

# Middle St. Croix Valley Regional Trail Master Plan



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# Acknowledgements

The Middle St. Croix Valley Regional Trail Master Plan was developed to serve as a guide for trail route alignment, improvements, uses, and facilities - along with management of corridor resources. Adopting this plan expands opportunities for state and regional funding to assist with right-of-way and land acquisition, trail development, and operations and maintenance needs. The input and feedback from several agencies, organizations, and individuals was instrumental in the development of this plan. It would not have been feasible without the support and efforts of Washington County and the communities, townships, agencies, and individuals listed below.

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*A sincere thank you to community members and elected officials for participating in this planning process!*

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**Other Municipal/Agency/Organization Partners**

- Bayport Public Works
- Bayport Township
- Belwin Conservancy
- City of Afton
- City of Lake St Croix Beach
- City of Lakeland
- City of Lakeland Shores
- City of Oak Park Heights
- City of St. Mary’s Point
- Metropolitan Council
- Metropolitan Council Parks and Open Space Commission
- Middle St Croix Watershed Management Organization
- Minnesota Department of Natural Resources
- Minnesota Department of Transportation
- National Park Service
- Stillwater Public Works
- Stillwater Township
- St Croix County
- Washington County Parks and Open Space Commission

# Executive Summary

Development of a regional linking trail along the St. Croix River presents an exciting opportunity for Washington County, the communities that abound there and the greater region. The Middle St. Croix Valley is filled with historic downtowns, culturally relevant sites and scenic natural settings important to the settlement of Minnesota and recreational enjoyment and conservation efforts. It provides patrons an opportunity to look back while also looking ahead as present stewardship efforts aim to ensure the area’s natural and cultural resources persist for future generations.

As a regional amenity, the Middle St. Croix Valley Regional Trail would link existing trails and resources to build on existing connectivity in the region. A 2019 county-wide residential survey demonstrated wide public interest and support for the expansion of Washington Counties off-road trail network.

This Regional Trail Master Plan was created in collaboration with multiple stakeholders over the past year, including potential trail users, communities surrounding the trail and a contingent of their elected officials. It also received input from numerous technical advisors representing several federal, state, regional and local agencies.

The map indicates the recommended future regional trail alignment. Master planning efforts considered several factors aligning this recommendation with local resources and ideals embodied in a regional trail. Where possible, it links residents with local resources (parking, natural and cultural points of interest, and businesses) in accordance with a set of goals developed during the planning process. Several segments were reviewed during this process that were not ultimately included as

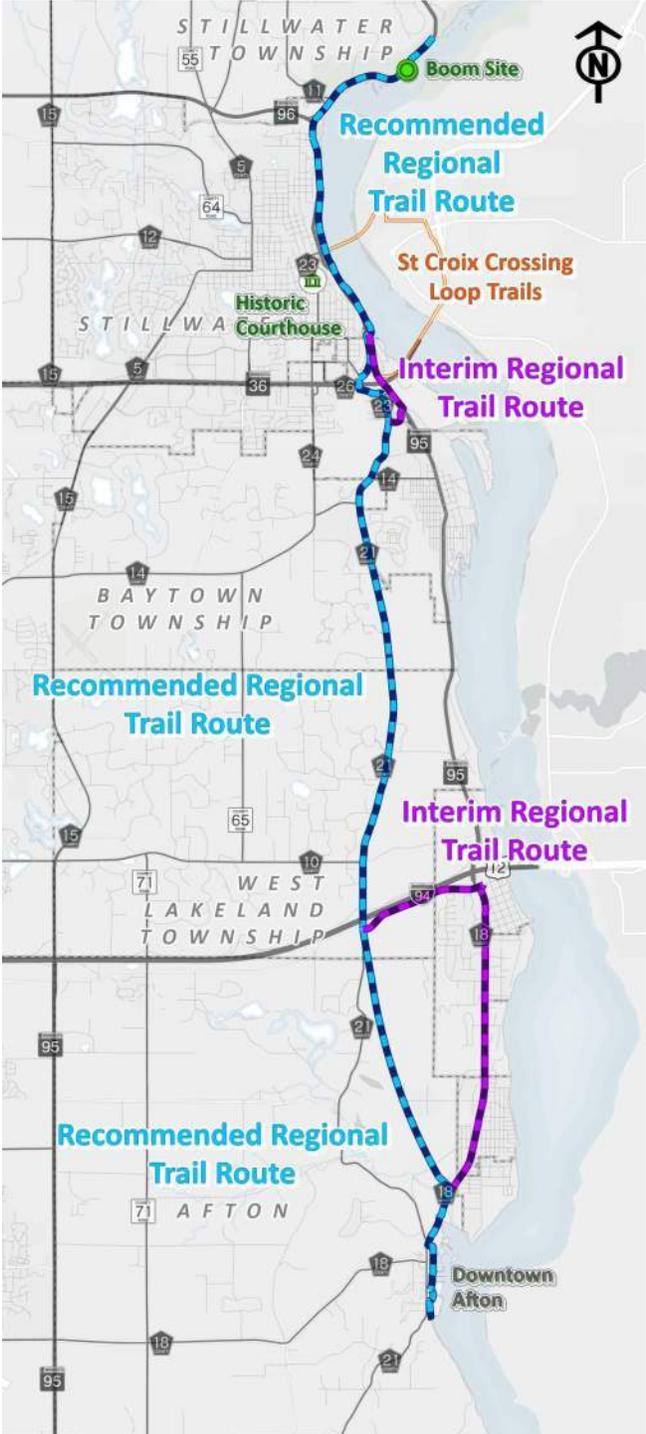


Figure 1: Recommended Middle St. Croix Valley Regional Trail route

part of the recommended route. This report recommends that local communities further explore developing these local links to enrich the connectivity provided by this amenity and share the local vibrancy of the communities along its route.

**Partner & Public Engagement**

Involving and engaging members of a Technical Advisory Committee (TAC) as well as the public were critical throughout the planning process. Their insights were key in developing the project goals to the left. They also assisted in alignment of this master plan with public consensus and with perspective of their representative agencies.

**Project Goals:**



**Safety, Accessibility, and Comfort**

Create a safe and comfortable recreational trail experience serving all ages and abilities



**Connectivity**

Create regional connectivity and support local connections highlighting unique destinations and adjacent communities



**Natural Resources**

Protect and enhance the natural resources along the trail corridor and foster stewardship of the river valley



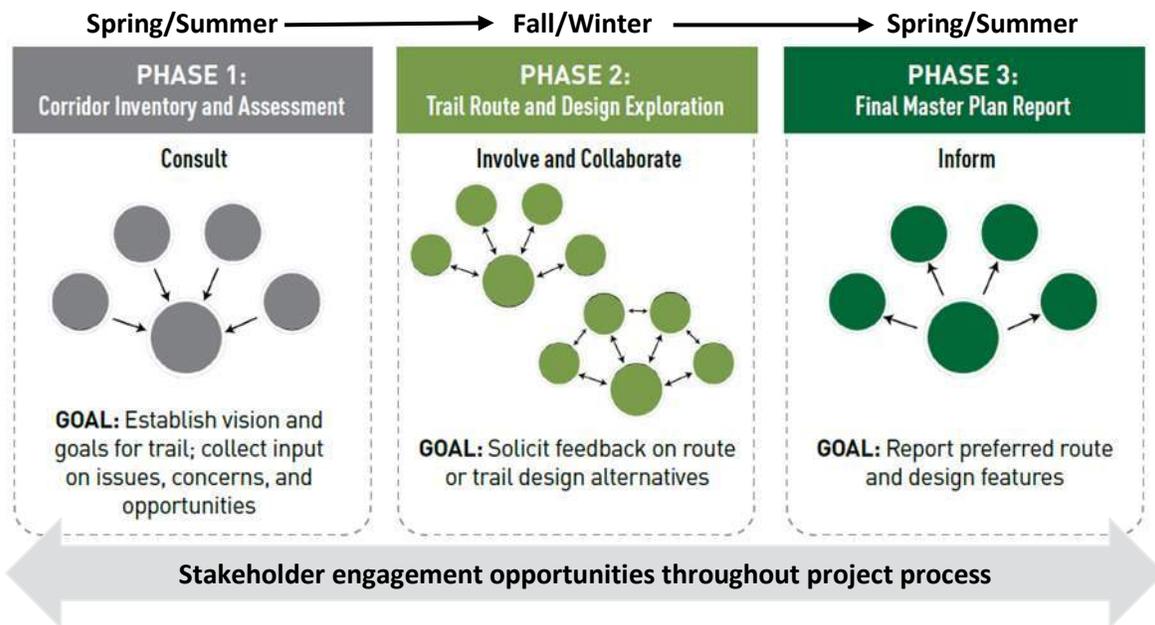
**Equity**

Prioritize facility alignment and design that is inclusive of historically underrepresented populations



**Implementation**

Prioritize implementation in identifying a trail alignment and design



The flow chart above indicates the different phases of engagement throughout the planning process. Different methods of outreach were used during each of the phases to align with the pace of master plan development and to ensure authentic outreach. In addition, Washington County staff representing various departments assisted in further outreach to stakeholders in the project search corridor, beyond those participating on the TAC.

# Part 1: Introduction

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## 1. Planning Framework

The scenic St. Croix Valley is a popular destination for residents and visitors. Located in eastern Washington County, the Middle St. Croix Valley Regional Trail will guide users through downtowns, industrial areas, and scenic natural settings. The 14-mile north-south multi-use trail will expand the planned regional trail network extending north to the St. Croix Boom Site and south to downtown Afton. It will be a destination serving as the spine for several local and state trail connections, including the Brown's Creek State Trail and the St. Croix Crossing Loop Trail.

Challenging topography, an abundance of culturally significant sites, and infrastructure constraints along the trail corridor provide both challenges and unique opportunities for trail development. The multitude of jurisdictional and public stakeholders requires a balance of local and regional needs and priorities, as well as careful consideration to the growing needs of potential trail users.

This master plan serves as the first step in transforming the community's vision for a regional trail into tangible plans that provide bicycle and pedestrian access to exceptional recreation opportunities, natural resources, and community destinations. Once fully developed, this trail will feature vital connections to city trails, parks, schools, and businesses in the St. Croix River Valley.

### What is a Regional Trail?

Regional trails are multi-use facilities that serve as "tree trunks" to the overall trail network, allowing local trails to branch in and out making connections to neighborhoods and destinations. Regional trails are often initiated for recreational purposes, but also serve as an important active transportation facility with this "tree trunk" functioning similarly to highway and road systems; with local streets feeding into collector county roads, which feed into arterial highways. Regional trails expand the reach of viable non-motorized connections throughout the region.

Regional trails may occur along county highways or meander outside roadway rights-of-way. Most regional trails are separated from the road by a curb. In constrained locations, they may be part of a paved shoulder. Recreational uses for these trails include bicycling, walking, running, rollerblading/roller skiing, skateboarding, etc. In specific cases, these trails may include horseback riding and snowmobiling, however this is not the intention of the Middle St Croix Valley Regional Trail corridor. The design of a regional trail can vary and must be right sized for expected use and community context. Trail design is intended to encourage and invite patrons of differing modes and abilities. Preferred characteristics include separation from roadways, sufficient width to accommodate multiple users, amenities to support trail use, and wayfinding to orient and direct patrons. While variations occur, generally a “typical” or preferred trail section will be implemented where conditions allow.



Figure 1: The Hardwood Creek Regional Trail exemplifies a regional trail constructed using preferred Washington County design standards

County trail design standards were identified as part of the 2021 *MOVE Washington County Bike and Pedestrian Plan* and outline the following characteristics:

- Bituminous (asphalt) surfacing
- 10-foot width preferred, with 8-foot width at areas of site constraint, and 12-feet or more in areas of heavy use
- 2- to 5-foot fall zone (turf or gravel) on both sides of the paved trail with no vertical obstructions within 2-feet on either side of the trail.
- 2-5% running slope wherever possible, with a 1-2% cross slope
- 10-foot preferred buffer between the edge of the roadway and the trail

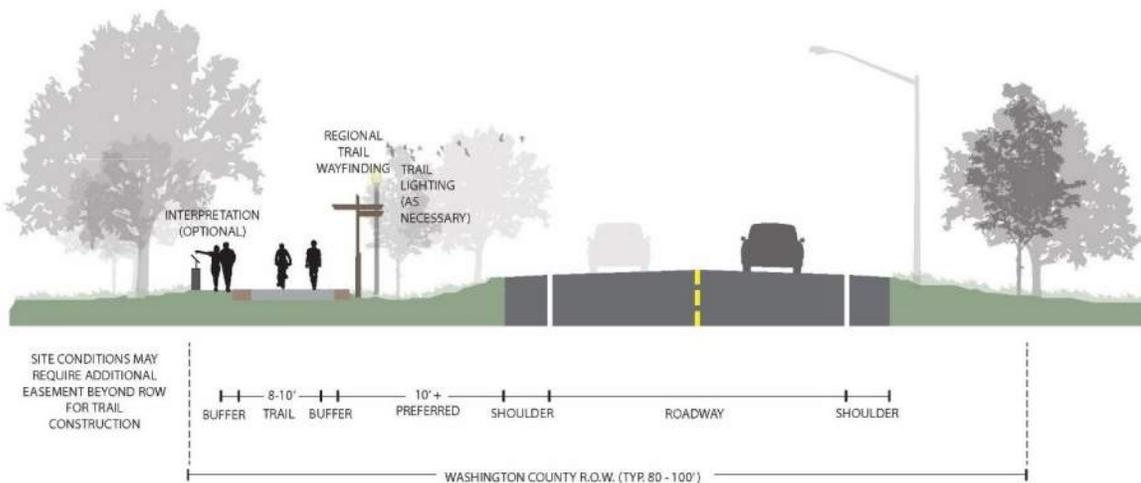


Figure 2: Washington County standard trail dimensions and layout, Source: *MOVE Washington County Bike and*

## 2040 Regional Parks Policy Plan – Regional Designation

The Metropolitan Council’s (Met Council) 2040 Parks Policy Plan defines a unified vision for the park and trail system in the seven-county Twin Cities metropolitan region and outlines the policies that apply to designate a park or trail as a regional facility.

Within this framework, regional trails:

- Serve a regional audience
- Connect regional and public interest destinations
- Connect regional facilities – linking the regional park system
- Serve as a backbone to local trail networks
- Do not duplicate an existing trail
- Serve one or more nonmotorized modes of travel
- Are off-road facilities wherever possible
- Are designed in a way to minimize impacts to, and protect, natural resources

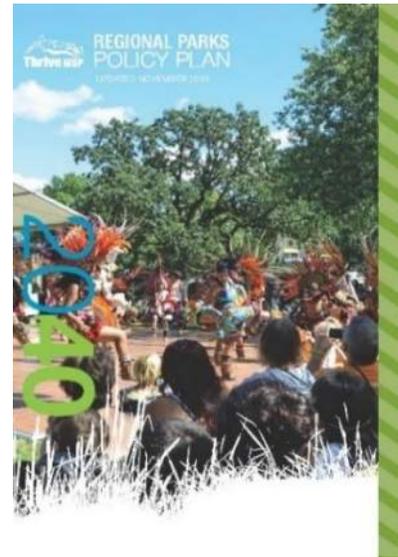


Figure 3: 2040 Parks Policy Plan

For a trail to become regionally designated, a master plan must be approved by the Metropolitan Council. It is up to each Regional Park Implementing Agency to develop individual master planning documents for their regional facilities which support the larger vision. A master plan is a long-range planning document which sets the vision for a trail and provides guidance on future alignment, design standards, implementation, management, and operations. *A master plan does not include preliminary or final design; design and implementation of specific trail segments follow the approval of a master plan once funding is secured.* This master plan designates Middle St Croix Valley as a “Linking” Regional Trail. In the 2040 Regional Parks Policy Plan, The Metropolitan Council defines Linking Regional Trails as “...trails that connect Regional Parks System units with each other, with other regional trails, state and federal lands, and with other regional destinations.”

### Thrive MSP & 2040 Regional Parks Policy Plan

The Metropolitan Council (Met Council) provides planning and policy guidance for the seven county Twin Cities region. *Thrive MSP 2040* was adopted in May 2014 and is the result of extensive engagement with residents, business leaders, and governing bodies. The plan serves as a comprehensive development guide and outlines five outcomes and three principles as the “foundation of a prosperous, equitable, and livable region for today and for generations to come.”

**Outcomes:** Stewardship, Prosperity, Equity, Livability, Sustainability

**Principles:** Integration, Collaboration, Accountability

The *2040 Regional Parks Policy Plan* (November 2018) was developed as one of three required metropolitan systems plans as part of *Thrive MSP 2040* and outlines policy direction to ensure, “...fulfillment of outdoor recreation benefits for all residents of the metropolitan regional, now and into the future.” The Met Council oversees visioning and planning for the system as well as acquisition and development of additional parks and trails. The system’s parks and trails are operated and maintained, however, by partnering cities, counties, and special districts.

An approved master plan will also offer additional funding opportunities. Acquisitions or trail development consistent with an approved master plan are eligible for certain State and Metropolitan Council grant funding. Additionally, regional trails with approved master plans are eligible for yearly operations and maintenance reimbursements.

Lastly, master planning processes provide opportunities to engage stakeholders across the County. Connecting with local agencies, organizations, and the public through this planning process creates a dialog about trails and non-motorized transportation across jurisdictional lines. Identifying a trail alignment and design representative of this dialog creates a unified vision, sets clear expectations for how the trail will develop, and mobilizes local groups to plan their projects accordingly.

## Trail Search Corridor

The Middle St. Croix Valley Regional Trail search corridor is 14-miles extending north to the St. Croix Boom Site and south to downtown Afton in eastern Washington County. The search corridor extends from the river inland to County Road 21/Stagecoach Trail as shown in yellow on Figure 4 to the right. Once fully developed, the corridor will expand the planned regional trail network, linking 11 river towns and connecting trail users to regional destinations and resources.

### *Why this Corridor?*

A 2019 county-wide residential survey demonstrated public interest and support for expanding the off-road trail network to connect communities, county parks, and other destinations. The 2020 completion of the St. Croix Crossing Loop Trail created momentum for continuing to build out the County's trail network. The Middle St. Croix Valley Regional trail will create a direct connection to the loop trail as well as the Brown's Creek State Trail and the trail system crossing along Interstate 94 into Wisconsin.

The trail will provide access and scenic views to the St. Croix River, a federally designated National Wild and Scenic Riverway, with several public and private accesses within corridor boundaries. The search corridor also provides direct access to several recreational and ecological destinations: including the St. Croix Boom Site, St. Croix Savannah Scientific and Natural Area (SNA), and Bayport Wildlife Management Area (WMA).

Lastly, there are several segments in the trail search corridor with existing trails which provide an opportunity to quickly establish the regional trail corridor. Downtown Stillwater has several trails along the river which could be utilized as part of this trail. The Afton to Lakeland trail along Highway 95 is another existing trail which could potentially serve as the regional trail facility from downtown Afton to Interstate 95.

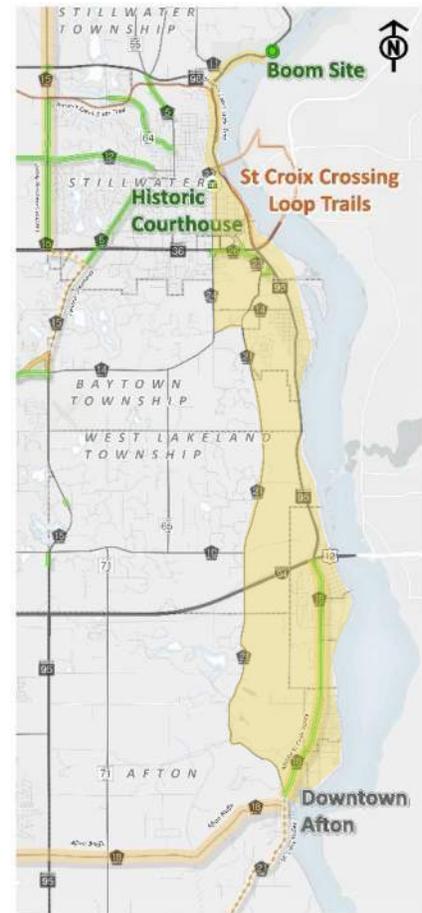


Figure 4: Middle St. Croix Valley Regional Trail Search Corridor

## Corridor Zones

In order to explore trail considerations and potential alignments, the search corridor was split into several zones based on context, natural breaks, and/or jurisdictional boundaries.

