenway and management operations. The Dakota County Board of Commissioners establishes policies and goals for the park system and through an annual budget provides capital and operating funds for the department. The Planning Commission, appointed by the Board of Commissioners, advises the County on park and recreation trail issues.

Dakota County Parks Department will be responsible for the operation of the 30-foot regional trail corridor. Where there are opportunities for operational partnerships, Dakota County will enter a joint powers agreement with partner agencies. The Parks Department employs a staff of permanent employees and seasonal employees adequate to maintain the system. Volunteers assist with outdoor education programs, patrol, park clean-ups, and special events. Contractual agreements also are in place with outside agencies for some maintenance and natural resource work. Dakota County recognizes that, as facilities expand, it will need to increase staffing.

### *Partner Engagement*

The planning process was a collaborative effort of multiple agencies and jurisdictions. Dakota County led the process with advice from a technical advisory group formed to guide the master plan. Key stakeholders were engaged during the process to inform planning decisions and recommendations.

A technical advisory group (TAG) met twice during the master planning process to provide guidance, provide insight into technical questions, explore options, identify partnership opportunities, and discuss concurrent projects. The TAG included representatives from Dakota County Parks, Dakota County Office of Planning, the City of Hastings, and the Vermillion River Watershed JPO. In addition to providing specific guidance, the TAG institutionalized a collaborative planning process and established relationships across agencies with a stake in implementing the master plan. TAG meetings were held on October 4, 2018, and February 5, 2019.

### *Public Engagement and Participation*

Public outreach included an open house, email outreach, posting information on a project website, online questionnaires, and targeted efforts. Specific outreach was made to engage and seek input from key landowners within the corridor area. A questionnaire was distributed at several locations asking for feedback on the greenway alignment, trail accessibility, connections, and amenity enhancements. The following outreach efforts were made:

- Information posted on project website
- Information posted on City of Hastings website
- Mailers to every property owner within 500 feet of the trail corridor
- A presentation was made to members of the Hastings Senior Center, which included at least 40 members in attendance. Comments included the desire for fishing docks/piers along the Vermillion River, emergency phones/lights along the more isolated areas of the trail, and questions about if the trail will be rebuilt in some areas. The attendees were interested in and supportive of the project

Comments and questions received at the open house and on the comment forms include the following topics and issues:

- Property owners along the undeveloped portion of the trail attended the meeting to learn more about the planned alignment and how it might affect their properties.

- There were concerns expressed about the darkness through the heavily wooded section of the trail from Vermillion Falls to Veterans Athletic Complex (Vets Park) and then the heavily wooded areas around the disc golf park. Lighting is desired in the wooded areas.
- There is interest in making the trail corridor more inviting around Vermillion Falls, which will help keep out vandalism or inappropriate behavior.
- There was interest expressed in keeping the undeveloped trail alignment along the river as is shown in the City of Hastings Comprehensive Plan rather than along County Road 46 where there is heavy traffic traveling at high speeds.

Prior to the greenway planning process, Dakota County completed an in-depth multicultural outreach process as part of its Visitor Services Master Plan (2017), which resulted in valuable information regarding recreational interests and preferences from minority cultural groups, non-native English speakers, and immigrants.

Some of the information obtained through the Visitor Services Master Plan influenced this greenway plan. For example, the County will provide marketing information about regional park and recreation facilities, safe and accessible facilities, and clear signage and other amenities along trails and in parks. Additional input from minority and low-income residents and potential trail users in the area was sought by contacting several local organizations, such as Artspace Hastings River Lofts, a development meant to provide affordable housing to artists; Hastings Community Education; United Way; the Tilden Community Center; 360 Communities; and Hastings Family Service.

### *Public Awareness*

Dakota County's Parks Department will continue working with Dakota County's Communications Department to promote awareness and use of the County's parks and greenway system. Many tools are available to promote awareness of Dakota County parks and greenways including, but not limited to, websites, direct mail, press releases, brochures, on-site promotion, monument signage along roads, wayfinding within greenways and parks and paid advertising. Dakota County also collaborates with cities, businesses, the Regional Parks System and others to promote its facilities, programs and services and educate the public about its resources.

### *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.

Most of the existing trail has an existing linear slope of less than three percent, which meets Americans with Disability Act accessibility standards.

The greenway trail will be provided for public use with no user fees or direct costs. Information will be provided on the Dakota County website and on signs in public parks that are adjacent to or connected with the greenway trail. The trail provides an accessible and cost-free recreation facility that encourages and promotes safe active living with access to natural resources.

