

## METROPOLITAN COUNCIL

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**DATE:** October 24, 2012

**TO:** Metropolitan Parks and Open Space Commission

**FROM:** Tori Dupre, Senior Planner-Parks (651-602-1621)

**SUBJECT:** (2011-XXX) Vermillion Highlands Greenway Regional Trail Master Plan, Dakota County, Review File No. 50029-1  
Metropolitan Parks and Open Space Commission Districts H (Barbara Schmidt)

### INTRODUCTION

Dakota County, a regional park implementing agency, submitted the Vermillion Highlands Greenway regional trail master plan to the Metropolitan Council for review on September 4, 2012. The Council reviews park and trail master plans to evaluate their consistency with the *2030 Regional Parks Policy Plan* and its content criteria for regional trail master plans.

The *2030 Regional Parks Policy Plan* Planning Strategy 1 describes the role of the master plan in the regional park system. The policy requires that any project proposed for funding in the Metropolitan Regional Parks Capital Improvement Plan (CIP) be consistent with a Metropolitan Council-approved regional park master plan.

The *Policy Plan* Siting and Acquisition Strategy 3 addresses locating and acquiring new regional trails and specifies that new regional trails serve a regional audience based on visitor origin surveys, follow natural or linear features in areas of scenic appeal, and provide connections between the regional park system's features and facilities.

This report reviews the proposed Vermillion Highlands Greenway Regional Trail master plan based on its consistency with the *2030 Regional Parks Policy Plan* and recommends approval of the master plan.

### AUTHORITY TO REVIEW

Minnesota Statutes 473.313 Subd. 1 requires Regional Park Implementing Agencies to "prepare, after consultation with all affected municipalities, and submit to the Metropolitan Council, and from time to time revise and resubmit to the council, a master plan and annual budget for the acquisition and development of regional recreation open space located within the district or county, consistent with the Council's policy plan."

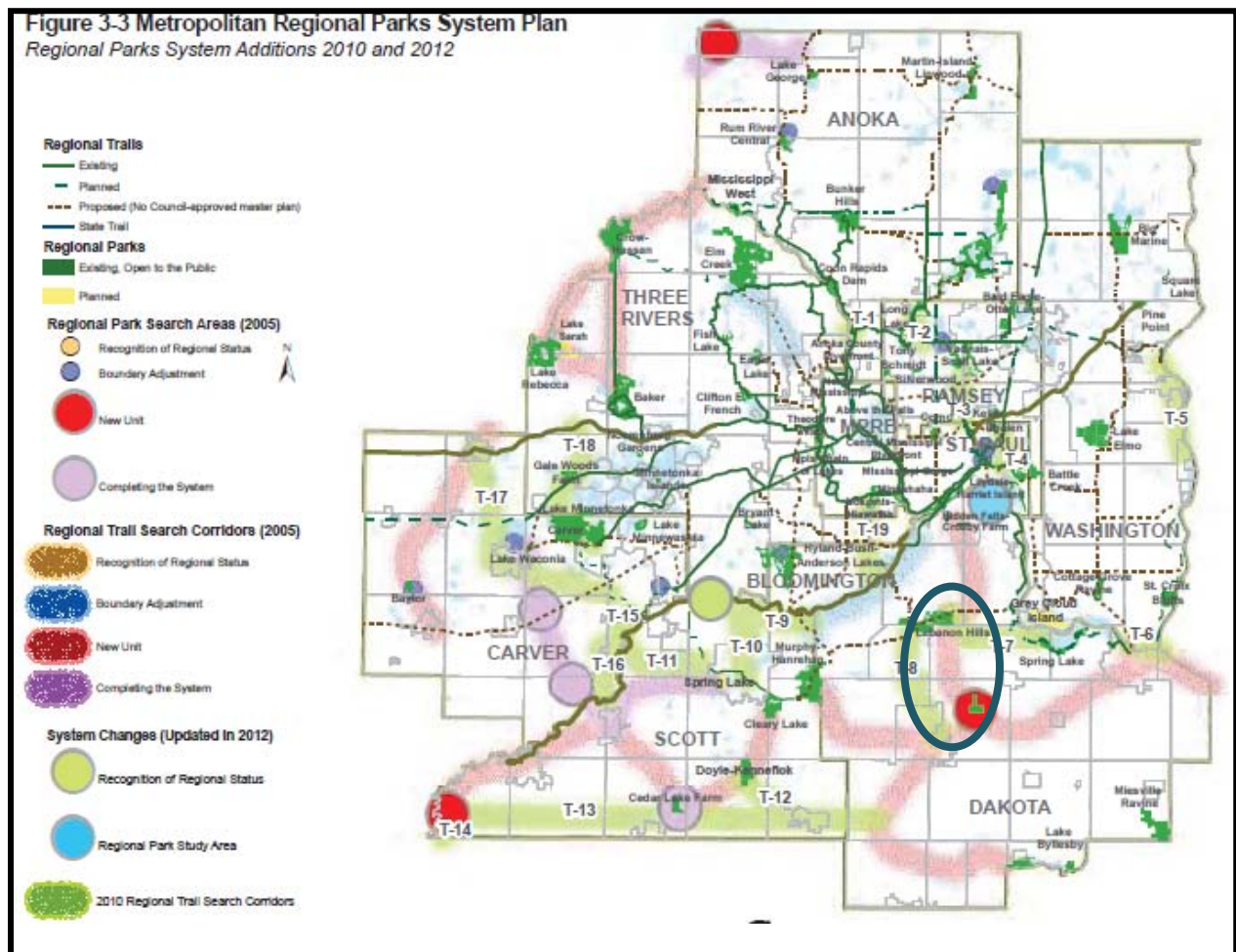
Minnesota Statutes 473.313 Subd. 2, authorizes the Metropolitan Council to review, with the advice of the Metropolitan Parks and Open Space Commission, master plans for the regional park system facilities. The Council reviews plans for their consistency with the *2030 Regional Parks Policy Plan*, and those plans found inconsistent with Council policy are returned to the implementing agency, along with the Council's review comments, for revision and resubmission.