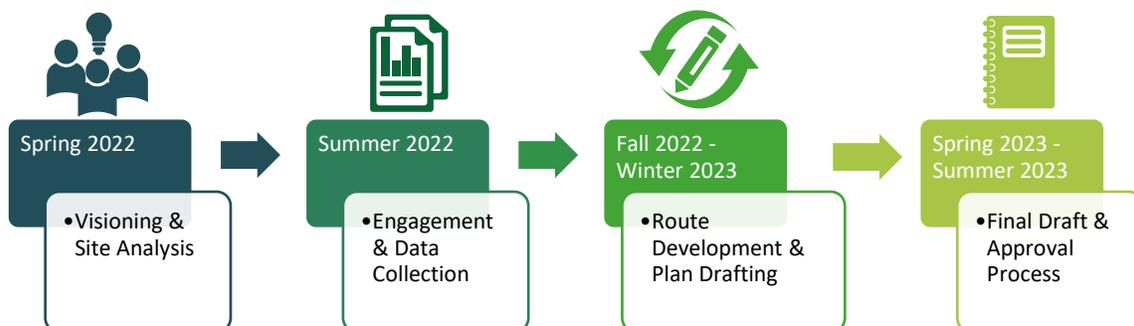
- **Zone 1 – St. Croix Boom Site to TH 95/Brown’s Creek State Trail:** Scenic highway route, curving road – potential visibility issues, challenging topography, infrastructure limitations, historic properties and regional destinations.
- **Zone 2 – TH 95/Brown’s Creek State Trail to Stillwater Lift Bridge:** Primarily downtown context, alignment compatibility with existing state and local trails, several historically significant sites/districts, wayfinding opportunities to destinations and existing trails.
- **Zone 3 – Stillwater Lift Bridge to Highway 36:** Alignment compatibility with existing trails - opportunity to close missing gaps, alignment opportunities to local destinations.
- **Zone 4 – Highway 36 to Interstate 94:** Alignment opportunity along TH 95 or CH 21, varied context – industrial/downtown/rural, existing trail compatible with alignment – variable compatibility with trail design standards, challenging topography and infrastructure limitations.
- **Zone 5 – Interstate 94 to Downtown Afton:** Varied context – commercial highway development/downtown, alignment alternative under 94 via Quixote Ave – potential property impacts and challenging slopes, existing bike and trail routes compatible with alignment, potential conflict for seasonal use – snowmobile routes, trailhead facility opportunities.



Figure 5: Regional Trail Search Corridor Zones Map

## Project Process

The Middle St. Croix Valley Regional Trail Master Plan has been created in collaboration with agency stakeholders, trail users, and the communities surrounding the trail. The planning process sought to identify a trail alignment which balances recreation opportunity, natural and cultural resource stewardships, and implementation feasibility. The planning process began in April 2022 and followed the following general timeline:



## Project Management & Organization

Project process was led by the Project Management Team (PMT). This team was comprised of County and Consulting staff and was responsible for the development of the plan, assessing existing conditions, reviewing stakeholder input, and identifying a trail alignment which balances the needs and priorities of all stakeholders along the corridor.

A primary role of the PMT was to provide information for stakeholders and to receive input from stakeholders to influence the final master plan. The osmosis of information extended across partner and public stakeholder groups, with the PMT serving as the clearinghouse for information. *Partner and Public Engagement is expanded upon in Chapter 6 of this report.*

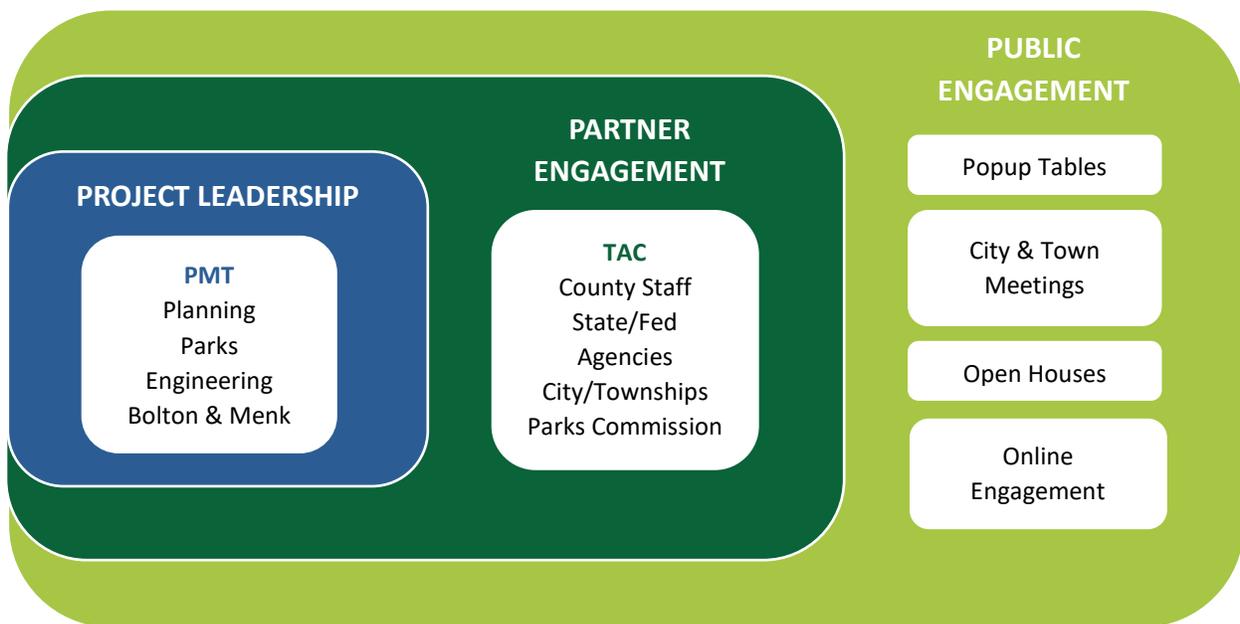


Figure 6: Process Values and Project Goals

## Process Values

Stakeholder engagement informed the project's process values listed below. Process values provide guidance through plan development aiming for the compilation of a cohesive and publicly supported plan.



Address requirements for regional trails in **2040 Parks Policy Plan**



Engage broad **cross section of the public**, especially historically underrepresented populations



Consistent with **Washington County policies, goals, and priorities**



Develop/expand relationships with local communities, affected public agencies and community groups. Project is **supported by local partners**



Plan accounts for the inventory and management of **natural and cultural resources**



**Process is fun** and keeps people positively engaged!



The plan is **implementable** – assessing key barriers to implementation

## Project Goals / Objectives / Performance Measures

Project goals, objectives, and performance measures were informed by public engagement findings and input from the Technical Advisory Committee. These statements reflect the priorities and unique characteristics of this corridor. Once drafted and vetted, they provided the framework for project planning and evaluation.

Establishing goals, objectives, and performance measures was important because it allowed the project team to refer back to these statements throughout the planning process and when making key decisions.

A goal is a broader, long-term outcome, whereas an objective is a specific, measurable action. Performance measures provide a way to quantify how objectives are being met throughout the development and implementation process.



### Project Goals:



#### Safety, Accessibility, and Comfort

Create a safe and comfortable recreational trail experience serving all ages and abilities



#### Equity

Prioritize facility alignment and design that is inclusive of historically underrepresented populations



#### Connectivity

Create regional connectivity and support local connections highlighting unique destinations and adjacent communities



#### Implementation

Prioritize implementation in identifying a trail alignment and design



#### Natural Resources

Protect and enhance the natural resources along the trail corridor and foster stewardship of the river valley

*Safety, Accessibility, and Comfort*

It is important to Washington County and stakeholders that a future regional trail provides a safe and comfortable recreational trail experience for all ages and abilities. Several key objectives help to qualify the intent with this effort including minimizing exposure to vehicular traffic and multimodal conflicts and developing infrastructure complying with ADA accessibility standards.

Project Goals	Objectives	Performance Measures
<p><b>Safety, Accessibility, and Comfort</b></p> <p>Create a safe and comfortable recreational trail experience serving all ages and abilities.</p>	<p><b>Minimize exposure to vehicular traffic</b></p>	Trail miles on-road/off-road
		Number of intersection/driveway crossings
		Traffic volume x traffic speed of adjacent roads
		Meets minimum buffer
		Number of uncontrolled intersections
		Number of bike/ped crashes on adjacent roads
		Number of railroad crossings
	<p><b>Minimize conflict between users</b></p>	Number of bike/ped accidents on adjacent roads
		Pinch points where typical trail section cannot be accommodated
	Capacity along alignment (easement width)	
	<p><b>ADA Accessibility</b></p>	Percentage of miles meeting ADA accessibility grades
	<p><b>Transit connections</b></p>	Number of transit stops within travelshed
	<p><b>Opportunities for trailheads</b></p>	Existing or potential opportunities adjacent to corridor
<p><b>Easy to navigate</b></p>	Number of decision points	
<p><b>Clear and consistent wayfinding</b></p>	<i>Not a differentiator</i>	
<p><b>High quality trail amenities</b></p>	<i>Not a differentiator</i>	

*Table 1: Project Objectives and Performance Measures as they relate to Safety, Accessibility, and Comfort*

Among the Safety, Accessibility, and Comfort Goal Performance Measures, three were particularly important: off-road status, Annual Daily Traffic, and number of intersections. Preference was given to a lower ratio of on-road vs off-road trail miles to minimize trail segments unable to provide separation between bike/ped users and motor vehicles. Segments adjacent to low volume traffic roads were also preferable to higher-traffic roadways; roads with  $\geq 10,000$  Annual Daily Traffic (ADT) were scored as 1 compared to roads with  $\leq 1,000$  ADT, which received a value of 4. Finally, preference was given to routes with fewer intersections or driveway crossings per mile, to reduce conflicts with motor vehicles.

## Middle St. Croix Valley Regional Trail - Non-Motorized Transportation

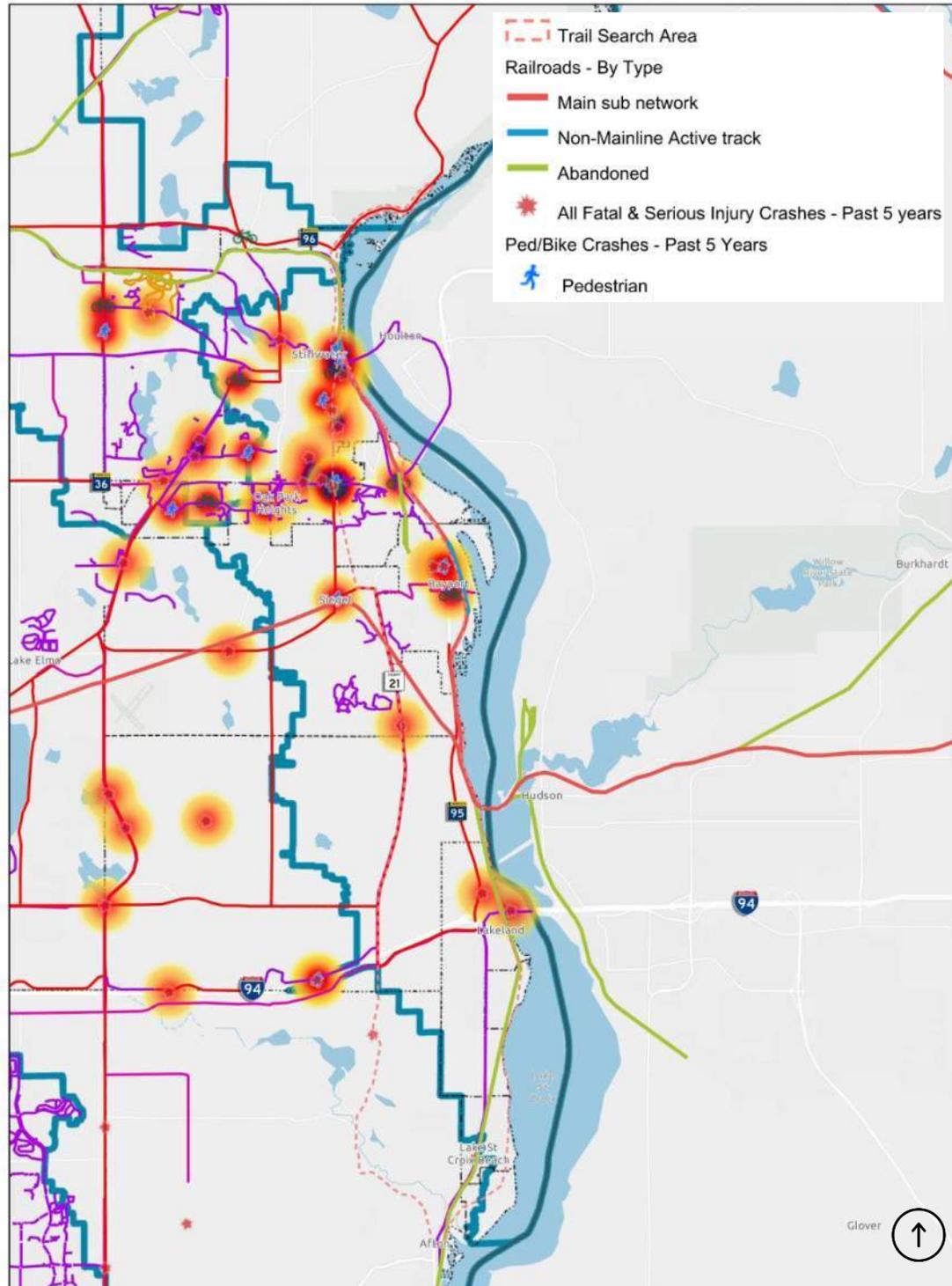


Figure 7: Geographic locations of pedestrian or cyclist crashed in the last 5 years. Hot spots for fatal and serious injury crashes provided additional context for potential trail segments review.

## Connectivity

Connections from the future regional trail to local assets such as parks, schools, natural areas, and historically significant features was an important goal for the PMT, TAC and the public, along with population volumes within the search corridor of each potential trail. The table below shows performance measures reviewed as part of the weighted scoring process for each of the potential trail segments for the connectivity goal. The Existing Services Map (Figure 9) shows the spatial distribution of existing services that informed the scoring for connectivity, including libraries, schools, natural areas, and proximity to transit.

Project Goals	Objectives	Performance Measures
<p style="text-align: center;"><b>Connectivity</b></p> <p>Create regional connectivity and support local connections highlighting unique destinations of adjacent communities.</p>	<b>Tie-ins to regional/local trails and paths</b>	Number of intersecting local trails/bike routes
	<b>Connection to commercial areas</b>	Commercial businesses within trail service area
	<b>Connections to park/open spaces</b>	Number of parks/trails/open space with direct access to trail
		Acreage of parks/open spaces within travelshed
	<b>Connection to historically significant sites</b>	Number of interpretive opportunities
	<b>Connection to education centers</b>	Schools/Libraries/Daycare within travelshed
	<b>Connection to population centers</b>	Population within travelshed

*Table 2: Project Objectives and Performance Measures as they relate to Connectivity*



*Figure 8: Existing sidewalk connection under I95.*

## Middle St. Croix Valley Regional Trail - Existing Services

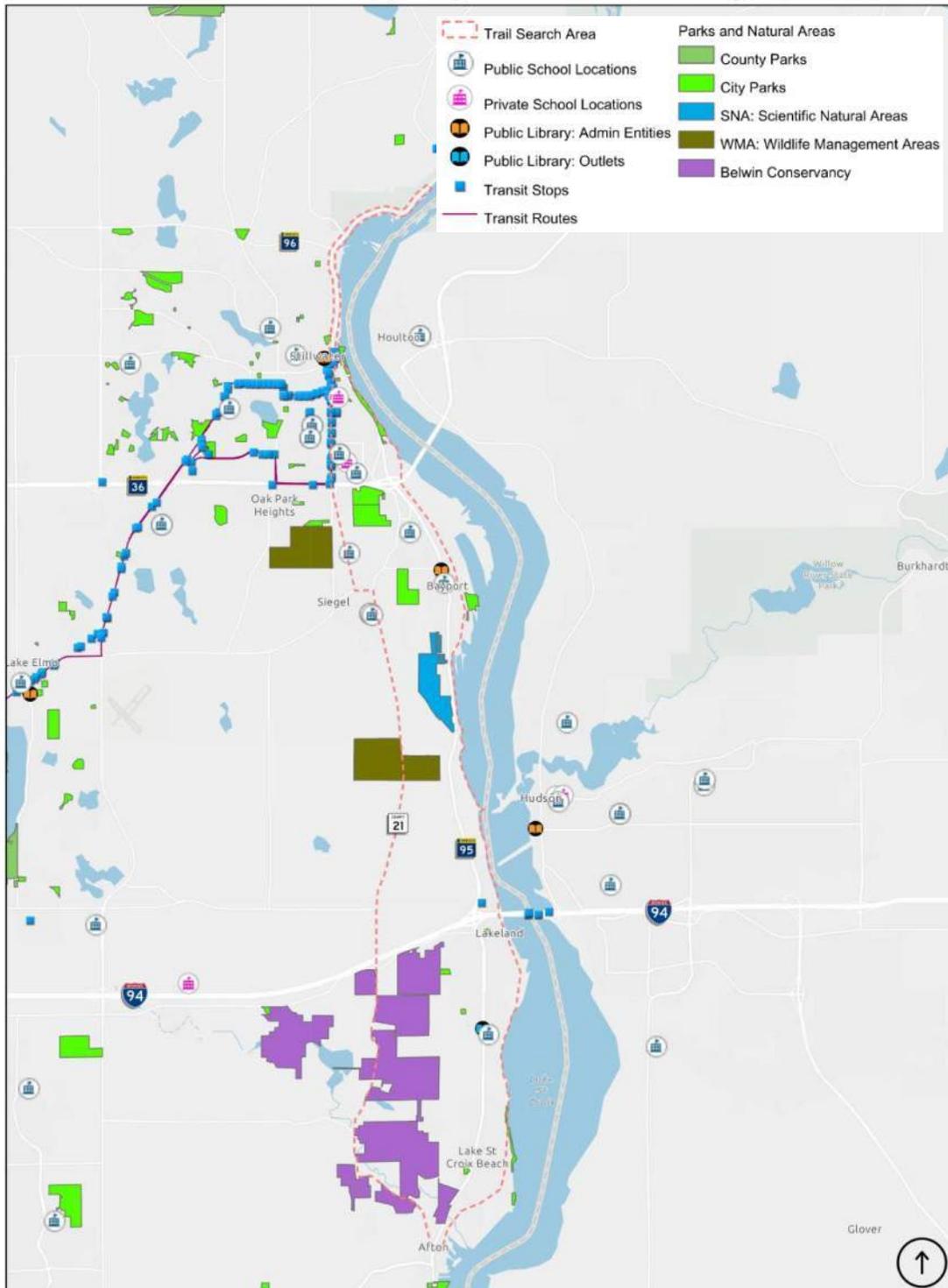


Figure 9: Geographic distribution of existing services and natural areas for connectivity consideration.

### Natural Resources

Regional trails play an important role in supporting natural resource conservation and stewardship, from improving access and educational opportunities, to connecting natural habitat corridors. This regional trail is located within the St. Croix Valley, an area well-known for unique and treasured natural resources, many of which are also historic assets. The importance of the conservation of these features and assets was supported throughout the public engagement process. Potential trail segments were evaluated for their capacity to enhance existing natural resources: by providing views of the St. Croix River, granting access to different habitats, avoiding routes that may cause habitat fragmentation, and avoiding proximity to sensitive resources. The table below lists performance measures aligning with the goal of protecting and enhancing natural resources. Each potential trail segment was scored based on its ability to meet these criteria and factored into the overall total used to compare different route options. The Cultural and Natural Amenities Map (Figure 11) shows the spatial distribution of cultural and natural features within the project area.

Project Goals	Objectives	Performance Measures
<p><b>Natural Resources</b></p> <p>Protect and enhance the natural resources along the trail corridor and foster stewardship of the river valley.</p>	<b>Avoid fragmenting of habitat</b>	Miles of adjacent high quality/threatened resources
		Potential impact of construction to natural systems
	<b>Provide river views</b>	Total miles with river views (distance with viewshed)
		Number of overlook opportunities
	<b>Foster stewardship of resources</b>	Opportunities to increase ability to manage adjacent natural resources;
	<b>Experience of habitats</b>	Different habitat types

*Table 3: Project Objectives and Performance Measures as they relate to Natural Resources*



*Figure 10: Scenic view of the St. Croix River TH 36 bridge crossing from a potential Beach Roach connection overlook.*

## Middle St. Croix Valley Regional Trail - Cultural/Natural Features

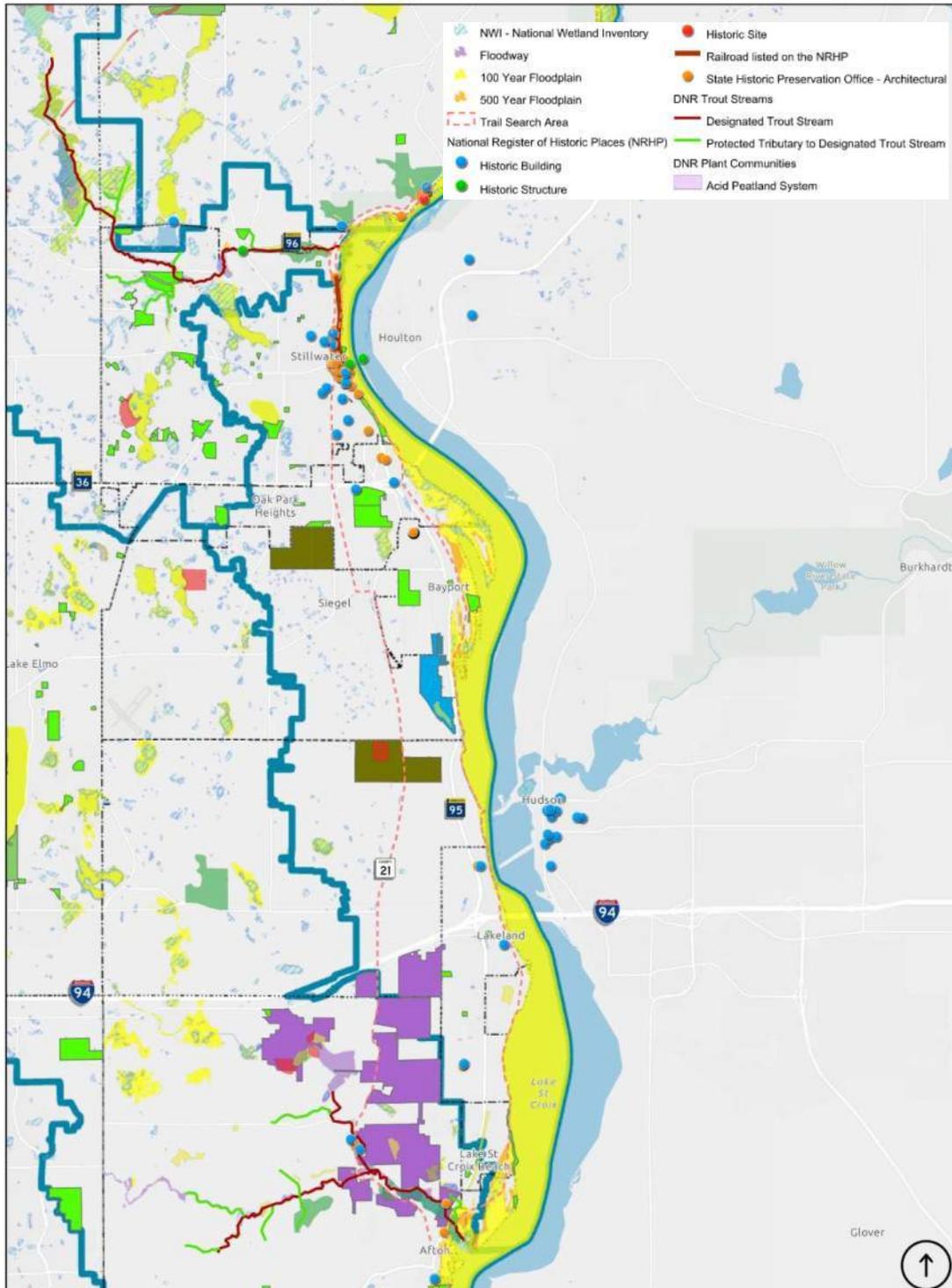


Figure 11: Geographic distribution of cultural and natural features in the search corridor.