### *Natural Resources*

The Vermillion River Greenway Regional Trail corridor connects forested and herbaceous parks and open spaces through rural and suburban areas. The overall quality of plant communities within the corridor is moderate- to high-quality, as identified by the Minnesota County Biological Survey (MCBS) and the Minnesota Land Cover Classification System (MLCCS).

Beginning at Levee Park, the Vermillion River Greenway connects to the Mississippi River, runs close to the wetland complex at Lake Isabel and Bullfrog Pond. At the crossing of the Vermillion River at Ravenna Trail, the greenway then follows the Vermillion River throughout southern Hastings.

The Vermillion River is part of the Vermillion River Watershed, which is managed by the Vermillion River Watershed Joint Powers Organization. This organization provides collaborative education, science, and support to restore and protect the watershed's natural resources for all who live, work, and play within its boundaries.

### *Mississippi River Corridor Critical Area*

A small portion of the trail corridor less than half a mile-long falls within the Mississippi River Corridor Critical Area (MRCCA). This is an existing paved trail that is part of the Mississippi River Regional Trail and City of Hastings trails. See map on following page.

This master plan recognizes the purposes of the MRCCA designation as detailed in Minnesota Statutes, section 116G.15, subd. 1, which are as follows:

1. protect and preserve the Mississippi River and adjacent lands that the legislature finds to be unique and valuable state and regional resources for the benefit of the health, safety, and welfare of the citizens of the state, region, and nation;
2. prevent and mitigate irreversible damages to these state, regional, and natural resources;
3. preserve and enhance the natural, aesthetic, cultural, and historical values of the Mississippi River and adjacent lands for public use and benefit;
4. protect and preserve the Mississippi River as an essential element in the national, state, and regional transportation, sewer and water, and recreational systems; and
5. protect and preserve the biological and ecological functions of the Mississippi River corridor.

This master plan also acknowledges the standards and criteria set forth in the State Statute that establish guidelines for the preservation, protection, and management of lands within the MRCCA. These standards apply to public facilities, private facilities, vegetation management, land alteration and storm water management, subdivision and land development, and exemptions.

### *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—to determine if the stewardship effort is economically and ecologically sustainable over the long term.

In order to provide for realistic and sustainable restoration and management of the resources, key habitat investment areas were identified for natural resource management. These habitat investment areas were prioritized and targeted to areas associated with high-quality ecological resources and greenway use patterns.

Some of the area along the Vermillion River Greenway is currently undeveloped, and much of it exists within city parks and natural/restoration areas. It is possible to conserve large areas of open space and establish a continuous ecologically functioning habitat corridor throughout these areas. General

recommendations are made for overall corridor preservation, while targeted natural resource and water quality improvements are recommended at key locations, such as trailheads and parks.

General considerations for stewardship activities are organized around ecological quality, landscape position, and future uses.

In native plant communities—prairie, woodlands, and wetlands—invasive species removal, buffer protection, or establishment and re-establishment of disturbance regimes will be the key activities. Oak savannas may need to be supplemented with tree plantings, and all of the grassland systems will likely need supplemental seeding.

Stormwater runoff from impervious surfaces will be treated, and significant erosion issues will be addressed, as opportunities arise along the corridor.

Lake, wetland, and stream restoration will also be considered along the greenway. Any restoration efforts will be designed by multidisciplinary teams that include expertise in engineering, hydrology, aquatic and restoration ecology, geomorphology, soil science, and policy/permitting.

### **Review by Other Council Divisions**

**Transportation – Regional Bicycle Transportation Network** (Steve Elmer 651-602-1756) – No additional comments.

**Community Development – Environment and Surface Water Management** (Jim Larsen 651-602-1159) – No additional comments

**Environmental – Sewers** (Roger Janzig 651-602-1119) – The construction of any new or updating of existing paths, trails, or bridges may have an impact on multiple Metropolitan Council interceptors in multiple locations. To assess the potential impacts to our interceptor system; prior to initiating this project, preliminary plans should be sent to Tim Wedin, Interceptor Engineering Assistant Manager (651-602-4571) at the Metropolitan Council Environmental Services.

**Metro Transit** (Steve Mahowald 612-349-7775) – No additional comments.

**Transportation Planning** (Russ Owen 651-602-1724) – No additional comments.

**Local Planning Assistance – Land Use** (Patrick Boylan 651-602-1438) – No additional comments