## BACKGROUND

The *2030 Regional Parks Policy Plan* acknowledges the proposed regional trail in Dakota County as the new Dakota North-South regional trail search corridor, and describes its connection to the North Urban Regional Trail, to Lebanon Hills Regional Park, south to the Whitetail Woods Regional Park, and continuing south to the Vermillion River.

The *Policy Plan* explains that greenways are similar to regional destination trails, and, should maximize the amount of high-quality natural resources within the trail corridor boundaries. The Vermillion Highlands Regional Trail is approximately 13 miles in length and is located in Figure 1 (outlined in blue).

**Figure 1: 2030 Regional Parks Policy Plan**



The Vermillion Highlands Greenway extends from Lebanon Hills Regional Park to the Vermillion River, traveling (north/south) through Eagan, Rosemount and Empire Township. It will link two of the most significant natural areas in Dakota County, the 2,000-acre Lebanon Hills Regional Park and the 3,000-plus acre Vermillion River aquatic management and wildlife management areas managed by the Minnesota Department of Natural Resources.

The greenway will connect to local parks in the city of Rosemount, to Dakota County Technical College, and to Whitetail Woods Regional Park. Figure 2 depicts the Vermillion Highlands Greenway in context with other greenways in Dakota County.

**Figure 2: Dakota County Parks and Greenways Plan**



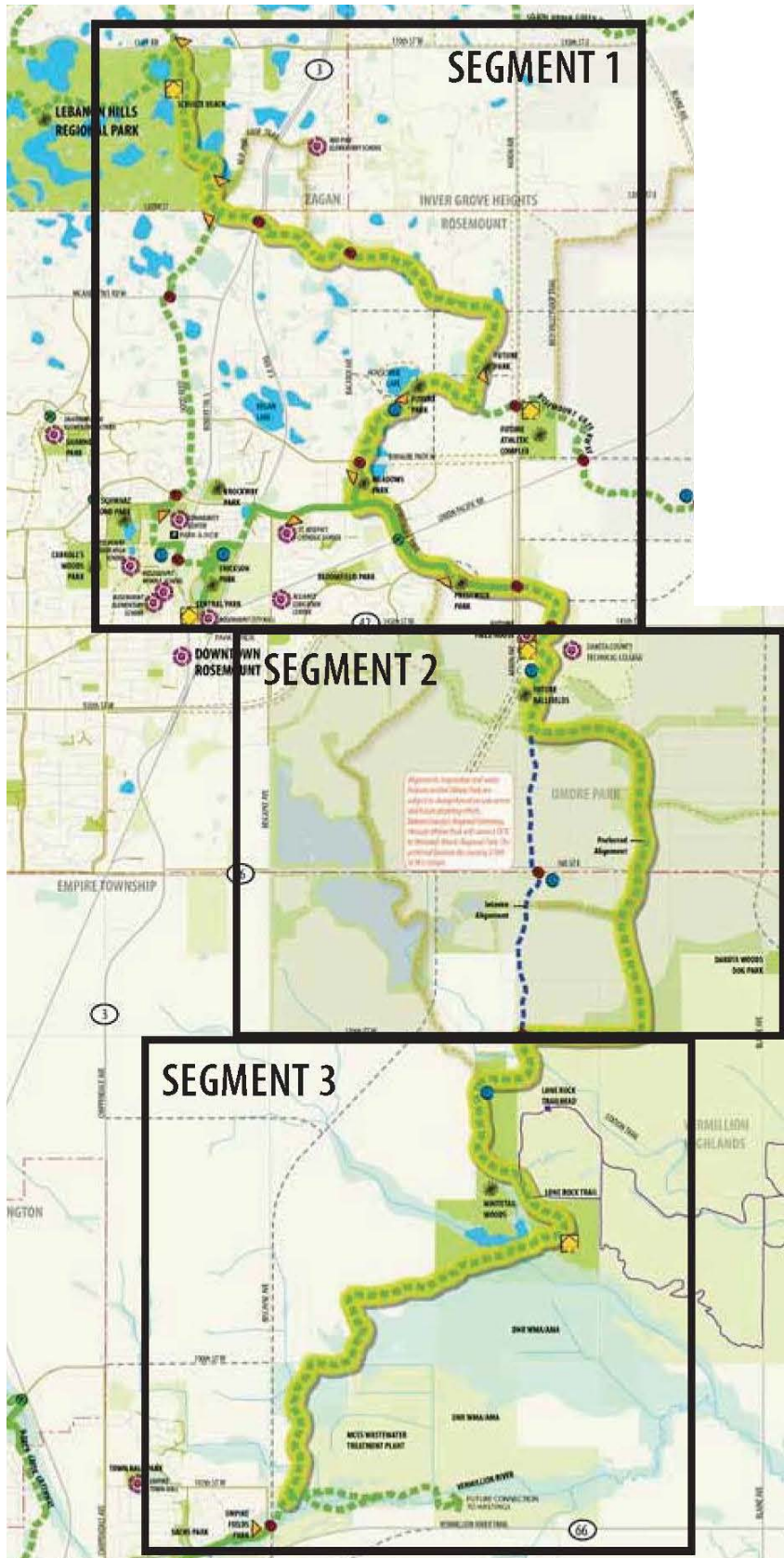