## Equity

With any public amenity, equity is an important factor in fostering long-term support for entire communities, and understanding the potential impacts a project may have on those communities. Prioritizing the development of a trail alignment that is inclusive of historically underrepresented populations was a key component of this regional trail master plan. This includes not only reaching historically underrepresented populations with the trail, but also finding opportunities to create a welcoming experience for vulnerable and marginalized populations. More specifically, an emphasis was placed on connecting Black, Indigenous, and people of color (BIPOC) communities, as well as communities marginalized due to age, disability, or income. The table below lists performance measures used to evaluate each of the potential trail segments according to the goal of equity.

Project Goals	Objectives	Performance Measures
<p><b>Equity</b></p> <p>Prioritize facility alignment and design that is inclusive of historically underrepresented populations.</p>	<b>Trail experience welcoming to underserved populations</b>	Number of interpretive opportunities featuring stories of underrepresented population
	<b>Reaching underserved populations</b>	Number of organizations serving underrepresented groups within travelshed
		% transportation vulnerable population (disability, age, income) within travelshed
		% population of BIPOC within travelshed

*Table 4: Project Objectives and Performance Measures as they relate to Equity*



*Figure 12: St. Croix Savanna SNA explored for potential connectivity during field review of potential trail segments.*

## Implementation

The final goal of the master plan was to ensure that the recommendation of this study represented a future regional trail that could be implemented. Throughout the process, the PMT reviewed potential segments for constructability to ensure future regional trail delivery to the Washington County community. Segments were evaluated based on the support of local agencies, constructability within rights-of-way, and for cost-effectiveness. From a technical review, barriers to cost-effectiveness include topographic constraints, bridge crossings, railroads, natural features, and limited right-of-way. The project team also performed a high-level review of potential funding partners to gauge alignment of recommendations with compatible funding sources. The table below lists performance measures used to evaluate potential trail segments according to the implementation goal.

Project Goals	Objectives	Performance Measures
<b>Implementation</b> Prioritize implementation in identifying trail alignment and design	<b>Publicly supported plan</b>	Support of local agencies/project partners
		Compatibility with local planning documents
	<b>Minimize barriers to implementation</b>	Number/cost of necessary easements/acquisitions
		Compatibility with existing infrastructure
	<b>Cost Effective</b>	Estimated capital costs
		Estimated additional maintenance costs
		Potential Funding Partner Collaborations
Compatibility with funding sources		

*Table 5: Project Objectives and Performance Measures as they relate to Implementation*



*Figure 13: Project team reviewing potential implementation opportunities/constraints along Brown's Creek State Trail.*

## Foundational Documents & Resources

The Middle St. Croix River Regional Trail search corridor spans numerous municipalities. Reviewing existing planning documents such as Comprehensive Plans, Bike and Pedestrian Plans, and Trail Master Plans in the area provided context for the search corridor. Understanding community goals and values for transportation alternatives, multi-modal connections, and existing and future trail connections are important considerations in determining trail alignment and design supporting local initiatives.

As part of this planning process, a review of applicable documents was completed to best align decision making for the Middle St. Croix Valley Regional Trail in a way that is most compatible with surrounding communities. The following documents were reviewed as part of this process. Summaries of content impacting development of a regional trail are included in **Appendix A**.

- Washington County 2040 Comprehensive Plan (Adopted 2019)
- MOVE Washington County Bike and Ped Plan (Adopted 2021)
- St. Croix Valley Regional Trail Master Plan (Adopted 2005)
- Brown’s Creek State Trail Master Plan (Adopted 2012)
- St. Croix County (WI) Bicycle and Pedestrian Plan (Adopted 2017)
- U.S. National Park Service Saint Croix Scenic Riverway (Sections adopted 2002, 2005, 2017)
- Lower St. Croix Watershed Partnership *Lower St. Croix One Watershed One Plan (1W1P)*
- Community Comprehensive Plans
  - Stillwater Township
  - Stillwater
  - Oak Park Heights
  - Bayport
  - Baytown Township
  - West Lakeland Township
  - Lakeland
  - Lakeland Shores
  - Lake St. Croix Beach
  - St. Mary’s Point
  - Afton

Several resources were used in the development of this plan and include:

- Metropolitan Council Regional Parks Equity Tool
- 2021 Metropolitan Council Regional Parks and Trails System Visitor Study
- ESRI® Business Analyst
- Regional Bicycle Transportation Network
- Minnesota Geospatial Commons
- MnDOT, Minnesota Best Practices for Pedestrian and Bicycle Safety
- Streams, HousingLink’s database of publicly funded affordable rental property in Minnesota
- US Fish & Wildlife Service Information for Planning and Consultation Report (IPaC)
- Saint Croix National Scenic Riverway ‘Time and the River: A History of Saint Croix’, Eileen M. McMahon and Theodore J. Karamanski, National Park Service Midwest Regional Office, 2002, <http://npshistory.com/publications/sacn/hrs/contents.htm>

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## 2. Demand Forecast

The Twin Cities Regional Park & Trail System serves the seven county Twin Cities metro area with over three million residents across the region. The regional park system hosts over 54,000 acres of park land and park reserves, eight special recreation features, and almost 400 miles of trails. The Metropolitan Council estimates people made 64.9 million visits to the Regional Parks System in 2021. By analyzing data related to the regional parks and trails system, we can assess how the Middle St. Croix Valley Regional Trail will fit into the existing trail network.

The Middle St. Croix Valley Regional Trail Search Corridor connects to several existing trail alignments. Primary connections with trails in the search corridor include the Brown's Creek State Trail, the St. Croix Crossing Loop Trail, the Lakeland to Afton Trail, and the future St Croix Valley Regional Trail (Master Plan, 2005). These trails have their own connections, further increasing the potential reach of a regional trail in the Middle St. Croix Valley area. These further connections are highlighted by Brown's Creek State Trail's connection to the Gateway State Trail. The Gateway State Trail runs between Pine Point Regional Park and Downtown St. Paul, linking numerous popular destinations along its route.

The Middle St. Croix Valley Regional Trail will be a regional facility with a regional audience. The 2021 Metropolitan Council Regional Parks and Trails System Visitor Study, referencing information from the 2016 study, reported that 80% of trail users live within 5 miles or less of the site. Projected population growth will likely lead to increased trail use over time. Using the Met Council's Regional Parks and Trails Equity Tool, the current population of the Trail Service Area was determined to be 62,413 (58,028 in 2010). The population in the trail serve area is projected to increase 10% by 2030, according to the Thrive MSP Forecasts released January 2023. The future regional trail will be developed to meet the recreational needs/trends of the current and projected population increase within the search corridor.



- 2021 Trail Service Area Population: 62,413 (+7.55% since 2010)
- 2027 Trail Service Area projected population: 65,208 (+4.48% expected in next 5 years)
- 2021 Washington County Population: 274,675 (+13.3% since 2010)
- Projected Washington County growth: 285,706 in 2027 (+4% expected in next 5 years).

*2021 Metropolitan Council Parks and Trails Visitor Report*

The Metropolitan Council produced a visitor report for the Regional Parks and Trails system in 2021. This report estimates the number of parks and trails users for the entire system and each county. The table below indicates total 2021 visits and trail visits for the entire system and Washington County:

<b>Entity</b>	<b>Trail Visitors</b>	<b>Total Visitors</b>
<b>Entire Regional Park System</b>	17,965,000	64,897,300
<b>Washington County</b>	488,300	1,785,200

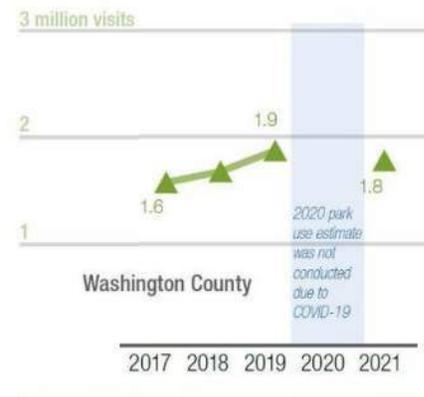
*Table 6: Trail visitors and total visitors for Washington County and the entire regional park system*

Washington County hosted approximately 2.75% of the overall system’s visitors. This was slightly down from the 1.9 million visitors reported in 2019. No data was collected in 2020 due to COVID-19, but usage of Washington County Parks and Trails was increasing steadily through the 2019 study period.

*2016 Metropolitan Council Regional Parks and Trails System Visitor Study*

The 2016 Metropolitan Council Regional Parks and Trails System Visitor Study showed that hiking, walking, and biking were the most popular activities at regional parks and trails. Trails had a higher frequency of visits across the seasons, but less time was spent per visit at trails compared to parks. Park visitors indicated that they were more likely to be socializing and in larger groups while visiting parks rather than making solo park visits.

When compared to visits to regional parks, trail visits tend to be solitary. Sixty-three percent of visitors have solitary experiences with trails compared to 45% reported solo park visits. Trail activities can be more characteristically solitary: including jogging, biking, and walking. Visitors also reported being able-bodied, with only 3% of survey respondents reporting a group member with a physical or mental disability. Of those disabilities, 97% were mobility related.



*Source: Metropolitan Council's Park Use Estimates.*

*Figure 14: Excerpt from Metropolitan Council's 2021 Regional Park Visitor Study. Visitors to regional parks and trails in Washington County accounted for 1.8 of 64.9 annual visits.*

2019 Minnesota State Trail User Report

The Minnesota DNR released a report in 2019 that profiled Trail users. While trail users can come from all walks of life, they are not necessarily representative of the average Minnesotan. The following figure has a more detailed look at state trail visitor characteristics. Several of the statistics identified as part of this study are similar with those of the Middle St. Croix Valley Regional Trail Search Corridor. This includes the median age of 43, the median household income of \$104,000 and a high percentage of population identifying as white: 89%.

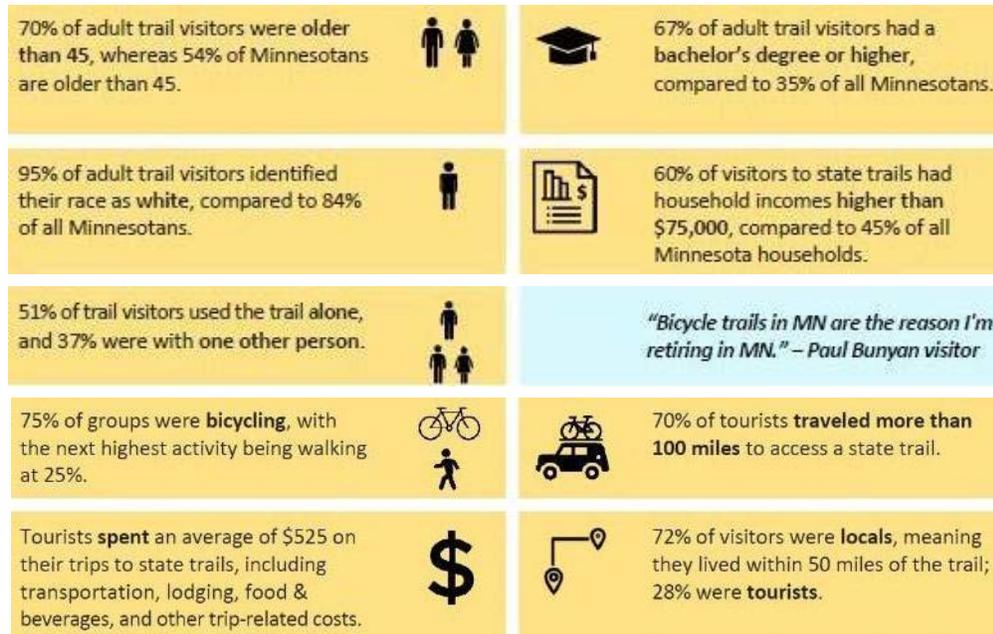


Figure 15: Excerpt from Minnesota State Trail Visitor Study Summary "Characteristics of Trail Visitors."

The following statistics illustrate aspects of the regional trail search corridor that begin to represent the characteristics of this area of Washington County. They specifically show trends within the search corridor: from population growth, changes in population age, diversification of population ethnicity and accessibility needs of residents in the search area.

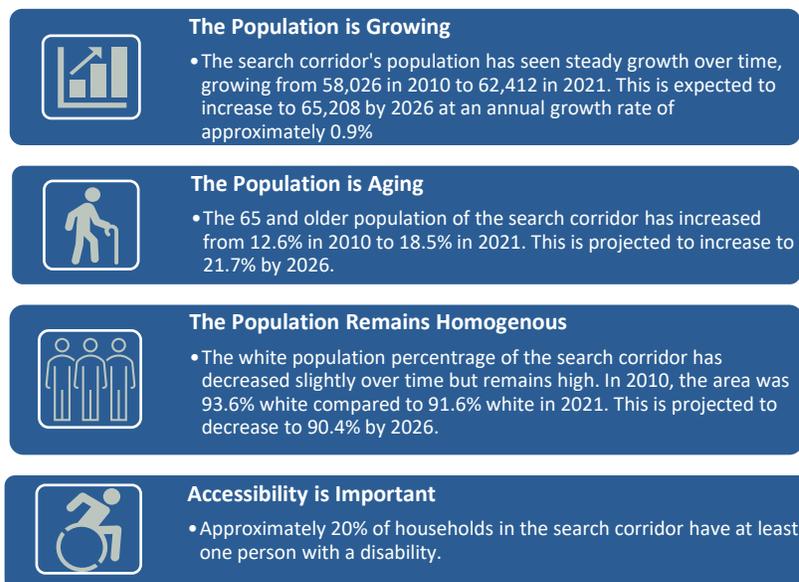


Figure 16: Excerpt from Minnesota State Trail Visitor Study Summary, continuation of "Characteristics of Trail Visitors" and "Characteristics of Trail Trips."

## 2021 MOVE Washington County Bike and Pedestrian Plan

The MOVE Washington County Bike and Pedestrian Plan, approved in 2021, was developed in response to the County's 2040 Comprehensive Plan, which called for the adoption of a county-wide bicycle and pedestrian plan to address recreation and transportation needs in the County. The plan aims to guide the expansion and improvement of the county's bicycle and pedestrian network by identifying barriers to biking and walking, gathering community input on related desires, identifying best practices, and informing policy and programming improvements related to biking and walking.

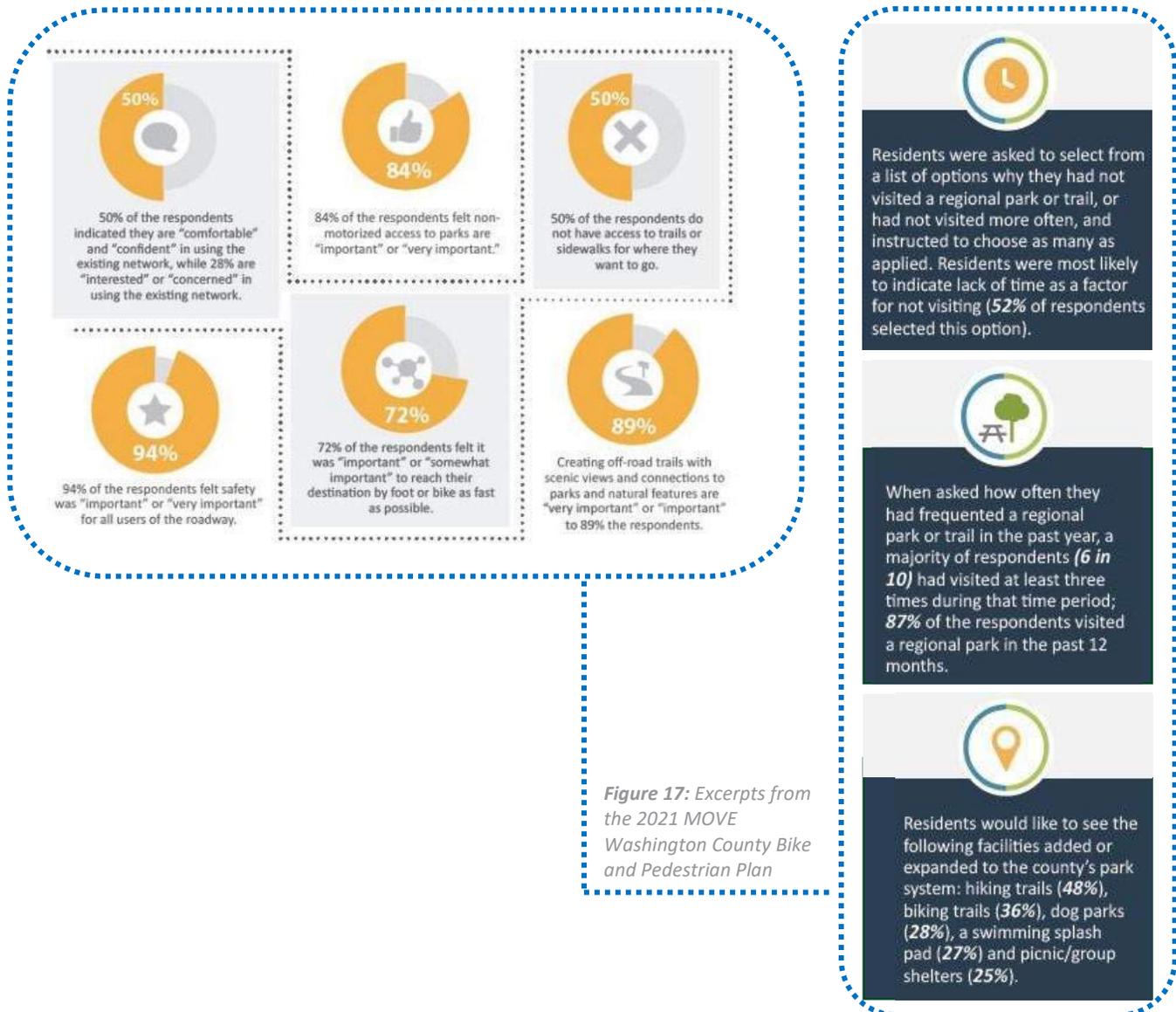
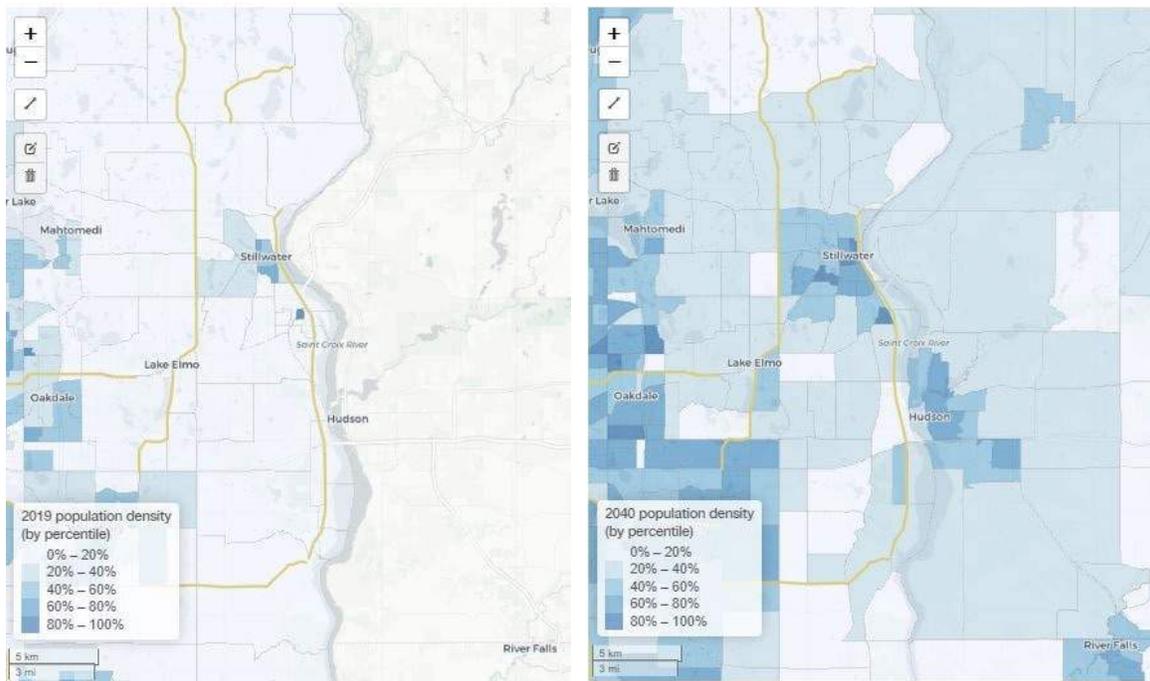


Figure 17: Excerpts from the 2021 MOVE Washington County Bike and Pedestrian Plan

### *Metropolitan Council's Regional Parks and Trails Equity Tool*

Another resource leveraged as part of the inventory phase of this study was the Regional Park and Trails Equity Tool developed by the Metropolitan Council. This tool provides high-level insight on population trends within the search corridor and helped define focused public engagement strategies that enabled more authentic outreach. It also provided a projected vision of the future population in this area to assist in the evaluation of potential regional trail needs, including meeting the needs of a more densely populated project area.



*Figure 18: Projected population density trends. (Source – Metropolitan Council Regional Parks Equity Tool)*

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When planning trail facilities, it is important to understand the expected primary users, and who might be encouraged to use the facility if barriers were reduced. As mentioned in the previous section, many of the Middle St. Croix Valley Trail's future users will be local to the corridor.

#### Key Takeaways

- **Race:** Predominance of people identifying as “white” within the search corridor, with a concentration of those identifying as “other or multiracial” in the Stillwater area.
  - *The Minnesota Correctional Facilities in Bayport and Oak Park Heights have a higher concentration of people identifying as black or Native American compared to the search area.*
- **Income:** Households below 185% poverty line near Stillwater and Oak Park Heights; There are 18 federally subsidized affordable housing properties in Stillwater with nearly 1,000 units.
- **Ability:** 20% of households have one or more person with a disability; ambulatory disabilities are concentrated near Oak Park Heights, “other disabilities” are around downtown Stillwater
- **Age:** Concentration of individuals age 65+ in Oak Park Heights, concentration of individuals age 15 or younger in Stillwater, Bayport, and Afton. The buffered search corridor has an older average age than the surrounding communities.
- **Households without a vehicle:** Portions of Stillwater, Baytown Township and Oak Park Heights
- Demographic characteristics which are not key geographic differentiators include: language, ethnicity, and origin.

A general service area was used to examine the demographics of the trail corridor. Table 2 compares this service area to Washington County, Minnesota, and St. Croix County, Wisconsin.

## Corridor Demographics

Characteristic	Trail Search Corridor (3-mile buffer)	Washington County, MN	St. Croix County, WI
Total population	61,925	274,675	95,753
Total households/household size	25,169 / 2.4	102,276 / 2.6	36,843 / 2.6
Race, non-white	11.4%	21.4%	8.1%
Median household income	\$103,913	\$109,043	\$91,876
Households below poverty level	6%	5%	6%
Household receiving food stamps/SNAP	4%	4%	5%
Renter households	24%	18%	23%
Households without personal vehicle	4.9%	3.7%	3%
Households with 1+ person with disability	20% (4,777)	20% (19,206)	20% (6,988)
Age, under 18	21%	24%	25%
Age, over 65	19%	15%	14%
Average Age	43	39.4	38.9

*Table 7: Middle St. Croix Valley Regional Trail Search Corridor Demographics (Source - Esri Business Analyst Report with ACS 2020, 2024 data)*

## Mapping Demographics

The following maps spatially display demographic information for the regional trail search corridor and the surrounding area. The maps show that while race, age, ability, income, and vehicle ownership within the corridor are generally homogenous, there are areas of concentrated diversity.

In general, future stakeholders will be comprised of individuals who are slightly older, more racially diverse, and from households with slightly higher median household income. The tables below show forecasted demographic changes within the trail search corridor for 2026.

Characteristic (Trail Search Corridor 3-mile buffer)	2021 Census Forecast	2026 Census Forecast
Total population	62,413	65,208
Total households/household size	24,259 / 2.46	25,431 / 2.46
Race, non-white	8.4%	9.6%
Median household income	\$96,994	\$106,144
Households below poverty level (below \$25,000)	10.2%	8.4%
Renter households	18.7%	17.6%
Age, under 18	20.5%	19.5%
Age, over 65	18.5%	21.7%
Median Age	42.8	43.2

*Table 8: Middle St. Croix Valley Regional Trail Search Corridor Forecasted Demographics Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2021 and 2026*

Population by Race / Ethnicity (Trail Search Corridor 3-mile buffer)	2021 Census Forecast	2026 Census Forecast
White Alone	91.6%	90.4%
Black Alone	2.8%	3.1%
American Indian Alone	0.7%	0.7%
Asian Alone	1.9%	2.1%
Pacific Islander Alone	0.1%	0.1%
Some Other Race Alone	0.8%	0.9%
Two or More Races	2.2%	2.6%
Hispanic Origin	2.9%	3.4%

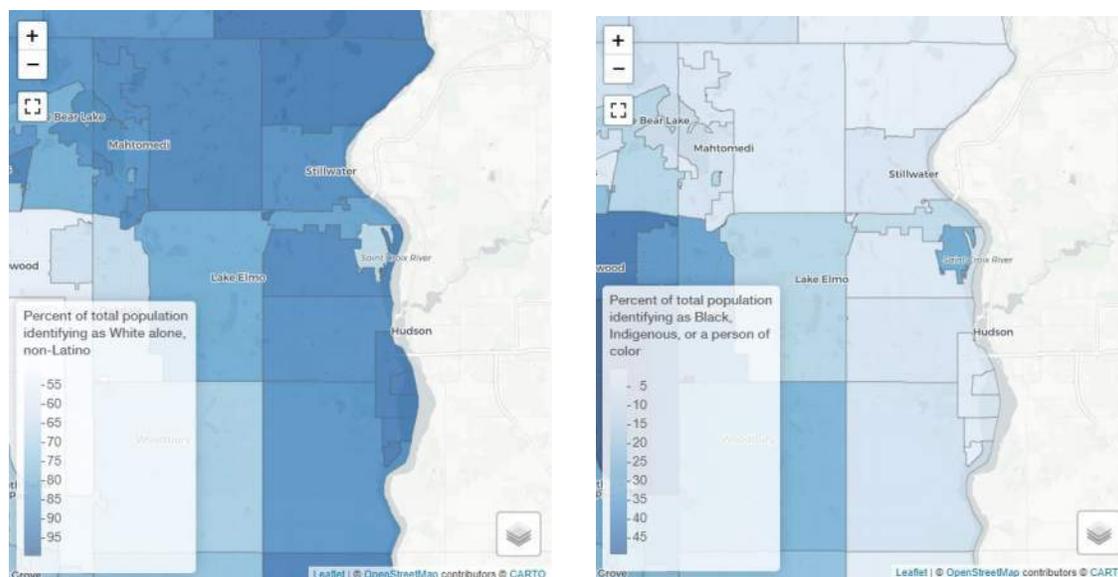
*Table 9: Middle St. Croix Valley Regional Trail Search Corridor Forecasted Demographics  
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2021 and 2026*

### Race

The racial composition of residents in the trail search corridor is predominantly white, ~88%, as seen in Figure 19 below.

Specific areas along TH 36 were more diverse with a higher population of residents identifying as Black, Indigenous, or a person of color. Included in this area are two correctional facilities; one is in Bayport (the Minnesota Correctional Facility – Stillwater) and an adjacent facility is in Oak Park Heights (Minnesota Correctional Facility – Oak Park Heights).

Inclusion of this demographic data skews the area user base within the search corridor; especially as these individuals are unable to access or use publicly available facilities.



*Figure 19: Ethnic and racial makeup of the regional trail search corridor. The lightest areas on the left display represent the most diverse population centers and correspond to the prison facilities in Oak Park Heights and Bayport. (Source – Metropolitan Council Regional Parks and Trails Equity Tool)*

## Age

Senior populations (Ages 65+), though distributed across the search area, do show concentrations in a few areas, including Oak Park Heights, MN and Hudson, WI. These concentrations help explain the higher average age within the three-mile buffered search corridor compared to both counties at large. The map of the population under the age of 15 is essentially the opposite of the map of the population 65+, as most areas with high numbers of young people have low numbers of people 65+ years of age.

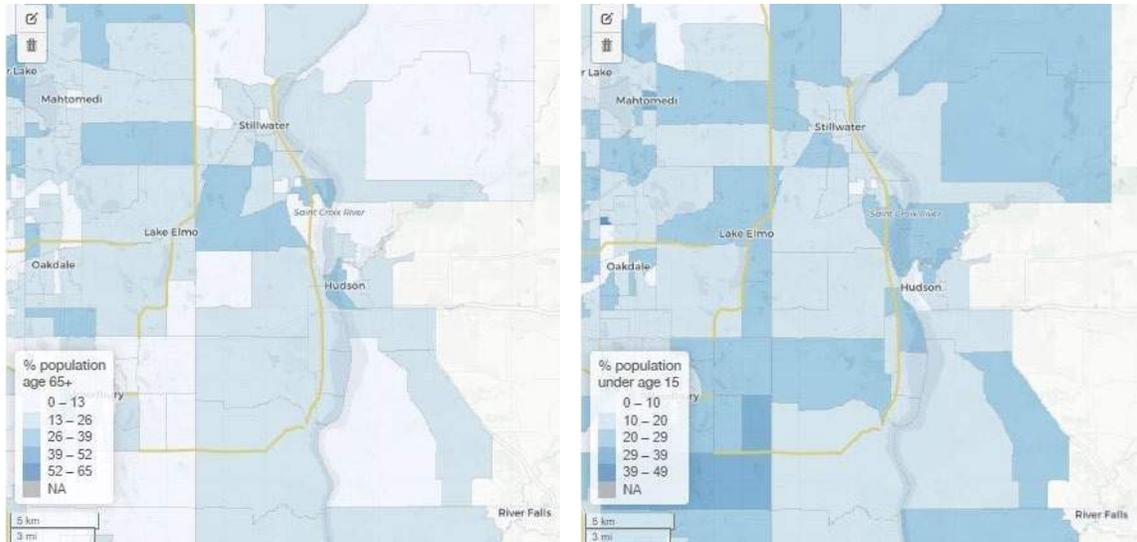


Figure 20: Age distribution within regional trail search corridor focused on concentrations of 65+ and under age 15 populations. (Source – Metropolitan Council Regional Parks and Trails Equity Tool)

## Disability

The area around Oak Park Heights has a high concentration of people with ambulatory disabilities (an impairment that impedes or prevents walking). Residents with other types of disabilities are spread out

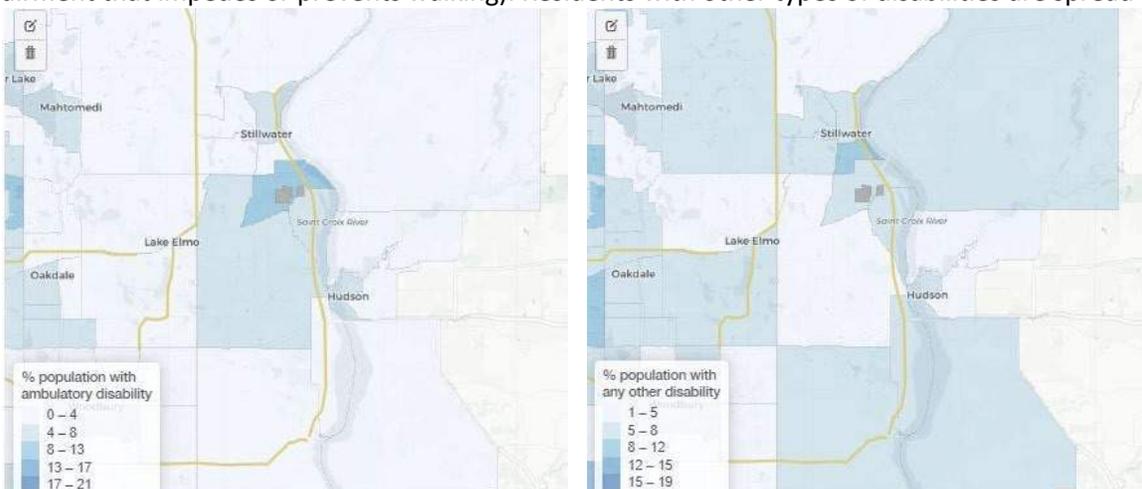


Figure 21: Location of populations with disabilities within the search area. (Source – Metropolitan Council Regional Parks and Trails Equity Tool)

more evenly throughout the search corridor, though there is a concentration of residents with other disabilities in the southern part of Stillwater as indicated in the figure below.

### Income

In reviewing household income across the project corridor, we noticed a concentration of households below 185% of the poverty line near Stillwater, MN as well as Hudson, WI. Median household income is relatively stable throughout the search corridor but is lower in the more densely populated places of Stillwater and Hudson generally corresponding to regions experiencing poverty.

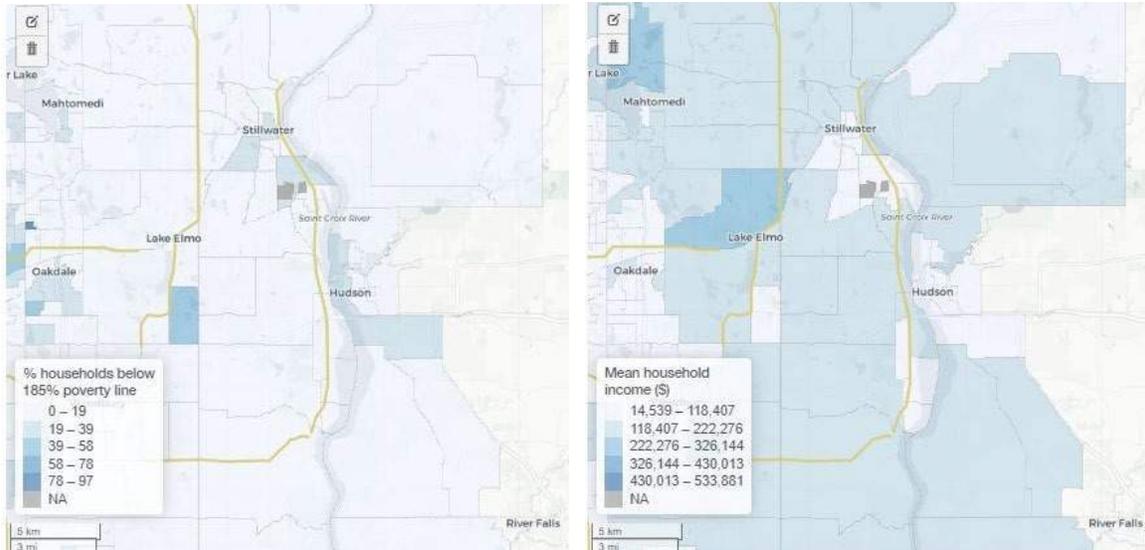


Figure 22: Median household income and households experiencing poverty. (Source – Metropolitan Council Regional Parks and Trails Equity Tool)

Additionally, we reviewed affordable housing units within the search corridor and found that many of these properties overlapped with areas of higher concentrations of people with disabilities, are age 65 or older, identify as multiracial, and have household incomes below the poverty level. The mapped properties are generally located in the southern area of Stillwater and northern area of Oak Park Heights along Country Roads 36. This data is from HousingLink’s database of publicly funded affordable rental property and includes all properties with a first finance closing through December 31<sup>st</sup>, 2021.

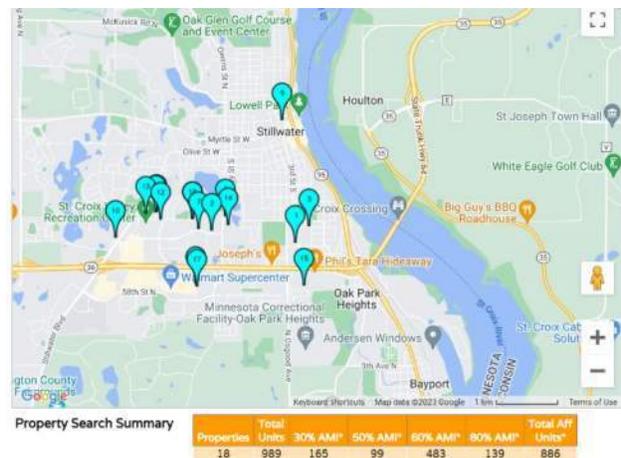


Figure 23: Total Affordable Rental Units within the search corridor. (Source: <https://www.housinglink.org/streams/>)

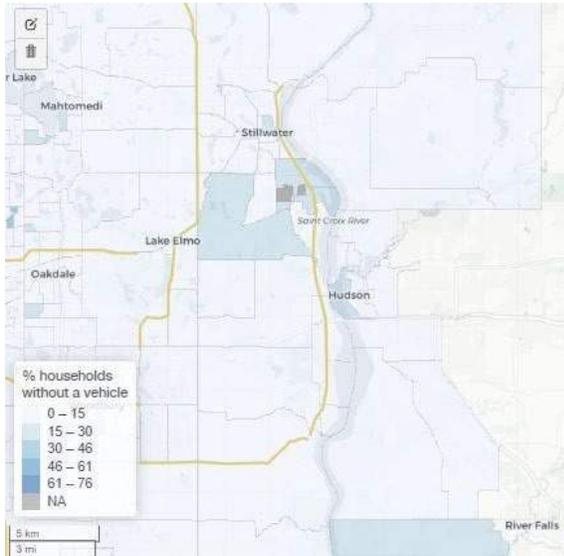


Figure 24: Percentage of households without a vehicle. (Source – Metropolitan Council Regional Parks and Trails Equity Tool)

### Households Without a Vehicle

Transportation is a key tool in people’s daily activities. We use it to access food, health care and connect with family, friends, and support networks. It also connects people with businesses, natural resources, and areas outside of our communities. For women and mothers, it can mean the ability to access prenatal care, childcare, attend schooling or maintain employment.<sup>1</sup> Transportation vulnerable populations tend to be comprised of young people without driver’s licenses, disabled persons, low-income workers and seniors.<sup>2</sup>

Most households without a vehicle in the project area are concentrated in Oak Park Heights, Bayport and Baytown Township. Findings do not indicate a high concentration of zero-vehicle households, but rather a higher percentage of such households when compared to the larger search corridor. While there are overlaps with displays mapping ethnic diversity (Figure 19), age distribution (Figure 20), and populations with a disability (Figure 21), and none match either of those footprints exactly. Note that only a portion of this map aligns with the poverty map (Figure 22).

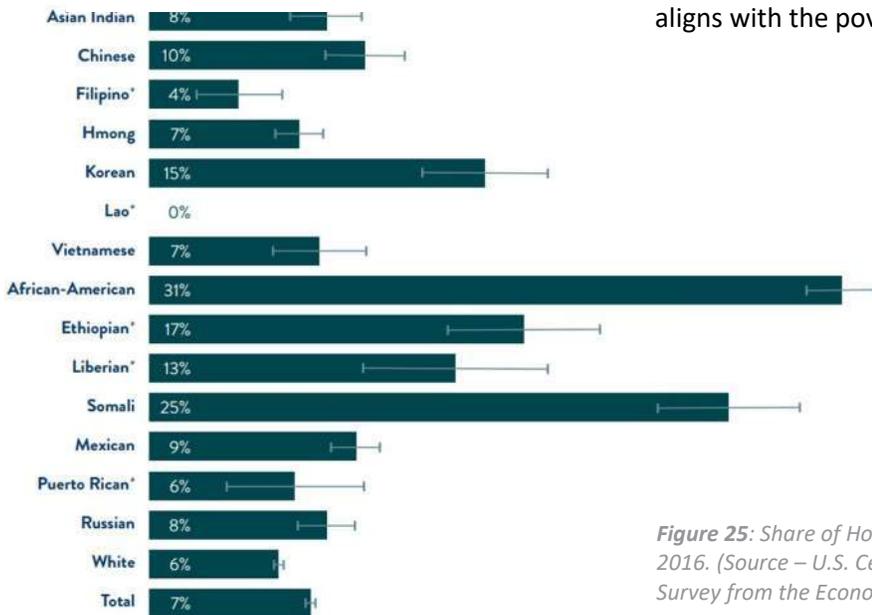


Figure 25: Share of Households without a Vehicle, 2012-2016. (Source – U.S. Census Bureau’s American Community Survey from the Economic of Minnesotans, 2018).