The Vermillion Highlands Greenway landscape character is generally suburban to rural and agricultural, with scattered areas of forest, wetlands and prairie. The master plan describes the greenway in three segments (Figure 3) showing a preferred alignment and connections to recreation destinations such as local parks, activity centers schools, trailheads, neighborhood gateways (local trail access points) and grade separated crossings.

Segment one is 6 miles from Lebanon Hills Regional Park to the Dakota County Technical College and County Road 42/145th Street West. It connects the existing trailhead at the Lebanon Hills Visitor Center to the neighborhood parks along the corridor.

Segment two is 2.75 miles from Dakota County Technical College to Whitetail Woods Regional Park, and travels through the UMore Park property owned by the University of Minnesota. The University's 2008 concept master plan for the UMore property identifies the greenway corridor. Finally, segment three is 4.7 miles from Whitetail Woods Regional Park to the Vermillion River through the Vermillion River Aquatic Management and Wildlife Management Areas.

The greenway corridor meets Dakota County's greenway goal providing 80 percent off-road trails, and no more than 20 percent of the trail located parallel to roads.

Figure 3: Vermillion Highlands Greenway Trail Segments



Trail Segments	Length/Miles	Along Roads	Off-Road
Segment 1	6.00	20%	80%
Segment 2	2.75		100%
Segment 3	4.70	--	100%
Greenway Total	13.45	9.5%	90.5%

## MASTER PLAN ANALYSIS

The *2030 Regional Parks Policy Plan* requires that master plans for regional greenway trails address the following items.