<sup>1</sup> Minnesota Department of Health. 2017 Minnesota Statewide Health Assessment, produced in collaboration with the Healthy Minnesota Partnership, St. Paul, MN.

<sup>2</sup> Minnesota Department of Health and Minnesota Department of Transportation. Minnesota Walks: A framework for action for creating safe, convenient, and desirable walking and rolling for all., 2016.

# Middle St. Croix Valley Trail Corridor (3-mile Buffer)

Middle St. Croix Valley Trail Corridor (3-mile Buffer)

Prepared by Esri

Area: 109.54 square miles

## KEY FACTS

62,413

Population

42.8

Median Age

2.5

Average Household Size

\$96,994

Median Household Income

## EDUCATION

3%

No High School Diploma

21%

High School Graduate

29%

Some College

47%

Bachelor's/Grad/Pr of Degree

## BUSINESS



2,666

Total Businesses



36,733

Total Employees

## EMPLOYMENT



74%

White Collar



17%

Blue Collar



Services

9%



Unemployment Rate

## INCOME



\$96,994

Median Household Income



\$48,923

Per Capita Income



\$380,207

Median Net Worth

## Households By Income

The largest group: \$100,000 - \$149,999 (20.3%)

The smallest group: \$25,000 - \$34,999 (4.4%)

Indicator ▲	Value	Diff	
<\$15,000	5.5%	-2.0%	<div style="width: 5.5%;"></div>
\$15,000 - \$24,999	4.7%	-1.8%	<div style="width: 4.7%;"></div>
\$25,000 - \$34,999	4.4%	-2.7%	<div style="width: 4.4%;"></div>
\$35,000 - \$49,999	8.3%	-2.9%	<div style="width: 8.3%;"></div>
\$50,000 - \$74,999	15.3%	-2.3%	<div style="width: 15.3%;"></div>
\$75,000 - \$99,999	13.1%	-1.4%	<div style="width: 13.1%;"></div>
\$100,000 - \$149,999	20.3%	+1.7%	<div style="width: 20.3%;"></div>
\$150,000 - \$199,999	12.1%	+3.7%	<div style="width: 12.1%;"></div>
\$200,000+	16.4%	+7.8%	<div style="width: 16.4%;"></div>

Bars show deviation from

Minnesota

# Equity Analysis

An Equity Analysis was conducted as part of the master planning process: an examination of the public engagement process and outcomes for stakeholders by race, ethnicity, national origin, income, ability, age, and other pertinent characteristics.

## Metropolitan Council Equity Toolkit

The Metropolitan Council has developed an equity toolkit that assists planning efforts by using data to clarify how regional parks and trails projects will advance equity. The Metropolitan Council adopted equity as one of the outcomes of the Thrive MSP 2040 Plan, defining equity and the Council's role as, "recognizing institutional and systematic barriers and creating access and opportunities that benefit all."

The following questions form the basis of analysis from toolkit data:

1. What is the population breakdown for your jurisdiction by race, ethnicity, age, national origin, ability status, and income?
2. Which population segments above are currently underserved by the regional parks system?
3. Which of the underserved populations identified will this project better serve?
4. What specific aspects of this project will help to better serve the targeted populations identified?
5. Exactly how will you verify the target populations are better served?

With the search corridor being predominantly white, middle aged, and having a median household income that is higher than the statewide median, it is important to ensure that underserved groups can access, use, and enjoy the trail and have been involved in planning efforts for this future amenity. This toolkit helps the project team identify shortcomings to develop strategies that allow the regional trail to better cater to the needs of these underserved groups.

## 1. Project Data

*a. Scope: What are the boundaries and demographics of the public engagement area? Please consider neighborhoods adjacent to the park or trail, travelsheds, and agency/regional boundaries.*

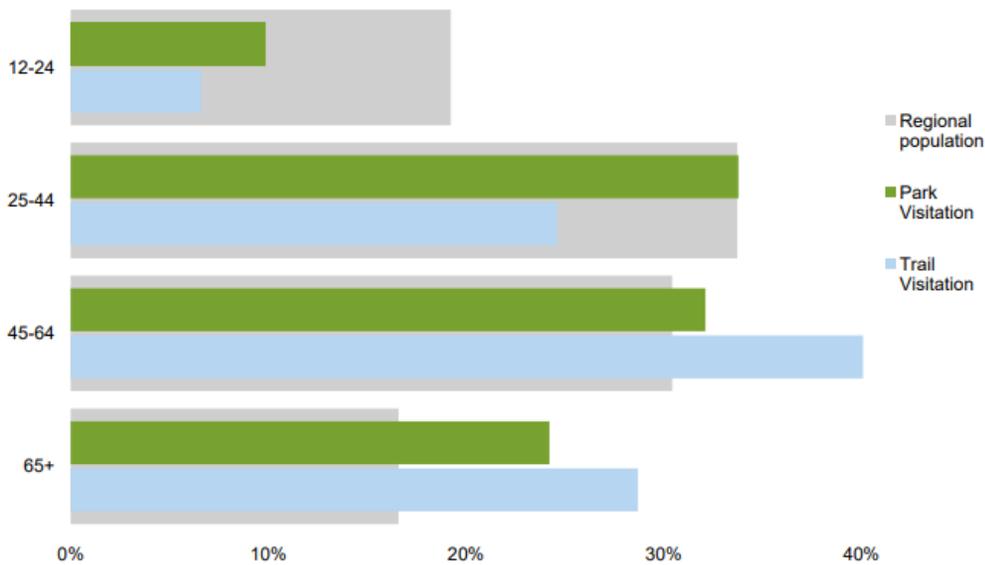
Washington County focused on engaging existing and potential trail users within roughly 3 miles of the regional trail search corridor. This distance ensured that residents in each of the 11 cities and townships within the search corridor were included in public engagement. This distance also corresponds to one of Metropolitan Council's Equity Toolkit guideline metrics for regional trails, and encompasses the 2.5-mile, 30 minute travelshed for bike access trips and the three-quarters of a mile, 15-minute travelshed for pedestrian access trips. Tables 7-9 show the demographics for this area.

*b. Context: What is known about future stakeholders, underserved populations, and how the region's history created present-day inequitable outcomes?*

Historically and today, local state and federal governments in the United States regulated land-use and environmental policies that increased park and trail access for some, while significantly limiting it for

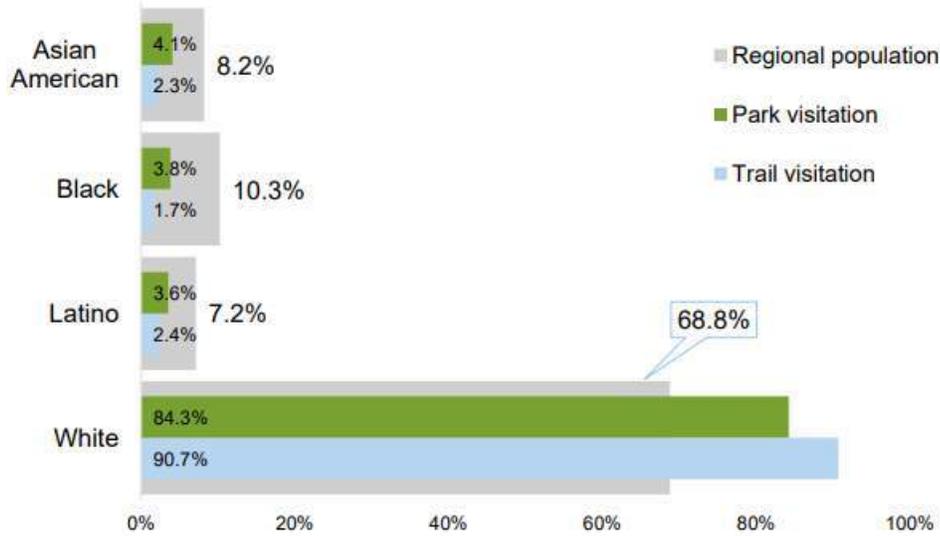
others, especially by income, education, race, and ethnicity. In addition to intentional policy decision and exclusionary practices, violence and discrimination throughout history have discouraged and made it difficult for some to use parks/trails and engage in recreational activities. As part of the 2021 Parks and Trails Visitor Study, the Metropolitan Council analyzed activity patterns of visitors to better understand differences among underserved users. Their study of visitor demographics showed that the proportion of young and BIPOC visitors does not match the regional population, and a gender gap exists in trail use. This analysis showed that efforts to create a park and trail system that is welcoming to underserved communities needs to be expanded, as operations, maintenance, and programming are important components of an equitable system. This study also found that trail users have greater social disparities than park users. Park agency staff shared their observations that new and underserved visitors want to feel safe when using parks and trails, and that clean, reliable access to water and bathrooms is an important factor in this.

This study also showed that younger people (ages 12-44) visit the parks and trails in the smallest proportion. In Washington County specifically, people ages 12-24 make up nearly 20% of the population but represent less than 10% of visitors. Considering access to trail amenities for children and older adults is an important factor in planning for equity, as children and older adults are more often transportation-vulnerable and rely on multi-modal facilities to provide safe transportation and recreation options.



*Table 10: Age of surveyed visitors 12 and older for parks and trails across the regional system compared with the seven-county regional population (percent), Source: Metropolitan Council 2021 Parks and Trails Visitor Study*

According to the Metropolitan Council, communities of color are also underrepresented among park and trail visitors compared to the overall population. In Washington County specifically, the BIPOC population represents about 22% of residents and only about 11% of parks and trail visitors.



*Table 11: Race/Ethnicity of surveyed visitors for parks and trails across the regional system compared with the seven-county regional population (percent), Source: Metropolitan Council 2021 Parks and Trails Visitor Study*

Across the regional park system and in Washington County, the 2021 report found that 11% of visitor groups included a member that had a physical, mental, or sensory disability/condition. Although not statistically significant, the study also found that visitors with a disability had a lower rate of use for trail than parks.

The 2021 study also found gaps in use based on gender and income. Women make up 51% of the regional population, but only 43% of trail users, and people from households earning more than \$100,000 per year make up 49.5% of park and trail users in Washington County versus 21.2% from household incomes of \$60,000 or less.

## 2. Public Engagement and Participation

*a. Participants: Which stakeholders discussed in 1b contributed to the planning effort? The following list is illustrative of stakeholders to consider including youth, Black, indigenous, and people of color communities, people with disabilities, low-income populations, populations age 60 and over, and neighborhood/regional groups that participated as planning staff, community advisory committee members, outreach liaisons, and the general public.*

Washington County actively seeks inclusive public engagement with all planning efforts. The project team developed and delivered a plan providing information to the public using multiple tools throughout the planning process, emphasizing easy and accessible participation for stakeholders. These efforts were deployed to allow input from a cross-section of the community; including diverse races, ethnicities, classes, ages, abilities and national origins. Public engagement opportunities included the following strategies and types:

- Online engagement survey
- Advisory Committee

- Committee consisted of local residents, representatives from non-profit organizations, public and regulatory agencies
- Open Houses (2)
- Targeted stakeholder outreach
- Listening sessions and site visits with underserved populations

Past planning processes have demonstrated a need to supplement engagement strategies for the general public with additional outreach specifically tailored to underrepresented groups. Washington County staff conducted engagement events to reach the following populations:

- Youth (from communities with a higher concentration of low-income families – Learn to Ride events (2) - Washington County hosted two Learn to Ride events, which provided an opportunity to engage with kids and parents who have barriers to owning bicycles and building skills. The county identified this demographic because data collected by the Metropolitan Council identified youth as an underserved population in the regional park and trail system. The importance of engaging this group is highlighted in the Youth in Parks Report (Metropolitan Council, 2021). The 2040 Regional Parks Policy Plan notes that involvement in nature-based outdoor recreation among young adults and their children has decreased since the 1990s. Their support is needed for maintaining broad-based public support for park and trail investments. The plan also notes that “By 2040, 39% of the population will be people of color, compared to 24% in 2010. The share of people of color increases among younger age groups; 53% of residents younger than age 18 will be people of color in 2040.” As a result, connecting youth to the outdoors is essential to achieve the equitable outcomes required in Met Council regional plans.”
- Women – She Ascends hiking group event and listening session. The 2021 Regional Parks and Trail Visitor Study demonstrated that a gender gap exists in trail usage within the regional trail system (men are 57% of users, women are 43% of users). The purpose of this engagement event was to understand the experiences of women on regional trails.

*b. Engagement: What engagement, outreach, and communication was conducted for stakeholders described in 2a? Please identify the level of public impact on the International Association for Public Participation’ Public Participation Spectrum and requisite engagement strategies for each stakeholder group. Please consider culturally competent and community representative staffing, training, locations, times, public awareness, and input approaches.*



**Figure 26:** Learn to Ride event for kids and parents who live within the search corridor

Washington County implemented the following strategies to address equity within the public engagement process.

- Systematic involvement of community members by having stakeholders participate in the Technical Advisory Committee (TAC). To gather local expertise and insight throughout the process, the TAC included residents and representatives from the community, and area businesses and non-profit organizations. This group played a critical role in developing goals for the project and was how potential routes were evaluated to finalize recommendations. The TAC worked closely with Washington County staff and the consultant team to provide guidance that shaped plan recommendations. They also advised on broader outreach efforts to ensure that key stakeholders and affected communities were informed of planning progress and were given opportunities to provide input.



*Figure 27: Project information table at Heritage Days at Lake St Croix Beach*

This strategy is an example of ‘Collaboration’ as included with the International Association for Public Participation’s Public Participation Spectrum (IAP2)

- To reach populations who may not feel comfortable or were unable to attend traditional open houses or public meetings, the project team organized pop-up events designed to ‘meet people where they were’. These events provide an opportunity to connect with potential trail users who may not have the time to attend or interest in engaging in county planning projects. The setting allows for mutual conversation, leading to improved trust between the county and the public.
- Staff attended and solicited input at the Washington County Fair, Bayport Farmer’s Market, Heritage Days at Lake St Croix Beach, Selma’s Ice Cream Parlor in Afton, and Lumberjack Days in Stillwater.

This strategy is an example of ‘Consult’ as included with the IAP2 Public Participation Spectrum

- Listening session/site visit invitations were sent to key representatives or groups who have experience with equity in the outdoor issues. Listening sessions are a useful method of engagement because the information shared by an individual reflects their personal experiences and perspectives. Washington County hosted the She Ascends hiking group for a walk along the Brown’s Creek State Trail and listening session. The hike and listening session allowed for more in-depth, one-on-one conversations and specific recommendations related to the way women experience and use trails. Feedback received included key destinations to connect to, wayfinding, and comments regarding safety/comfort (lighting, visibility, restroom/water access, accessibility). She Ascends is a local organization with the following mission:

“Our mission is to Strengthen bodies. Feed minds. Calm souls. We aim to connect women of all ages to each other, nature, and to themselves so that they can live happier and healthier lives.”

This strategy is an example of 'Involve' as included with the IAP2 Public Participation Spectrum.

- Washington County implemented an intentional engagement strategy of programming collaborations with underrepresented groups. The county initiated a new program in 2022 called Learn to Ride. This free program was funded through the Regional Parks Equity Grant Program and the goal was to work with communities to provide lessons and skill-building experiences. Washington County then hosted two events, which provided an opportunity for project staff to engage with kids and parents who attended about the trail master plan. At these events, staff connected with parents (with help from a translator) regarding walking/biking in their neighborhood. The youth participants provided input on: What excites you about learning to bike? What makes you nervous? What places would you like to bike to?

This is an example of 'Consult' as included with the IAP2 Public Participation Spectrum

*c. Public Participation: What did you learn from the engagement conducted in 2b? Please summarize the advice you heard into themes and identify the contributing stakeholder.*

Input received during engagement events and listening sessions were synthesized with project findings and aligned with themes used to develop project goals guiding the master plan. Specifically, 14 of the 23 goal objectives directly address input received by underserved populations the project team engaged with throughout the master planning process.

- Safety, Accessibility and Comfort Improvements:
  - Provide high quality trail amenities
    - She Ascends listening session
  - Provide clear and consistent wayfinding
    - She Ascends listening session
  - Integrate ADA accessibility
    - She Ascends listening session
  - Minimize conflict between trail users
    - She Ascends listening session; Learn to Ride event
  - Provide connections to transit
    - Learn to Ride event
  - Minimize exposure to vehicular traffic
    - She Ascends listening session; Learn to Ride event
- Connectivity
  - Provide tie-ins to regional/local trails and paths
    - She Ascends listening session; Learn to Ride event
  - Provide connections to: parks/open spaces, historically, culturally and naturally significant sites, education centers and population centers
    - She Ascends listening session; Learn to Ride event
- Natural Resources:
  - Provide river views
    - She Ascends listening session;
  - Provide experiences through multiple habitats
    - She Ascends listening session;
- Equity:
  - Provide a welcoming trail experience for underserved populations
    - She Ascends listening session; Learn to Ride event
  - Provide a trail that connects with underserved populations
    - She Ascends listening session; Learn to Ride event
- Implementation:
  - Develop a publicly supported plan
    - She Ascends listening session; Learn to Ride event

### 3. Evaluation Summary

*a. Transparency: How did the public participation from 2c impact the decisions and policies made? Please consider input that advances, supports, coincides, and diverges from the master plan.*

In addition to the overall guiding project themes and goals (see 2c), public engagement was offered specifically to solicit input on corridor issues and opportunities as well as to gather feedback on elements comprising a high-quality trail experience. The advice received at the various engagement efforts resulted in a list of key findings that guided development of the concept plan:

- The natural, recreational, and cultural amenities within the trail corridor are visited and enjoyed by both local residents and people from all over the region
- A proposed trail alignment should seek to connect communities to the significant natural, recreational, and cultural resources throughout the trail corridor
- Protecting and enhancing opportunities to experience the St. Croix River
- Improving/widening existing pedestrian trails in the corridor to support a wider range of users and abilities
- Proposed acquisitions would add value to the trail corridor and the region through the conservation of natural resources and low-impact improvements
- Building more awareness regarding the regional trail system
- Additional regional trail programming would be welcomed
- Safety and comfortability for trail users varies. Deference should be given to those most vulnerable
- Trail user separation from vehicle traffic is important

*b. Accountability: How will the planning effort create better outcomes? Please consider outcomes related to regional and local access, quality of experience, facility rules/policy, and reporting back about 3a to stakeholders discussed in 2a.*

The key findings highlighted in 3a permeate proposed trail corridor alignments described in the Washington County Regional Trail Master Plan. This targeted engagement led to a better and more inclusive master plan, and through this process Washington County was able to create relationships and build trust with community stakeholders. For example, participation at the ‘Learn to Ride Events’ completed with the Landfall and Cimarron Mobile Home Communities helped establish relationships with underrepresented groups in the search corridor, improved understandings of trail use barriers, and revealed future trail amenity desires.

Throughout the Summer and Fall of 2022, a series of pop-up events and informational booths set up at pre-existing community events were held to engage with a broad spectrum of community members and potential user groups present in the area surrounding the regional trail search corridor. For example, a meeting with the *She Ascends* Hiking Group resulted in feedback on desired trail amenities as well as a discussion of barriers to trail use for women - not only within this trail corridor but at other trails in and around Washington County.

Finally, underserved groups were followed up with as final master plan drafts were sent out for public comment to solicit their feedback on the plan. Washington County has, and will continue, to engage the community on the future development and implementation of the Regional Trails Master Plan.



Figure 28: Elected officials engagement meeting



Figure 29: Open House 1, community member engagement

# Part 2: Inventory & Analysis

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## 4. Corridor Context and Resource Review

The Middle St. Croix River Regional Trail corridor is located within the St. Croix River Valley, an area rich in natural and cultural resources and important to indigenous cultures as well as emigrants who cut lives out of the region while the state was in its infancy. Its natural beauty has been recognized through federal dedication of the St. Croix Scenic Riverway in 1968 and later protection of the St. Croix Savanna Scientific & Natural Area (SNA) in 1991. Throughout its industrial beginnings and natural recreational tourism, this area has been well-connected; by boat, train and the automobile.

As the popularity of these modes of transportation changed, so has the need for the infrastructure supporting them. Partly to meet the transportation needs of local residents and partly in response to growing ecotourism, this chapter reviews corridor amenities related to regional trail development to determine the impact area resources may have on a future regional trail.

### Key Takeaways

- A regional trail provides an opportunity to create non-motorized connections between the river communities while also establishing connections to local destinations.
- A regional trail provides an opportunity to connect to several existing recreation resources in the search corridor.
- There is an abundance of opportunities for interpretation highlighting the corridor's history and celebrating the local communities.
- At the master planning level, no existing natural, cultural, or water resources appear to inhibit development of a trail. Specific permitting and/or design considerations will need to be considered with implementation.
- There is an abundance of opportunities for interpretation highlighting the corridor's resources.
- Applicable agencies/organizations should be engaged during planning, design, and implementation to identify mutually beneficial partnerships and projects enhancing recreation opportunities along with natural, cultural, and water resources.

This chapter outlines the considerations made for identifying the trail alignment and applicable considerations for trail implementation. Additional mapping and research can be found in **Appendix B**.

## Corridor History

Several historic themes provide context and opportunity for interpretation along a future regional trail. From natural features and land formation to the role of the lumbering industry with early settlement, evidence of historical activities are still present today.

### *Glacial Geomorphology*

Shaped by shallow seas and multiple glaciers over millions of years, the St. Croix River Valley still exhibits its glacial history in the rocks and landforms surrounding the river.<sup>1</sup> The river was once a major drainageway for glacial meltwater originating from present-day Duluth and Lake Superior and the Red River Valley.<sup>2, 3</sup> Evidence of shallow seas can be found in the sandstone bluffs on either side of the valley, whereas evidence of the valley's glacial history can be most readily found in the "potholes" ground into the bedrock within Minnesota's and Wisconsin's Interstate Parks. Glacial deposits can also still be found in this area, such as the gravel outwash and thick lake clays.<sup>4</sup>

### *Native American Area History*

Native Americans have lived and used the St. Croix River Valley since the last glaciers receded from the area approximately 10,000 years ago. There are multiple archaeological sites within the Middle St. Croix Valley dated to before European contact that speak to the spiritual and cultural importance of the area. These sites include rock shelters, burial mounds, villages, campsites, and artifact scatters.<sup>5</sup> The multitude of precontact archaeological sites and the multiple types of sites not only speak to the plentiful resources available to people in the valley for thousands of years, but they also speak to the continued importance of the St. Croix River Valley to Native American groups into the present day.



Figure 30: St. Croix River Sandstone, (Source: Minnesota Pollution Control Agency)



Figure 31: Kayakers Along the St. Croix River, 2012, (Source: Greg Seitz, from St. Croix 360 online magazine)

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<sup>1</sup> Bock, Phillip. "Shaping the Valley." *Press Publications*, 27 November 2012. Electronic document, [https://www.presspubs.com/osceola/news/article\\_ed466fc-38bb-11e2-bf7d-001a4bcf887a.html](https://www.presspubs.com/osceola/news/article_ed466fc-38bb-11e2-bf7d-001a4bcf887a.html), accessed June 2022.

<sup>2</sup> St. Croix Scenic Byway. *Geology and Glacial History*. Electronic document, <http://stcroixscenicbyway.org/PDF/101%20Geology%20and%20Glacial%20History.pdf>, accessed June 2022.

<sup>3</sup> Blumentritt, Dylan J., Herbert E. Wright, and Ivanka Stefanova. Formation and Early History of Lakes Pepin and St. Croix of the Upper Mississippi River. *Journal of Paleolimnology* 41(4):545-562.

<sup>4</sup> Thornberry-Ehrlich, TristaL. 2010. *Geologic Resources Inventory Scoping Summary, Saint Croix National Scenic Riverway*. Geologic Resources Division, National Park Service, U.S. Department of the Interior. Electronic document, <https://irma.nps.gov/DataStore/DownloadFile/597745>, accessed June 2022.

<sup>5</sup> Minnesota Office of the State Archaeologist. *OSA Site Portal*. Electronic document, <https://osaportal.gisdata.mn.gov/>, accessed June 2022.

### *Environmental Recreation*

Environmental conservation was a growing national theme in the 1960s and 1970s. Concurrent to this, local environmental and conservation efforts surrounding the St. Croix River Valley were in their beginning stages.<sup>6</sup> At the same time, Minneapolis's and St. Paul's booming population and subsequent booming suburbanization of the metropolitan area increased the St. Croix River Valley's visibility as an outdoor recreation site threatened by encroaching development. Local and national political figures and conservationists understood the importance of the natural river valley and pushed for environmental protection legislation. Pressures from industrialization, coupled with national environmental protection ethos at this time, ultimately culminated in the Wild and Scenic Rivers Act of 1968, which explicitly included the upper St. Croix River and Namekagon River for environmental protection and federal management. The Act was further revised in 1973 to include the lower St. Croix River, where the National Park Service manages the riverway north of the City of Stillwater, and the Minnesota and Wisconsin Departments of Natural Resources manage the riverway south of the City of Stillwater.<sup>7</sup>

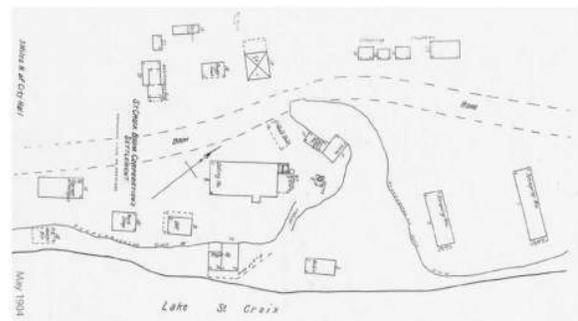
The legacy of these early conservation efforts can be seen today along the federally managed St. Croix National Scenic Riverway and the multiple outdoor recreation opportunities within the St. Croix River Valley, including the vision for the Middle St. Croix Valley Regional Trail.



*Figure 32: Scenic and Recreational Opportunities along the St. Croix National Scenic Riverway (Source: nps.gov)*

### *St. Croix Boom Site/Lumbering*

The St. Croix Boom Site was built in 1856, north of Stillwater at a choke point of the St. Croix River at the Head of Lake St. Croix. Its location near the sawmills of Stillwater made it ideal for sorting, scaling and rafting, as well as buying and selling the timber that had been driven down from tributaries. The St. Croix Boom Company was first chartered in 1851 to build a boom in Osceola about 20 miles north of Stillwater. However, this was too remote from Stillwater which was emerging as the major milling area of the valley. The company reorganized and purchased land closer to Stillwater at the present-day St. Croix Boom Site. The site consisted of the boom works within the river:



*Figure 33: St Croix Boom Site - Stillwater Sanborn Fire Insurance Map, 1904, (Photo source: Minnesota Historical Society, article by Dan Ott – obtained from the National Park Service)*

<sup>6</sup> Karamanski, Theodore J. 1993. *Saving the Saint Croix: An Administrative History of the Saint Croix National Scenic Riverway*. National Park Service, Midwest Region.

<sup>7</sup> Karamanski. *Saving the Saint Croix*.

the piers, pilings, and booms (floating log fences) that extended for miles, created log channels, navigation channels, sorting gaps and holding pens for moving and organizing timber. It also consisted of the settlement that housed the men who worked at the Boom and the facilities that went along with this industry.<sup>8</sup>

The St. Croix Boom Site is designated as a National Historic Landmark and is a National Register-listed property. This area is also within the St. Croix National Scenic Riverway.

### *Stillwater/Birthplace of Minnesota*

Stillwater is often referred to as the “Birthplace of Minnesota,” which became a territory in 1848 and achieved statehood in 1858. Lumber prospectors were drawn to this area early, and by 1843 John McKusick had a mill on the river and formed the Stillwater Lumber Company. The town was platted by 1848, the same year Minnesota became a territory, and the next year the town was selected as the seat of Washington County.<sup>9</sup> The town was incorporated as a city in 1854, shortly before Minnesota achieved statehood.<sup>10</sup> The second county courthouse was built in 1869. The riverfront was dominated by sawing and shipping lumber throughout the late nineteenth century till 1914 when the St. Croix Log boom closed.<sup>11</sup> Stillwater continued to thrive with a variety of businesses including boat works, shoe companies, furniture companies, farm equipment makers, flour mills/elevators and forges/foundries.<sup>12</sup>



Figure 34: Stillwater Manufacturing Company on Main Street, 1908, (Photo credit: Minnesota Historical Society)

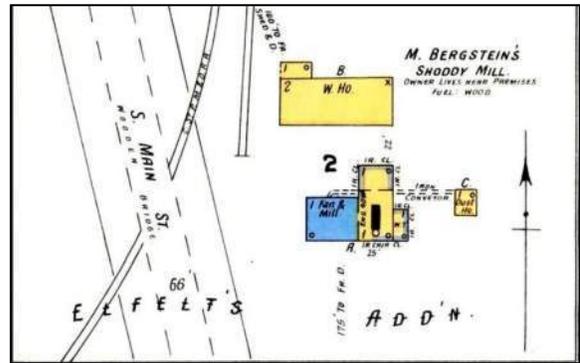


Figure 35: Bergstein Shoddy Mill, Sanborn Fire Insurance Map, undated, (Photo credit: The Gazette, 2022 article)

<sup>8</sup> Ott, Dan. “The St. Croix Boom.” 2013. *St. Croix National Scenic Riverway*. Electronic Document, <https://www.nps.gov/articles/000/stcroixboom.htm#:~:text=Narrative-The%20St.,%2C%20sorted%2C%20scaled%20and%20rafted>, accessed June 2022

<sup>9</sup> Landscape Research, LLC. “The Stillwater Cultural Landscape District.” Electronic Document, <https://www.ci.stillwater.mn.us/home/showpublisheddocument/334/637269084126900000>, accessed June 2022: page 2.

<sup>10</sup> Washington County Historical Society “Stillwater” 2022. Electronic Document, <https://www.wchsmn.org/stillwater/>, accessed June 2022.

<sup>11</sup> Landscape Research, LLC. “The Stillwater Cultural Landscape District.” Electronic Document, <https://www.ci.stillwater.mn.us/home/showpublisheddocument/334/637269084126900000>, accessed June 2022: page 2.

<sup>12</sup> Washington County Historical Society “Stillwater” 2022. Electronic Document, <https://www.wchsmn.org/stillwater/>, accessed June 2022.

Stillwater is federally recognized as a Preserve America Community and its Commercial District is listed on the National Register along with other numerous individual houses and properties that are listed throughout the city. Two other districts are eligible for listing on the National Register, the South Main Agricultural District, and the Stillwater Cultural Landscape District. Many other sites have been determined as National Register eligible throughout the city.

### *Oak Park Heights*

Early settlement of this area occurred in 1857 when a 10-block plat was entered in by John Parker, William Dorr, Gold and Mary Curtis, Olive Anderson, and William M. McCluer between Stillwater and South Stillwater (Bayport). The 1880s saw the construction of a sawmill and a barrel-making company. In 1890, Jewish settlers Moritz and Bertha Bergstein operated a waste materials yard where waste fabric was recycled into stuffing for mattress. They had a “shoddy” mill and warehouse in this area till it was moved to its new location in Stillwater.<sup>13</sup> It is listed on the National Register.

The area was slow to grow and the construction of the nearby Minnesota State Prison in Bayport in 1914 brought in little economic activity. The extension of Trunk Highway 36 in the 1930s encouraged more automobile tourism to the river valley. The area along the highway has continued to become increasingly commercial through the decades.

Oak Park Heights has two National Register Properties: a log cabin which houses Phil’s Tara Hideaway and the Stillwater Overlook.

### *Bayport*

In 1856 lumbermen from Stillwater (Nelson and Loomis) platted Baytown and organized it around a sawmill. Another group of investors (Staples and Short) platted Bangor south of Baytown, and yet another investor (Holcombe) recorded a plat north of both called Middletown. The St. Croix Railway Improvement Company combined these into South Stillwater in 1873 and it was incorporated into a village in 1881. South Stillwater later became confused with the City of Stillwater and changed its name to Bayport in 1922.



*Figure 36: Minnesota State Prison, 1912 – Drawing by John Runk, (Photo credit: Minnesota Historical Society)*

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<sup>13</sup> Washington County Historical Society “Oak Park Heights” 2022. Electronic Document, <https://www.wchsmn.org/oak-park-heights/>

Lumbering continued to be a large operation along the St. Croix, including Tozer Mill which operated from 1878 to 1916 and is a predecessor to the Andersen Lumber Company. This company established in 1897 in Hudson, Wisconsin moved to South Stillwater in 1913 and would later become Andersen Windows, a very successful business in the St. Croix Valley.<sup>14</sup> Between 1910 and 1914, the Minnesota State Prison at Stillwater was constructed in what is now Bayport. This complex is listed in the National Register and includes an administration building, four cell halls, a hospital, a chapel/dining hall/kitchen complex, along with industrial buildings, which are enclosed by a 28-foot-tall wall with guard towers. This constitutes the original complex with an additional 13 acres, 29 buildings and 1 structure included in the historic district.<sup>15</sup>

### Lakeland

The area which would become Lakeland had settlers in the early 1840s and a ferry was established to Hudson in 1848 by Moses Perin. Between the years 1850 and 1869, John Oliver, a former British Naval Officer and Boston harbor pilot operated the ferry and built a house on the bluff overlooking the ferry. By 1849 the town plat was laid out and many buildings were erected along Main Street, a wide avenue on axis with the river. The 1850s saw the establishment of a wagon-making shop, the post office, a mercantile, blacksmith, and a saloon. Several mills were established before the Civil War and the St. Paul & Milwaukee railroad came through in 1880. The area remained relatively unchanged though the early 19<sup>th</sup> century and it was not until 1951 that the village of Lakeland was incorporated. Today it is a highly suburban area.<sup>16</sup>



Figure 37: Andersen Lumber Company Office Building and Plant, 1924, (Photo credit: Minnesota Historical Society)



Figure 38: Lakeland Main Street, 1931, (Photo source: Minnesota Historical Society)



Figure 39: Davies General Store, Lakeland (Source: Washington County Historical Society)

<sup>14</sup> Washington County Historical Society “Bayport.” 2022. Electronic Document, <https://www.wchsmn.org/bayport/>, accessed June 2022.

<sup>15</sup> Ferguson, Robert. 1985. *National Register of Historic Places Nomination: Stillwater State Prison Historic District*. Electronic Document, <https://npgallery.nps.gov/GetAsset/3899c5c1-3f94-4497-b4a5-87f98e591d24>, accessed June 2022.

<sup>16</sup> Washington County Historical Society “Lakeland.” 2022. Electronic Document, <https://www.wchsmn.org/lakeland/>

Lakeland has three National Register-listed properties: the Captain John Oliver House, the John T. Cyphers House and the Mitchell Jackson Farmhouse.

### *Afton*

A French-Canadian named Gaspere Bruce, first settled Afton Township around 1837 near Bolles Creek, at which time it was known as Catfish Bar for the large sandbar that could be seen in the St. Croix River when water was low. This place was a natural ford for cattle and horses. In 1845, Lemuel Bolles built the first grist mill in the county on the creek named after him. The mill ground mostly corn and wheat and had a 50-barrel-a-day capacity. Mr. Bolles was also the first postmaster in 1852.<sup>17</sup> By 1855, the village of Afton was platted with the new name on land of one of the earliest settlers, Alexander McHattie. The village had a blacksmith shop, a grocery store, hotels, fish market, ice cream parlor, and several churches established. The first school was also established that year. Afton continued to attract settlers, particularly Germans and Swedes who liked the flat fertile farmland, and the hillier regions, respectively.<sup>18</sup>

Afton has three properties listed on the National Register: Erastus Bolles House, Newington Gilbert House, and the Cushing House, along with other sites and properties eligible for listing.



*Figure 40: John T. Cyphers House (Source: Wikipedia)*



*Figure 41: Newington Gilbert House, 1965, Photo source: Minnesota Historical Society*

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<sup>17</sup> Washington County Historical Society “Afton.” 2022. Electronic Document, <https://www.wchsmn.org/afton/>, accessed June 2022; There is a Historic Marker for the Bolles Mill Site located at 3291 St. Croix Trail S, Afton.

<sup>18</sup> Ibid.

## Community Context

This section outlines the cities/townships, infrastructure, and destinations located along the regional trail search corridor.

### *Cities and Townships*

There are 11 cities and townships within the trail search corridor. Table 2.1 lists each community from north to south with information outlining their size and the approximate trail length of the Middle St. Croix Valley Regional Trail that will intersect with each. These communities intersect with Highway 95/County Highway 18 (St. Croix Trail). County Highway 21 (Stagecoach Trail) bypasses Lakeland, Lakeland Shores, Lake St. Croix Beach, and St. Mary’s Point.

Stillwater, Bayport, and Afton all have downtowns which center on Highway 95/County Highway 18 (St. Croix Trail). Oak Park Heights, Lakeland, Lakeland Shores, and Lake St. Croix Beach primarily include highway development along this same road. Development along County Highway 21 (Stagecoach Trail) primarily follows rural development patterns along its entirety.

City/Township	Met Council Community Designation	Population (2020 Census)	Land Area (Acres)	Approximate Trail Length (miles)*
Stillwater Township	Diversified Rural	1,866	11,200	1.1
Stillwater	Suburban	19,471	5,807	2.8
Oak Park Heights	Suburban	4,974	2,144	1.1
Bayport	Suburban	3,758	1,124	2.6
Baytown Township	Rural Residential	2,088	6,144	0.5
West Lakeland Township	Rural Residential	3,976	8,083	1.3
Lakeland	Rural Residential	1,710	1,871	2.9
Lakeland Shores	Rural Residential	339	467	0.7
Lake St. Croix Beach	Rural Residential	1,043	630	1.1
St. Mary’s Point	Rural Residential	440	250	0.05
Afton	Diversified Rural	3,008	16,947	0.9

*Table 12: Middle St. Croix Valley Regional Trail Search Corridor Community Overview \*Approximate trail length assumptions are measured along Highway 95 and may vary depending on final trail alignment.*

### *Major Roads and Highways*

There are four major routes that run through the search corridor: State Highway 36, Interstate 94, State Highway 95/County Highway 18 (St. Croix Trail), and County Highway 21 (Stagecoach Trail). **The St. Croix Scenic Byway follows Highway 95 north of Interstate 94, and County Highway 21 south of the interstate.**

### *Minnesota Highway 36*

Minnesota Highway 36 is a principal arterial that runs east to west and is located just south of Stillwater. It is a 4-lane divided highway (two-lanes in each direction) and runs between Minneapolis and the Minnesota-Wisconsin border. At the border, it turns into Wisconsin State Trunk Highway 64 after crossing the St. Croix Crossing Bridge, a new bridge that opened in 2017. The Annual Average Daily Traffic (AADT) of Minnesota Highway 36 was 29,536 as of 2021. There is an at-grade crossing at N Osgood Avenue and an interchange with the intersection with State Highway 95.

### *Interstate 94*

Interstate 94 is a freeway that runs east to west just north of Lakeland and Lakeland Shores. It is a six-lane divided highway that is one of the major arteries between the Twin Cities and cities such as Eau Claire, Madison, and Chicago. It is, by far, the busiest road that bisects the search corridor. The AADT of the freeway was 74,544 as of 2021. There is a grade-separated crossing at County Highway 21 and an interchange with the intersection with State Highway 95.

### *State Highway 95/County Highway 18 (St. Croix Trail) - St. Croix Scenic Byway*

State Highway 95/County Highway 18 is a minor arterial that runs north to south along the St. Croix River from Stillwater to Afton. It is primarily a two-lane undivided road, with sections of roadway with a median. State Highway 95 extends from Interstate 94 through the north extents of the search corridor, and County Highway 18 extends south from Interstate 95 into Afton. The AADT is dependent on location and has a wide range; the 2021 AADT ranges from 6,500 – 11,000 through Stillwater, is 15,400 near Interstate 94, and is down at 3,300 near Afton.

Roadway characteristics vary by section:

- **Right-of-Way (ROW):** North of Highway 36, there is 100-feet of ROW, which narrows to 75-feet in Bayport. South of Interstate 94, the road widens to between 150- and 170-feet of ROW, before narrowing to 80-feet through downtown Afton.
- **Shoulders:** Paved shoulders are present from Stillwater Township to Lakeland Shores, with the shoulder used as parking in Downtown Stillwater and Bayport. There are unpaved shoulders between Lakeland and St. Mary's Point, with paved shoulders returning South of St. Mary's point through to Afton.



*Figure 42: Major Roads and Highways within search corridor*

### County Highway 21 (Stagecoach Trail) - St. Croix Scenic Byway

County Highway 21 runs north to south from Highway 36 in Oak Park Heights to the city of Afton, where it converges with County Highway 18. This road is one mile west of and runs parallel to State Highway 95/County Road 18. The northern section (north of 5<sup>th</sup> Avenue in Bayport) and the southern section (south of 10<sup>th</sup> Street North in West Lakeland, just north of Interstate 94) are classified as major collectors, while the middle section is classified as a minor arterial. AADT varies depending on location. As of 2019, the section north of Interstate 94 ranged from 2,500 and 5,500, while south of Interstate 94 the AADT was 640.

- **Right-of-Way (ROW):** The ROW north of Interstate ranges from 70 feet to 150 feet, with a majority of this section being between 120 and 150 feet wide. South of Interstate 94, the ROW narrows significantly at typically 66-feet.
- **Shoulders:** North of Interstate 94, there are paved shoulders. South of Interstate 94, the St. Croix Scenic Byway, does not have shoulders.

### Railroad Lines

The Union Pacific owns and operates the only active railroad line in the trail search corridor. Railroad activity will primarily impact Zone 4 of the Middle St. Croix Valley Regional Trail corridor. The main line crosses into Minnesota from Wisconsin via the swinging bridge over the St. Croix River and turns toward the Twin Cities West of Bayport, passing Lake Elmo on its way to St. Paul. A spur of this line runs from the swinging bridge on the St. Croix River 1.25 miles north of Interstate 94 along the St. Croix River to the Xcel Energy Allen S. King Power Plant. The tracks continue less than 1-mile further north, but these sections do not appear to be active.

As part of the planning process, the county engaged with stakeholders regarding the future of this rail line. It was shared that the rail line expects to be in operation for the foreseeable future. If these plans change or conditions change, additional coordination among public agencies within the corridor will be done to determine the best future use of the land.