### 1. Boundaries and Acquisition Costs

The master plan addresses the parcels to be acquired, the estimated acquisition costs and the acquisition schedule for the proposed regional trail. It also describes the trail corridor's natural resources, special assessments and other acquisition considerations.

The Council's review evaluates the proposed regional trail part of the broader greenway corridor. Dakota County's priority is to acquire and preserve the 30-foot wide greenway trail corridor. The broader greenway corridor will range in width from 100 to more than 300 feet to incorporate natural resources and features, and Dakota County will partner with other entities and agencies to acquire and manage this part of the greenway.

The County will acquire the greenway in phases based on a priority plan, funding and acquisition opportunities. The first priority projects are intended to establish the continuous greenway, while second priority projects enhance the greenway. These projects add improvements and investments such as new trailheads and grade-separated crossings. The County will use interim routes to connect trail gaps until the preferred alignment is built.

Figure 4, Vermillion Highlands Greenway Regional Trail Ownership, illustrates that the trail segment from Lebanon Hills to County Road 42 is approximately 22 acres and of this, 10.86 acres (about 3 miles) is privately owned. The balance of the greenway corridor travels through publically-owned land.

Dakota County estimates that the 30-foot greenway trail acquisition costs will total approximately \$1,245,600. The County will need to acquire the private land through park dedication, land donation, permanent easements and other acquisition negotiations. The County will continue to work with cities, landowners and developers as acquisition opportunities arise.

**Figure 4: Vermillion Highlands Greenway Property Ownership**

Figure 54. Property Ownership

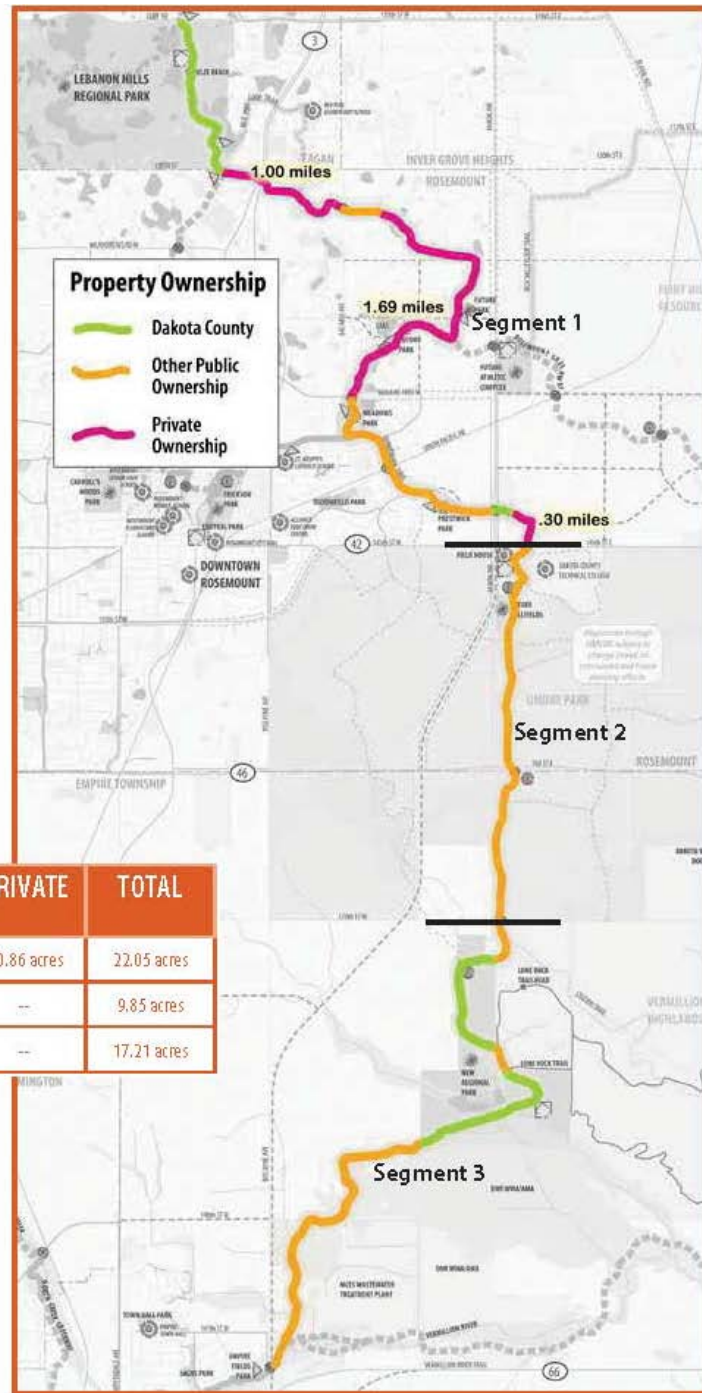


Table 54. Protection and Steward Partnership Lands (for 30 foot wide trail corridor)