### Crossings Along the Main Line

There is one railroad overpass and three level crossings along the main line within the search corridor:

- Highway 95 (St. Croix Trail) overpass – This bridge is located approximately 2 miles north of Interstate 94 where the St. Croix Scenic Byway passes over the railroad tracks. The bridge is a Steel Continuous-Beam Span built in 1960. It is 260 feet long and in satisfactory condition. At 50 feet wide, the bridge has three lanes: two southbound lanes and one northbound lane, with a



Figure 43: Existing railroad lines near Stillwater

wide shoulder on the northbound side. There are no existing separated pedestrian or bicycle facilities on this bridge.

- Caterpillar Road east of Stagecoach Trail N (south of Bayport) - single track crossing; this is a dirt road at this location and leads to Miller Excavating; this does not appear to be a public crossing.
- Stagecoach Trail N between Inspiration Pkwy S and Caterpillar Road - single track crossing; signals with gate arms are located at both approaches to the crossing.
- Osgood Ave N at 47th St N - single track crossing; signals with gate arms are located at both approaches to the crossing.

#### *Crossings Along the Spur Line*

All railroad crossings along the spur line are level. There are significantly more crossings compared to the main line. As it runs along the St. Croix River, it passes through numerous communities that have river access. Level crossings along the spur line, from north to south, include:

- Metropolitan Council Environmental Plant driveway crossing - stop signs present, marked as a private crossing.
- King Plant Road (leads to Xcel Energy Plant) - three track crossing; stop signs present, marked as private crossing.
- Bayport (nine crossings)
  - 10th Ave N - three track crossing. RR signage and stop signs, but no warning lights
  - 8th Ave N - within the Andersen Windows complex
  - 5th Ave N at Maine St N - RR crossing signage and stop signs, but no warning lights
  - 4th Ave N at Maine St N - RR crossing signage and stop signs, but no warning lights
  - Central Avenue at Maine St S - RR crossing signage and stop signs, but no warning lights
  - 2nd Ave S at Maine St S - RR crossing signage and stop signs, but no warning lights
  - 3rd Ave S at Maine St S - RR crossing signage and yield signs, but no warning lights
  - 3rd St. S/ Hubs Point Dr - this crossing may be closed
  - 5th Ave S (near Bayport Marina) - advanced warning signs say, "Look for Trains" and "No Train Horn 10PM – 7AM;" stop signs at the crossing, but no warning lights or gate arms

#### *Regional Bicycle Transportation Network*

The project team reviewed the Metropolitan Council's Regional Bicycle Transportation Network (RBTN) plan as part of the corridor analysis. As identified in this plan, this corridor will serve as a vital connection in the active transportation system. It will be important for the RBTN to reflect the regional trail route. The county may pursue future amendment moving the RBTN alignment that currently runs along TH 95 from TH 36 to I 94 to County Road 21 (Stagecoach Trail N). MnDOT, Metropolitan Council and Washington County will coordinate on this effort.

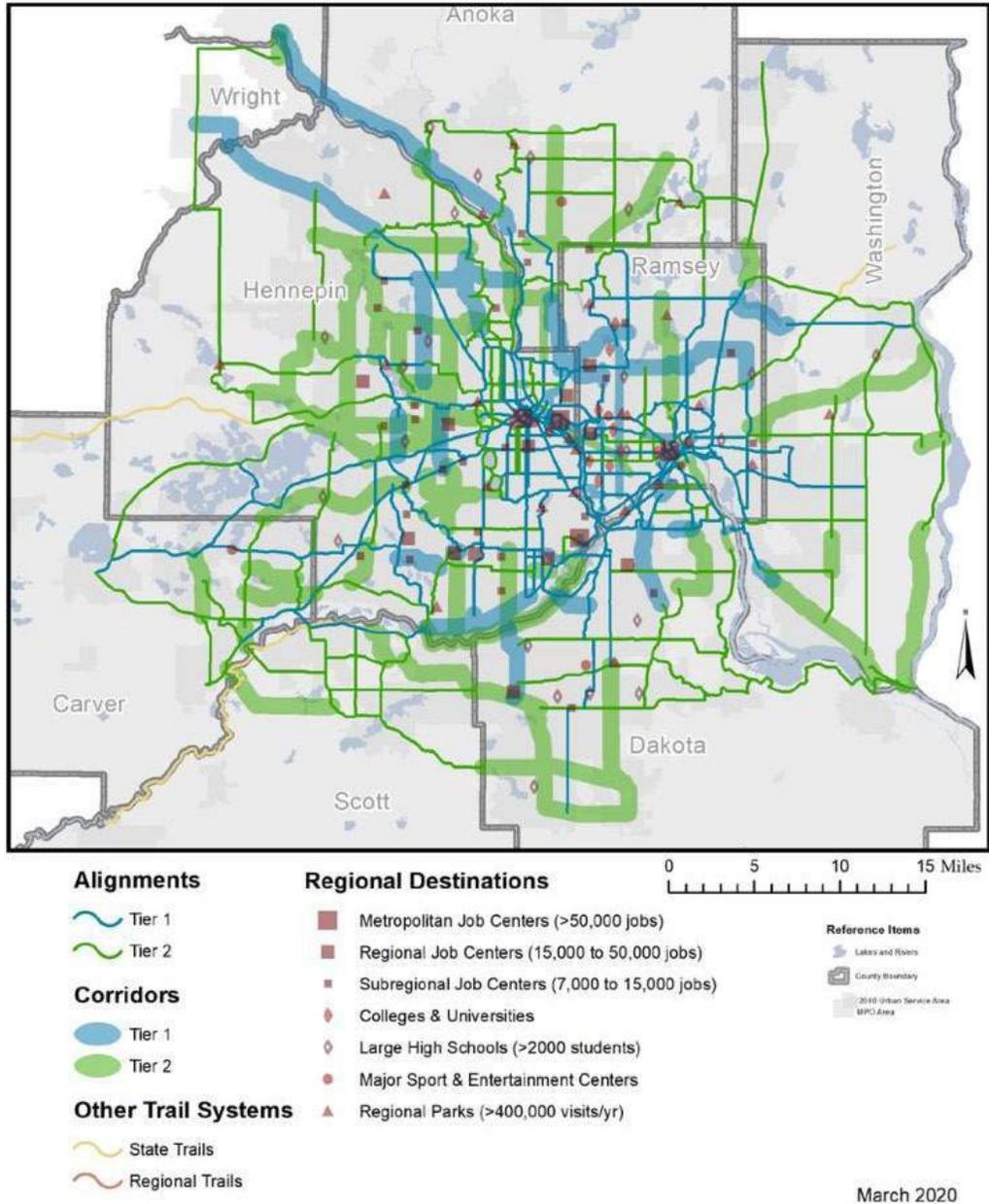


Figure 44: Met Council Regional Bicycle Transportation Network Map

### Transit Services

One way to improve community livability is by enhancing access and connectivity through the improvement of connections between public transportation services and public trails. Such connections could extend the transit service area outward and enable pedestrians to access areas which they might not otherwise travel due to physical barriers, safety concerns, or traffic congestion.

As of 2022, Metro Transit operates a single bus route into Stillwater, Route 294. On weekdays, it runs once per day in each direction between Stillwater and Downtown St. Paul. There is no service offered on weekends. There are no other Metro Transit fixed route bus services provided along the search corridor.



Figure 45: Existing transit services near Stillwater

### Lakeland Park and Ride Station

The Lakeland Park and Ride Station is located at the northeast corner of Interstate 94 and Highway 95, with the entrance to the lot located on Rivercrest Rd N. This is Greyhound Bus Station with multiple buses per day that pick up and drop off from the lot. This stop is on the Minneapolis to Chicago bus route and is the only stop between St. Paul and Eau Claire. There are approximately 80 parking spots at the park and ride, which includes four handicap spaces.

### Schools

In the search corridor, there are 11 schools, including multiple preschools, elementary schools, middle schools, and a preparatory academy. Each school is named below, listed from north to south.

- Stonebridge Elementary School
- New Heights School
- St. Croix Catholic School
- Preschool at Stillwater Area Public Schools – Early Childhood Family Center
- Stillwater Middle School
- Salem Lutheran School
- Pony Preschool Child Development Center
- Andersen Elementary School
- St. Croix Preparatory Academy
- Afton Lakeland Elementary School
- Afton Preschool

### Libraries

There are four public libraries located in the search corridor. Three of these libraries are traditional public libraries, while the fourth is the Washington County Law Library, located within the Washington County Courthouse. Below is a list of the libraries in the search corridor:

- Stillwater Public Library: 224 3rd St N, Stillwater, MN 55082
- Washington County Law Library: 14949 62nd St N, Stillwater, MN 55082
- Bayport Public Library: 582 4th St N, Bayport, MN 55003
- Valley Library: 384 St Croix Trail S, Lakeland, MN 55043

*Additional Destinations/Noteworthy Landmarks*

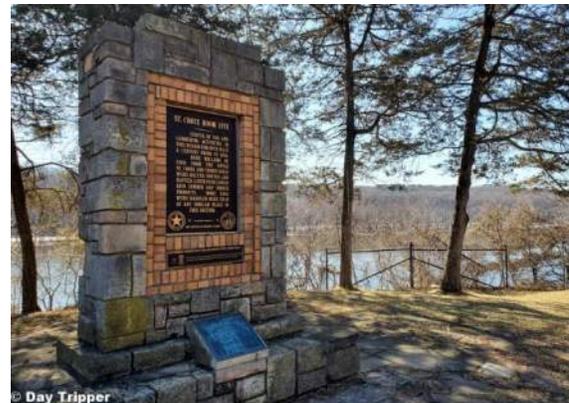
- **Xcel Energy Allan S. King Plant:** The Allan S. King Power Plant is a coal fired electric generating station located along the St. Croix River in Bayport. Built in 1965, the powerplant can burn up to 300 tons of coal per hour and generate 598.4 Megawatts. Coal is delivered using trains, which run on the spur line along the St. Croix River. This power plant is scheduled to be closed in 2028, as Xcel Energy is planning on shifting away from coal and non-renewable resources and toward renewable resources like wind and solar. As of 2022, the plant operates for six months each year during the peak heating and cooling months (December to February and June to August). Xcel Energy plans to retire the plant in 2028, Oak Park Heights and other stakeholders are actively planning for the future of this area.

- **Minnesota Correctional Facility – Oak Park Heights:** Opened in 1982, the Oak Park Heights Connectional facility can incarcerate up to 473 people. This facility has the highest level of custody of any facility in the Minnesota Department of Corrections system, with most individuals designated at maximum or close custody levels.



*Figure 46: Minnesota Correctional Facility – Oak Park Heights*

- **St. Croix Boom Site:** A scenic and historical wayside destination along the St. Croix River, the St. Croix Boom site is in Stillwater Township. A log boom was located here from 1856 to 1914, where fallen trees from upriver were caught and sorted for downstream sawmills. This site was one of the most important log storage and handling sites for Minnesota’s logging industry and was designated as a National Historic Landmark in 1966. Today it provides public access to the St Croix River, parking, trails, and picnic facilities.



*Figure 47: St. Croix Boom Site (Source: Day Tripper Blog)*

## Natural Resources

Eastern Washington County boasts dramatic topography and picturesque landscapes. From woodlands to prairie systems, the Middle St. Croix River Regional Trail crosses a wide spectrum of ecosystems and provides robust opportunities for education and interpretation fostering stewardship of the natural resources in the region.

### *Wildlife and Nature Preserves*

Segments four and five of the Middle St. Croix River Valley regional trail search corridor include wildlife and nature preserves. Preserves are generally established to protect identified significant vegetation or wildlife communities for general conservation or educational purposes. Aligning a regional trail through these areas would require buy-in, coordination, and partnership with each managing agency.

#### *Bayport Wildlife Management Area (WMA)*

Established in 1973, the Bayport WMA includes 452 acres split across two parcels. The landscape is split between grassland and woodland with limited wetlands and is managed for wildlife. Hunting with firearms and archery and trapping are permitted during established seasons and in designated areas. The site is managed by the Minnesota Department of Natural Resources.

#### *St. Croix Savanna Scientific and Natural Area (SNA)*

This 150-acre site highlights an example of hill prairie and provides protection for several threatened or endangered species. The site is managed by the Minnesota Department of Natural Resources to maintain the savanna by managing woody vegetation growth. There are no maintained trails within this wildlife management area.

#### *Belwin Conservancy*

Belwin Conservancy is a privately run organization dedicated to land conservation and education. The organization owns and manages over 100 acres of land in Afton and West Lakeland Township. There are several trail systems as part of the conservancy which are open to the public from dawn to dusk. The Stagecoach Prairie and Tallgrass Trails have access points a mile south and just south of I-94 respectively. A new trail system, Oxbow trails, are currently under development and are located just north of downtown Afton on the west side of 95.

### *Native Plant Communities - Sites of Biodiversity Significance*

Native plant communities – as identified by the Minnesota Department of Natural Resources – are present in the regional trail search corridor. Plant communities include mesic hardwood forest, upland prairie, wet meadow/carr, fire-dependent forest woodland, open rich peatland, floodplain forest, and marsh systems.

The presence of native plant communities does not directly impact trail alignment decisions at a master planning level. Measures to protect native plant communities should be followed with trail design and implementation. Trail design and development adjacent to native plant communities provides opportunity to enhance the native vegetation and presents interpretive information to foster stewardship of these valuable natural resources.

### *Rare and Natural Features*

The US Fish and Wildlife Service (USFWS) Information for Planning and Consultation Report (IPaC) of the Middle St. Croix Valley Trail search corridor notes seven endangered species that may be present in the area. Species include the Northern Long-eared Bat, several species of clams, the monarch butterfly, and the rusty patch bumble bee. There are no critical habitats listed as part of the report. The report also identifies several migratory bird species present in the area. Birds may be protected under the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act, and/or may be listed on the USFWS Birds of Conservations Concern (BCC) list.

While the presence of these species will not impact trail alignment at the master planning level, considerations will need to be made during implementation planning and may include additional assessment or inventory needs, design modifications, or construction staging to avoid negative impacts; specifically for migratory or nesting birds, vertebrate animals such as turtles, and herbaceous species. The IPaC report can be found in **Appendix B** of this report.

Additionally, rare feature data provided by the Minnesota Department of Natural Resources Division of Ecological and Water Resources was reviewed as part of this planning process. Rare natural features in the trail corridor include vertebrate animals, invertebrate animals, and vascular plant communities and are primarily concentrated around the river. Of these considerations, vascular plant communities are most sensitive to impacts from trail development and design will need to take into consideration an alignment that will avoid or minimize impacts to these communities. Further investigation into the location, extents and quality of the resource may have to be completed to better understand any potential impacts.

### *Trout Streams*

Designated trout streams and protected tributaries are present throughout the regional trail search corridor. Designated trout streams are protected, cool water fisheries that provide habitat for trout propagation. These designated streams have imposed restrictions during fishing seasons prohibiting minnow harvesting. Within the trail search corridor, Brown’s Creek is a designated trout stream and protected tributary near Stillwater, while Valley Branch and Valley Creek are designated trout streams near Afton.



*Figure 48: St. Croix Savanna Scientific Natural Area*



*Figure 49: Belwin Conversancy, (Source: AllTrails.com, Wilmot)*



*Figure 50: Volunteers working on streambank restoration along Valley Creek near Afton*

Infrastructure improvements adjacent to or crossing trout streams need to be permitted through both the MN DNR and section 404 of the Clean Water Act. Crossings of these streams may have restrictions on construction periods and require specific design elements like natural bottom culverts.

### *Aquatic Resources*

Additional aquatic resources beyond Trout Streams are found in segments 1, 4 and 5. These include wetlands and water courses. For the purposes of this Master Plan, wetlands have been identified using the National Wetland Inventory and MN DNR Public Waters Inventory. These inventories use off-site data such as aerial imagery and LiDAR to determine the presence of wetlands. This is not an exhaustive inventory of wetland and ground truthing will be required to identify all wetlands within a potential corridor. Wetlands are protected through the Wetland Conservation Act of Minnesota and Section 404 of the Clean Water Act. Any impacts will have to be properly permitted through these state and federal regulations and may require mitigation.

Available inventories only identify Trout Streams as being present within the search area. It can be assumed that more streams exist flowing from the west to the St. Croix River. These water courses are under the jurisdiction of Section 404 of the Clean Water Act and can be under the jurisdiction of the MN DNR. Any impacts to these water courses will require the proper state and federal permits and may require mitigation.

### *Land Cover Classification*

The Minnesota Land Cover Classification System (MLCCS) *categorizes urban and built-up areas in terms of land cover rather than land use* (MN DNR). Land cover classifications capture percent impervious cover as well as plant communities in non-urbanized areas. Classifications can be used as a planning tool to understand the general biomes found along the corridor. For trail planning and design, land cover does not give specific locations or quality of biomes. During planning of the trail corridor, these classifications will have to be field verified to determine if any adverse effects may occur to specific biomes and to determine if there are any design elements that could minimize those impacts.



Land Cover Classification maps can be found in **Appendix B.**

*Figure 51: Aerial of natural area in the Middle St. Croix Valley regional trail search corridor*

## Water Resources

The St. Croix River is an important natural resource which drains the eastern half of Washington County. There are four watershed management districts within the Middle St. Croix Valley Regional Trail search corridor: the Carnelian-Marine St. Croix Watershed District; the Brown's Creek Watershed District; the Middle St. Croix Water Management Organization; and the Valley Branch Watershed District. Together with the Minnesota and Wisconsin Departments of Natural Resources and the National Parks service, these entities are responsible for stewardship of this essential water resource.

Beyond local government stakeholders, the St. Croix River is a recreational draw which inspires a connection to the river. Trails are critical infrastructure that provide opportunities for connecting people to places and fostering a sense of ownership and stewardship to resources potentially unknown otherwise. Through a sense of shared ownership and responsibility for protection, the Middle St. Croix Valley Regional Trail corridor can be used to harness enthusiasm in enhancing the river along with the surrounding ecological resources through construction of dedicated stormwater treatment facilities, vegetation and habitat improvements, and bolstered flood protection.



Figure 52: Aerial photo of the St. Croix River

### *River Floodplains*

Portions of the trail search corridor are located within the 100- and 500-year floodplain of the St. Croix River. Additionally, there are segments of the corridor in floodways of contributing tributaries. The presence of a floodplain or floodway does not inhibit construction of a trail; however, any fill within the regulatory floodplain likely requires compensatory replacement of flood storage. Local and state regulations must be followed for any floodplain impacts. Furthermore, consideration needs to be made for the desired user experience. Constructing a trail in flood prone areas may result in the trail being closed periodically because of intermittent flooding of key segments.

### *Watershed Regulation and MS4 Communities*

Proposed trail segments through the jurisdictional agencies may require local, state, or federal review and must follow specific permitting processes. This includes provisions for stormwater management, erosion control, wetland impacts, stream crossings, floodplain fill, and other potential rule triggers. While stormwater requirements for trail construction can often be met with the surrounding vegetated buffer adjacent to the trail, Watershed District regulation should be reviewed for each trail segment.

A Municipal Separate Storm Sewer System (MS4) is a designation by the Minnesota Pollution Control Agency (MPCA) for requiring communities with large populations (over 10,000) and/or communities near sensitive water resources to meet minimum control measures for pollution control. Entities regulated by the MS4 general permit are required to adopt a stormwater pollution prevention plan (SWPPP) that generally includes regulatory mechanisms, public education, illicit discharge prevention,

and good housekeeping. Stillwater and Oak Park Heights are MS4 communities and may require additional design and/or permitting considerations at trail implementation.

*Lower St Croix One Watershed One Plan (1W1P) – Lower St. Croix Watershed Partnership*

The Lower St. Croix River Partnership formalizes the local government stakeholder groups that have created a collaborative and comprehensive “One Watershed, One Plan” to prioritize protection and restoration strategies. Through 2030, the plan identifies needs and implementation for stakeholder engagement and social capacity; public education and outreach; agricultural land management; stormwater quality best management practices (BMP) in developed areas; and ecosystems services. The Middle St. Croix Valley Regional Trail corridor intersects a number of these priorities and should consider joint opportunities for water quality and natural resources improvements.

Priority projects have been identified throughout the Lower St. Croix watershed. Stakeholder engagement opportunities throughout the planning and design of the Middle St. Croix Valley Regional Trail may reveal opportunities to construct joint projects identified in the One Watershed, One Plan or identify locations where stormwater management and water quality improvements can go above and beyond local regulation to match the goals of the plan.



*Figure 53: Aerial photo depicting landscape terrain of the Middle St. Croix Valley Region of Eastern Washington County*

## Cultural Resources

The rich natural resources of the river valley have supported human habitation in the area from the glacial recession approximately 10,000 years ago, to Native American contact with Europeans in the late 19<sup>th</sup> century, to today with 11 communities calling the river valley home. Notable cultural resources exist along the entirety of the trail corridor.

### *National Register of Historic Places*

There are over 70 nationally listed (or eligible) properties throughout the trail corridor. The highest concentration of these properties is in downtown Stillwater. Notable properties include:

- **The St. Croix Boom Site** in Stillwater Township is a listed property and is managed by the National Park Service. At the northern terminus of the trail corridor, this property may be compatible for use as trailhead with existing parking, amenities, and interpretation – coordination with the NPS would be required.
- **The Stillwater Bridge** in downtown Stillwater was converted to a bike/ped facility in 2020 as part of the St Croix Crossing Loop Trail. This historic bridge is a landmark in the region and its conversion supports trail connections between Minnesota and Wisconsin and serves as a recreation destination.
- **The Cushing Hotel** is located on St. Croix Trail in Afton and was constructed in 1867 on foundations of an earlier hotel built in 1861. It is a local example of post-Civil War construction built for the river-oriented community in Washington County.