SEGMENT	DAKOTA CO.	PUBLIC	PRIVATE	TOTAL
<b>1</b>	4.77 acres	6.42 acres	10.86 acres	22.05 acres
<b>2</b>	--	9.85 acres	--	9.85 acres
<b>3</b>	5.92	11.29 acres	--	17.21 acres

## 2. Demand Forecast

The master plan addresses how the trail will meet the recreational demand as identified by the Metropolitan Council and Dakota County data. The plan includes the Metropolitan Council’s 2030 population forecasts and shows that in the communities touching the greenway’s 3-mile primary service area, the population is expected to increase 45 percent between 2010 and 2030. The planned development at UMore Park could add another 30,000 residents within the primary service area.

The Metropolitan Council's 2008 parks and trails survey indicated that two-thirds of those visiting the metropolitan area's recreational facilities were using the trails primarily for hiking and walking, the most popular activities. Based on the demographic data and population forecasts, Dakota County anticipates that annual visits to the Vermillion Highlands Greenway Trail may be at least 313,000 people by 2030.

### 3. Development Concept

The master plan addresses the trail development schedule and cost estimates. The County's primary focus in planning and developing the trail is to provide numerous links and connections to existing neighborhood parks, schools and other community centers. These connections increase trail visits and limit the need for trailhead parking.

The master plan describes the greenway corridor trail as a multipurpose, bituminous trail designed to meet Federal, State and County standards. The trail will be 10 to 12 feet wide, with a three-foot grass clear zone on each side, designed and developed to accommodate walking, jogging, inline-skating and bicycling. The trail will be maintained for winter use.

Dakota County estimates that the trail corridor's capital (construction) costs will total \$10,392,259 (Figure 5). The costs include site furnishings (benches, fountains, trash containers, lights), trail and interpretation signs, landscaping, design and engineering, and underpass structures. The contingency costs (10%) are included separately. The costs estimate a bituminous trail at \$60 per linear foot.

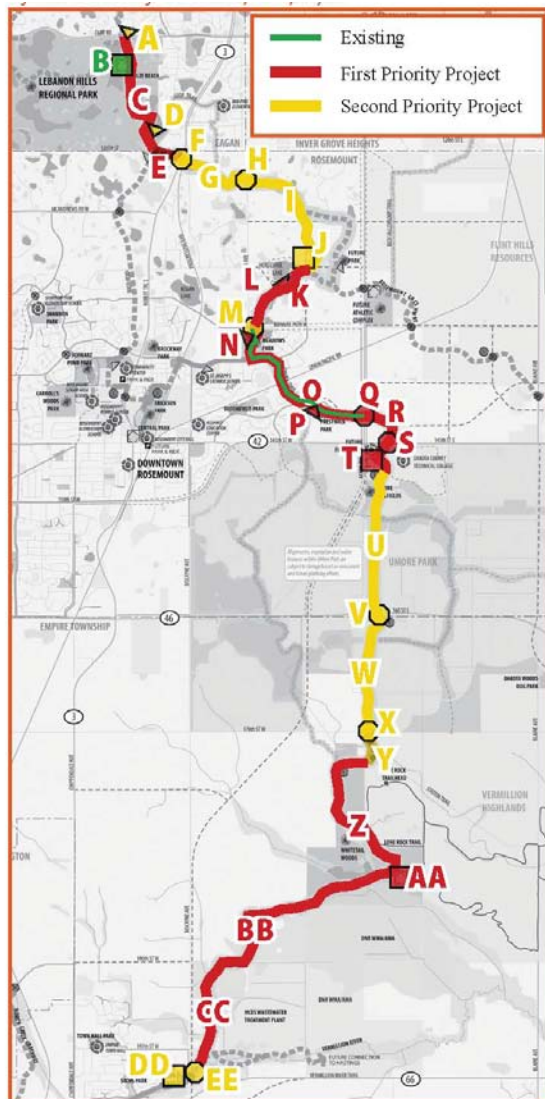
**Figure 5: Vermillion Highlands Greenway Regional Trail Development Costs**

<b>Trail Component by Segment (3)</b>	<b>Estimated Development Costs</b>
1. Lebanon Hills Regional Park to Dakota County Technical College	\$ 4,464,215
2. Dakota County Technical College to Whitetail Woods Regional Park	\$ 2,628,361
3. Whitetail Woods Regional Park to Vermillion River and Management Areas	\$ 2,538,121
Contingency @10%	\$ 761,562
<b>Total Cost</b>	<b>\$10,392,259</b>

Dakota County anticipates that trail development funding will be shared with various other partner agencies. The County will follow the greenway corridor priority projects shown in Figure 6, but will maintain flexibility if properties and funding become available.

As with the greenway corridor acquisition schedule, the County will follow the master plan's priority schedule to develop the regional trail as opportunities become available and new development occurs.

**Figure 6: Vermillion Highlands Greenway Development Priority**



#### **4. Conflicts**

The master plan addresses the potential conflicts with existing land uses or proposed projects affecting the trail, including the steps necessary for resolution. The master plan states that the land uses surrounding the greenway are generally compatible, and identified minor conflicts from the public comment process that the County staff addressed.

#### **5. Public Services**

The master plan indicates that no new public services (electrical utilities and water/sewer) will be needed to accommodate the trail. Proposed trailheads and neighborhood gateways are currently served by the existing road network. Dakota County will consider options such as solar lighting if municipal utilities are not accessible at these trailhead and gateway locations.



## **6. Operations**

The master plan addresses the rules, regulations or ordinances affecting the trail, including estimated operations and maintenance costs, and sources of revenue to operate and maintain the trail.

Dakota County Parks and Open Space Department is the lead agency for coordinating greenway and management operations. The County's existing park ordinance addresses park and trail operations such as regulation of public use, user conduct and activities, property protection, and vehicle parking.

The County will implement a maintenance program and schedule for the greenway corridor to maintain and protect the public investment, enhance natural resource quality and provide a quality service. The County estimates that the greenway maintenance and operations costs will total \$151,875 annually. Maintenance responsibilities include landscaping, habitat management, sign replacement, winter plowing and other activities. Dakota County will fund the operations and maintenance activities through the County general fund.

## **7. Citizen Participation**

The master plan addresses the citizen participation process that the County conducted in planning the regional trail. The County-led greenway planning process included a technical advisory group (TAG members below) that met to discuss both the Vermillion Highlands Greenway and the Rosemount Greenway master plans. The County held a cultural resources meeting in December 2011 to discuss proposed interpretive themes.

The County also held two open houses for both proposed greenways and developed a project website. In addition to the TAG meetings, the County met with Dakota County Technical College and the City of Rosemount staff, both key stakeholders. The County received resolutions supporting the trail from Empire Township, the City of Rosemount, UMore Development LLC, and the Dakota County Technical College.

### Technical Advisory Group

- City of Rosemount
- Empire Township
- Flint Hills Resources
- Minnesota Department of Natural Resources
- Dakota County Parks and Open Space
- University of Minnesota UMore Park
- Dakota County Planning

## **8. Public Awareness**

The master plan addresses the County's approach for informing the public about greenway information and details once the trail is open. Dakota County uses a number of communication tools to promote the parks and trails system including websites, mailings, press releases, brochures and wayfinding systems/kiosks. Interpretive signs will be a minimal size, low profile, accessible and well-placed along the greenway at trailheads or at neighborhood gateways (local parks).

The plan includes an interpretive component to inform visitors about the greenway's history and cultural resources, including land use changes over time, six archeological sites, and the Gopher Ordinance Works (GOW), a mid-1940's military ammunition manufacturer on the now University of Minnesota-owned UMORE property in Rosemount.

## **9. Accessibility**

The County is committed to offering universal accessibility at all trail facilities. The primary paved trail and all access points described in the master plan are located and planned for accessibility for all greenway visitors, and are designed and built to meet Federal, State and County standards.

## **10. Natural Resources and Stewardship**

The master plan includes a natural resource analysis and stewardship plan to restore and preserve these resources. The County used the Minnesota Department of Natural Resources Land Cover Classification System during the greenway planning process to evaluate the greenway's natural resources, type and quality, and potential restoration needs and priorities.

The greenway corridor includes high quality natural resources such as the Vermillion River Aquatic Management and Wildlife Management Areas, two large wetland complexes. In addition, the Vermillion River is a high-quality trout stream. The analysis is reflected in the Stewardship Plan for natural resource management, and includes strategies to restore and protect vegetation, habitat, and surface and ground water.

The County's stewardship priority is to restore the continuous habitat within the greenway, and secondly to restore habitat on identified sensitive lands including uplands, in the broader greenway. The stewardship plan includes capital projects that will total \$467,400, and include natural resources management, invasive species removal, lakeshore buffer planting, wetland education, and a habitat corridor. The plan estimates that the natural resources maintenance will total \$129,400 annually.

## **REVIEW BY OTHER COUNCIL DIVISIONS**

The Metropolitan Council staff reviewed the master plan for potential issues with the other regional systems plans for water resources management, wastewater and transportation (including aviation). The Council staff found that the proposed trail is compatible with the regional systems plans. The Metropolitan Council staff provided the following comments.

### **Environmental Services-Wastewater (Roger Janzig, 651-602-1119)**

The Vermillion Highlands Greenway Master Plan shows trails that may have an impact on Metropolitan Council wastewater interceptors. To assess the potential impacts to our interceptor system, the County should provide preliminary plans to Scott Dentz, Interceptor Engineering Manager (651-602-4503) at the Metropolitan Council Environmental Services (MCES) for review and comment prior to initiating the project.

## **Environmental Services–Water Supply** (Lanya Ross, 651 602-1803)

The Vermillion Highlands Greenway master plan includes an objective to improve stormwater infiltration, which is particularly important because portions of the greenway are located upgradient of the City of Rosemount's municipal wells, and in the City of Rosemount's Drinking Water Supply Management Area (DWSMA). The DWSMA has been designated as being moderately to highly vulnerable to potential contamination by both the City and the MN Department of Health. Since stormwater infiltration occurring in this area may impact public drinking water supplies, Council staff recommends that the County consult the MN Department of Health document, 'Evaluating Stormwater Infiltration Practices in Vulnerable Wellhead Protection Areas at <http://www.health.state.mn.us/divs/eh/water/swp/stormwater.pdf>.

## **Parks and Natural Resources** (James Larsen, Senior Planner, 651 602-1159)

The Vermillion Highlands Greenway master plan indicates that Dakota County will maintain the greenway regional trail using pavement seal coat. Sealcoat products, whether coal-tar or asphalt-based, can contribute significant amounts of PAHs (polycyclic aromatic hydrocarbons) to storm water runoff from impervious surfaces. Areas tributary to the Vermillion River are at the greatest risk of runoff contamination. Staff recommends the Minnesota Pollution Control Agency consumer fact sheet be considered in trail maintenance. The fact sheet is at <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/industrial-stormwater/industrial-stormwater-steps-to-compliance/industrial-stormwater-steps-to-compliance-step-14-how-to-stay-in-compliance/how-municipalities-can-verify-compliance-of-facilities.html> )

## **CONCLUSIONS**

1. The Vermillion Highlands Greenway regional trail master plan from Dakota County is consistent with the *2030 Regional Parks Policy Plan*.
2. The estimated costs to implement the regional trail master plan total \$12,105,259, which includes acquisition costs at \$1,245,600, construction costs at \$10,392,259 and stewardship (resource restoration) costs at \$467,400. The annual costs total \$281,275 which includes operations and maintenance (\$151,875), and stewardship (\$129,400).
3. The proposed greenway trail alignment may impact the Metropolitan Council wastewater interceptors. To assess the potential impacts to our interceptor system, the County should provide preliminary plans to the Council's Interceptor Engineering Manager to review construction documents prior to initiating any project.
4. The Metropolitan Council's approval of the master plan allows Dakota County to be eligible to request regional funding for the regional greenway trail's acquisition, construction and natural resource restoration.

## **RECOMMENDATIONS:**

That the Metropolitan Council:

1. Approve the Vermillion Highlands Greenway Regional Trail Master Plan.
2. Require Dakota County to provide trail alignment and development plans to the Metropolitan Council Environmental Services Interceptor Engineering Manager for review to protect regional wastewater inceptor facilities.
3. Request that Dakota County consider the referenced documents regarding groundwater and surface water management concerns.