Figure 54: Historic Lift Bridge, Stillwater (Source: [stillwatermn.gov](http://stillwatermn.gov))



Figure 55: Historic photo of the Cushing House Hotel, (Source: [presspubs.com](http://presspubs.com))

*Trail segments through areas with known nationally listed properties may need state and or federal review to determine if the proposed trail construction will adversely affect the resource or supporting features.*

### *Designated Districts*

Three historic districts are designated along the trail corridor. Trail segments through historic districts may require State and/or Federal review which would require consultation and/or coordination with agencies to determine if a planned trail will adversely impact the character defining features of the historic districts it passes through. Generally, the addition of vertical elements is the primary concern; for a regional trail, this may include signage or the addition/removal of trees.

- **Stillwater Downtown Commercial Historic District:** The district broadly encompasses buildings fronting Main Street between Commercial Street and Nelson Streets with an extension along the southwest side of Chestnut Street as well as northwest towards, and including, the Lift Bridge.
- **Stillwater Cultural Landscape District:** This district encompasses the above-described district and extends across the river to include some areas in Wisconsin on the east and then extends to the west up the bluff.
- **Stillwater State Prison Historic District:** This district encompasses approximately 30 structures on 22 acres at 5500 Pickett Avenue.

The **Lower S. Croix National Scenic Riverway (LSCR)** was added to the National Wild and Scenic Rivers program in 1972 and spans 52-miles from Taylors Falls, Minnesota to the confluence with the Mississippi River at Point Douglas. The riverway is managed by the state in several districts from Stillwater to the south and is managed by the National Park Service north of Stillwater.

There are portions of the trail corridor that reside within LSCR. Within these areas, regulations vary throughout the corridor regarding building and development (i.e. lot size, structure height, landscaping, etc.). Prior to implementation, the county will coordinate with NPS, DNR and the appropriate local government to ensure compliance with LSCR regulations.

Trail segments identified within the state managed LSCR may require review by the State Department of Natural Resources (MN DNR). Section 106 would apply to trail segments planned within the federally managed district. The National Park Service (NPS) will need to be notified of proposed plans and be involved/consulted within this designated area. Additionally, the Park's cultural resource team may want to conduct cultural resources surveys in the area.

### *Archeological Sites*

Sites with known cultural artifacts are present in each segment of the trail corridor. Three burial mound sites are identified across the corridor. Proposed trail plans would need to be reviewed by qualified professionals to determine if there is a negative impact to these sites. If negative impacts could occur designs would need to be altered or additional work may be needed.

## Recreation Resources

The Middle St. Croix Valley Regional Trail can connect to several existing recreation resources in eastern Washington County.

### Trails

- **Brown's Creek State Trail:** This paved trail runs from the Gateway State Trail along Highway 96 to Downtown Stillwater. Totalling 5.9 miles, this trail was constructed on an old railway alignment and is accessible for all users due to its generally flat terrain.
- **St. Croix Crossing Loop Trail:** This 4.7-mile paved loop is an interstate trail that runs along both sides of the St. Croix River through Stillwater and Hudson, Wisconsin. It was completed in 2020. Accessible to both pedestrians and bicyclists, the trail crosses both the historic Stillwater Lift Bridge and the St. Croix Crossing bridge. Multiple scenic overlook points are located on the St. Croix Crossing. This trail is accessible for all users but does have a large but gradual elevation gain associated with it.
- **Lakeland to Afton Trail:** This four-mile paved trail was resurfaced in 2017 and connects five communities from Afton to Interstate 94. The trail is eight-feet wide with a ten-foot or more vegetated buffer from the road in most locations. The trail is relatively flat along the length of the trail. At the north terminus, the trail connects with another facility which continues across the Interstate 94 St. Croix River Bridge into Wisconsin and to downtown Hudson.
- **Afton Bluffs Regional Trail:** This trail search corridor crosses Washington and Ramsey counties, connecting downtown Afton with St. Paul. The trail corridor follows County Highway 18 (Afton Boulevard). There is not currently a master plan for this trail.
- **St. Croix Valley Regional Trail:** A master plan for this regional trail was approved in 2005. This trail corridor is approximately 17.4 miles and connects downtown Afton with Point Douglas. For the most part, this trail has not yet been constructed.
- **Belwin Conservancy** is a privately run organization with over 100-acres of land in Afton and West Lakeland Township. There are several trail systems as part of the conservancy that are open to the public from dawn to dusk. The **Stagecoach Prairie and Tallgrass Trails** have access points 1-mile south and just south of I-94, respectively. A new trail system, **Oxbow trails**, are currently under development and located just north of downtown Afton on the west side of 95.
- **St. Croix River State Water Trail:** The St. Croix River is designated as a water trail divided into two sections: Trego, Wisconsin to State Highway 70 and State Highway 70 to the Mississippi River. This river trail is managed by the Minnesota Department of Natural Resources (MN DNR) and was designated as a National Scenic Riverway in 1968. With recreation options including canoeing, kayaking and paddleboarding, the river also provides river-side paddle-up campsites.



Figure 56: St. Croix River Trail Source: [nps.gov](https://www.nps.gov)



Figure 57: Lakeland to Afton Trail (Source Google Streetview)



Figure 58: Brown's Creek State Trail Highway 95 overpass bridge



*Figure 59: Belwin Conservancy Bison Release - Sykora*

### *Parks*

There are numerous city parks in the corridor, including many along the St. Croix River. These parks offer a variety of options for outdoor recreation activities, including use of playgrounds, walking, biking, swimming, picnicking, and other various uses.

- **Lucy Winton Bell Athletic Fields** at Belwin Conservancy is a regional destination for youth sports. This complex has eight soccer fields and four softball fields, for which the outfields can be converted to two football fields. The St. Croix Soccer Club, a youth soccer organization, plays many of their games at the complex.
- **Fairy Falls Day Use Area:** The Fairy Falls Day use area is a 54-acre nature area in Stillwater Township, owned by the National Park Service (NPS). Silver creek passes through this area to connect to the St. Croix River and the site includes ravines, bluffs, and marshland. This area is currently closed to visitors due to safety and maintenance concerns. The NPS is currently conducting a planning process to identify site improvements. Potential ideas for the site include the addition of parking and formal access to the falls.
- **St. Croix Crossing Boat Launch:** Located just to the south of the St. Croix Crossing bridge, this new boat launch is scheduled to open in 2024. Planned as a double boat launch, the site will feature 35 boat trailer parking spots and a designated aquatic invasive species cleaning station. Toilets will be provided, but no trash cans will be on site as boaters are expected to take their trash with them. This will be the second boat launch on this section of the river, with an existing site located near the St. Croix Boom Site north of Stillwater.
- **15 + City Park Destinations:** located within the trail search area.

### *Recreation Groups and Activities*

Minnesota is full of outdoor recreation opportunities and enthusiasts, and Washington County and the Middle St. Croix Valley is no exception. The following is a list of some recreation options in the area.

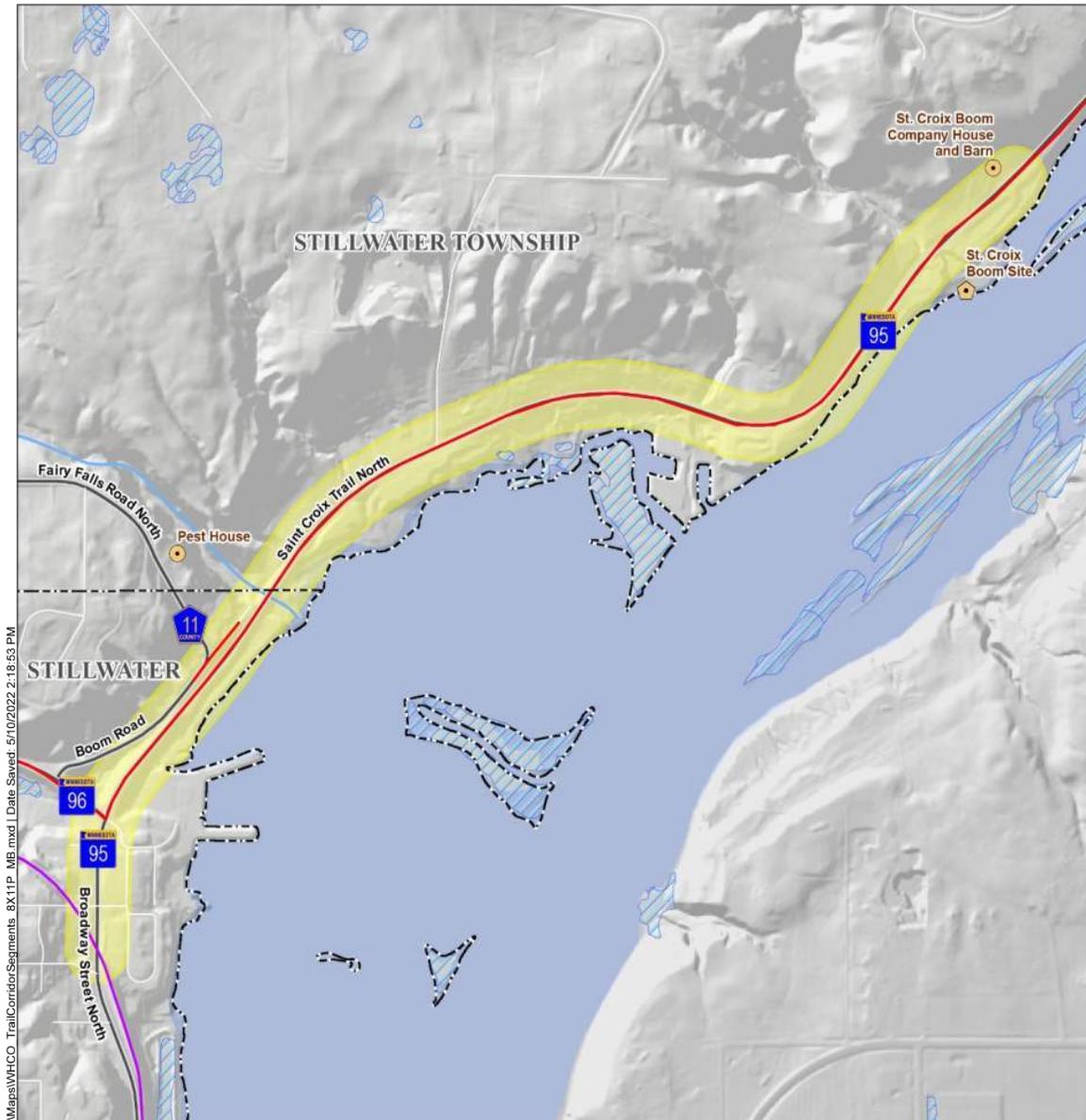
- **Cycle Clubs** – Cycle clubs offer opportunities for enthusiasts of all experience levels to bike, socialize, and have fun. Some clubs are more social, while others focus on competition and race training. Rides generally use area bike trails or low volume roads in the Middle St. Croix Valley.
- **Mountain Biking** - A popular mountain biking trail is the Valley View Trail, a 3.2-mile-long trail located in Valley View Park in Oak Park Heights. The trail is a purpose-built single-track trail and

is rated as an intermediate trail. It's a trail used for training and has over 400 feet of elevation gain over the course.

- **Snowmobile Routes and Associations**– The Washington County Star Trail is an organization that maintains, grooms, and marks 140 miles of snowmobile trails within the County. The organization is funded in part by the Minnesota Department of Natural Resources Trail Grant-in-aid Program, and by proceeds from charitable pull tab gambling within Washington County. Trails within the Middle St. Croix Valley Area include along the south side of Interstate 94, along Stagecoach Trail North up through Bayport, and a trail from Lakeland south to St. Mary's Point.
- **Cross Country Skiing and Snowshoeing** – Cross country skiing and snowshoeing are common winter activities throughout Washington County. Some of these include Pine Point Regional Park, north of the Middle St. Croix Valley, which has four-miles of groomed ski trails and an additional four-miles of multi-use trails for skiers and snowshoers alike. Brown's Creek State Trail does not have groomed ski trails but is popular for winter hiking and snowshoeing. South of the Middle St. Croix Valley, Afton State Park has 12-miles of ski trails and snowshoe trails. While most trails are for intermediate and advanced skiers, a 2.5-mile beginner loop is available.

## Regional Trail Corridor Context – Segment Maps

These interactive maps provided a visual representation of the project corridor. As illustrated in Chapter 4, these resources reveal an even more complex landscape in which to consider suitability for a regional trail. Using the information presented throughout the chapter, the maps represented in Figures 60-64 on the following pages showcase the layered resources of the project search area.



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**LOCATION MAP**

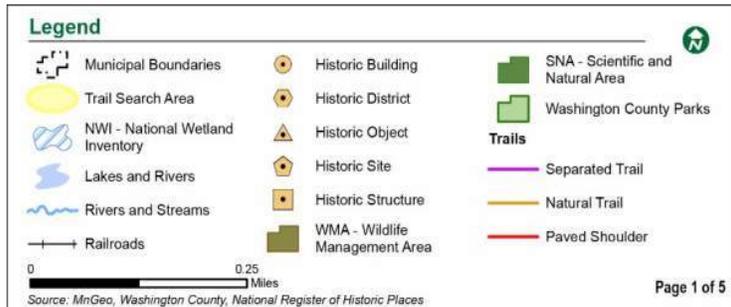


Figure 60: Middle St. Croix Regional Trail Project Search Corridor Zone 1

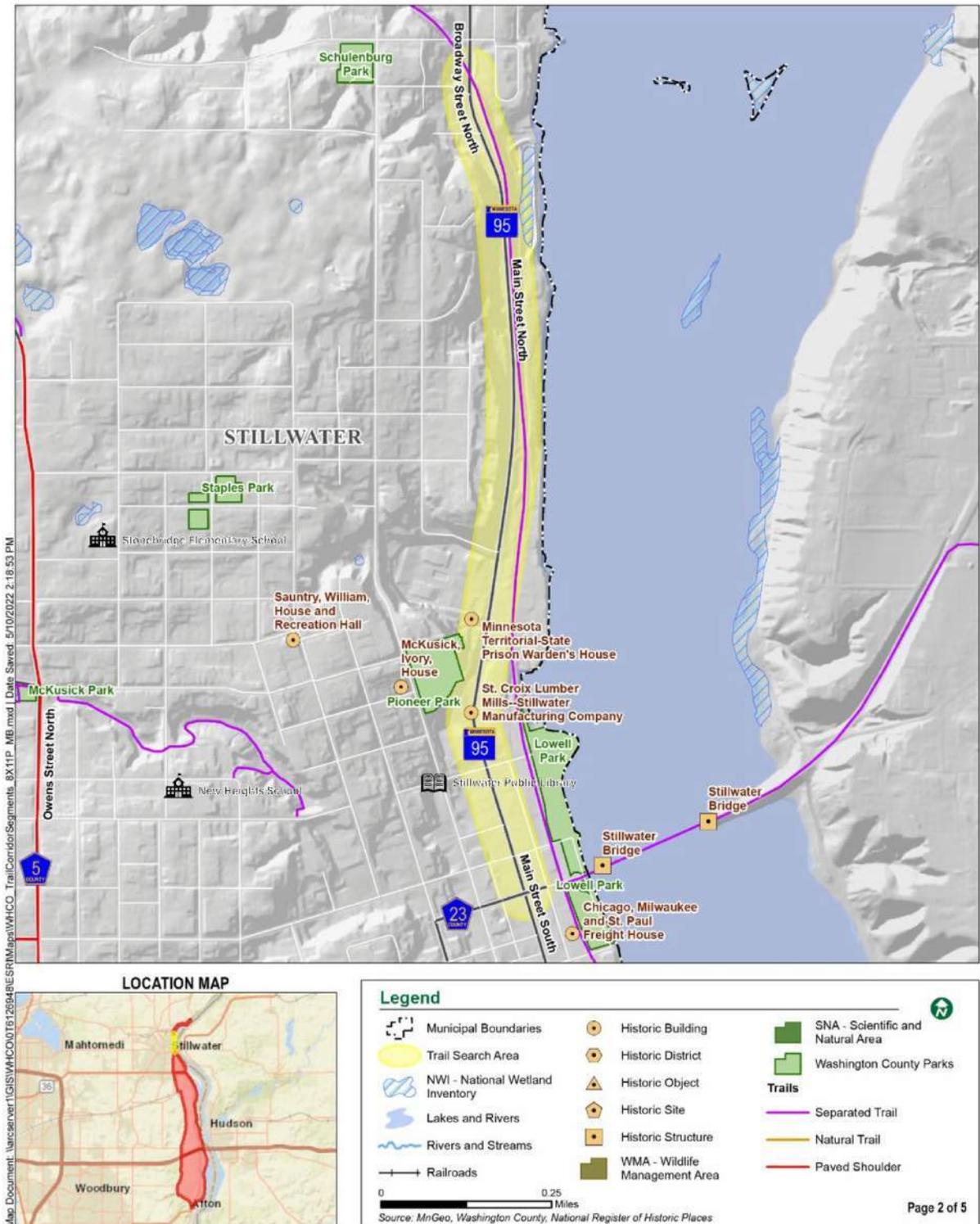


Figure 61: Middle St. Croix Regional Trail Project Search Corridor Zone 2

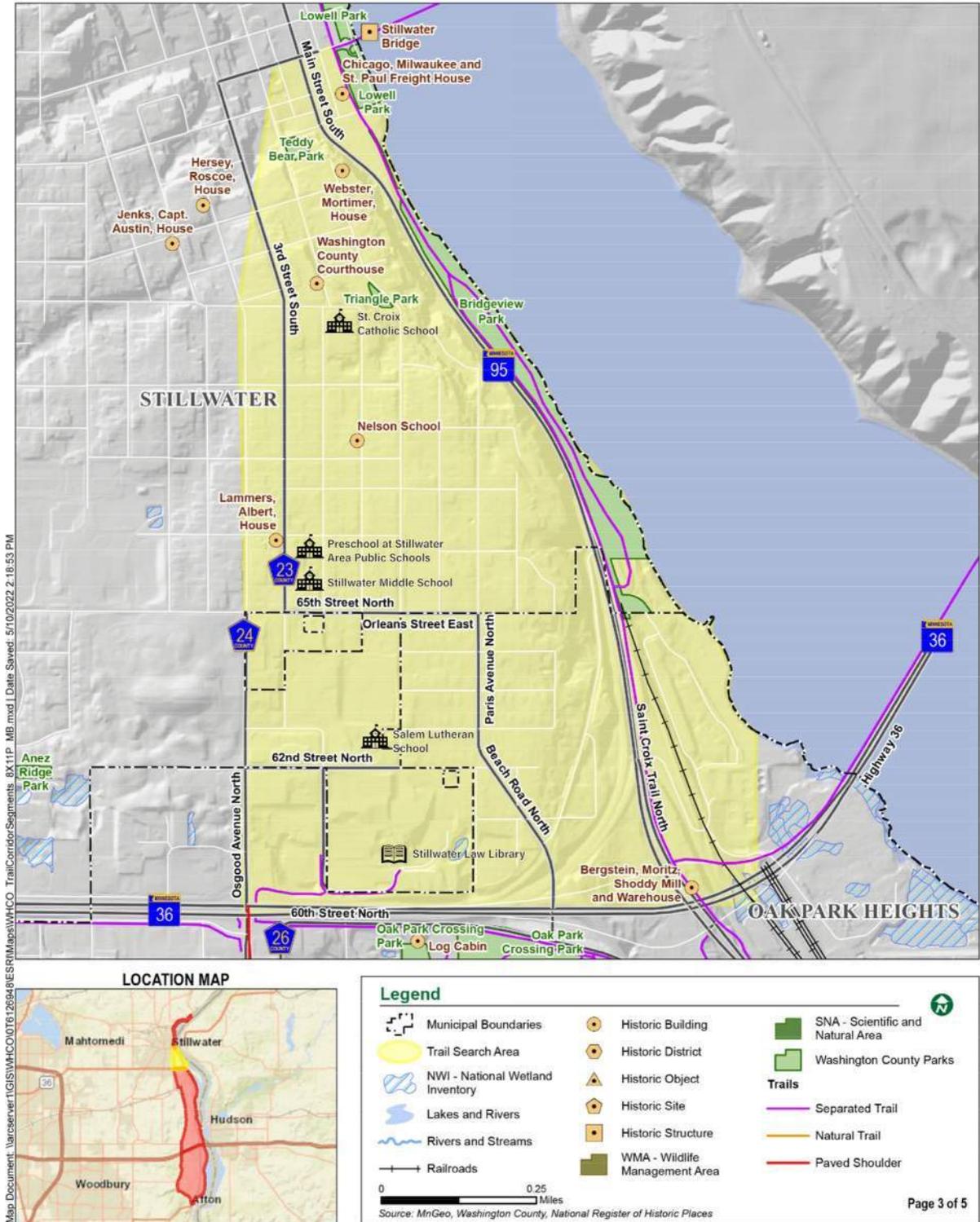
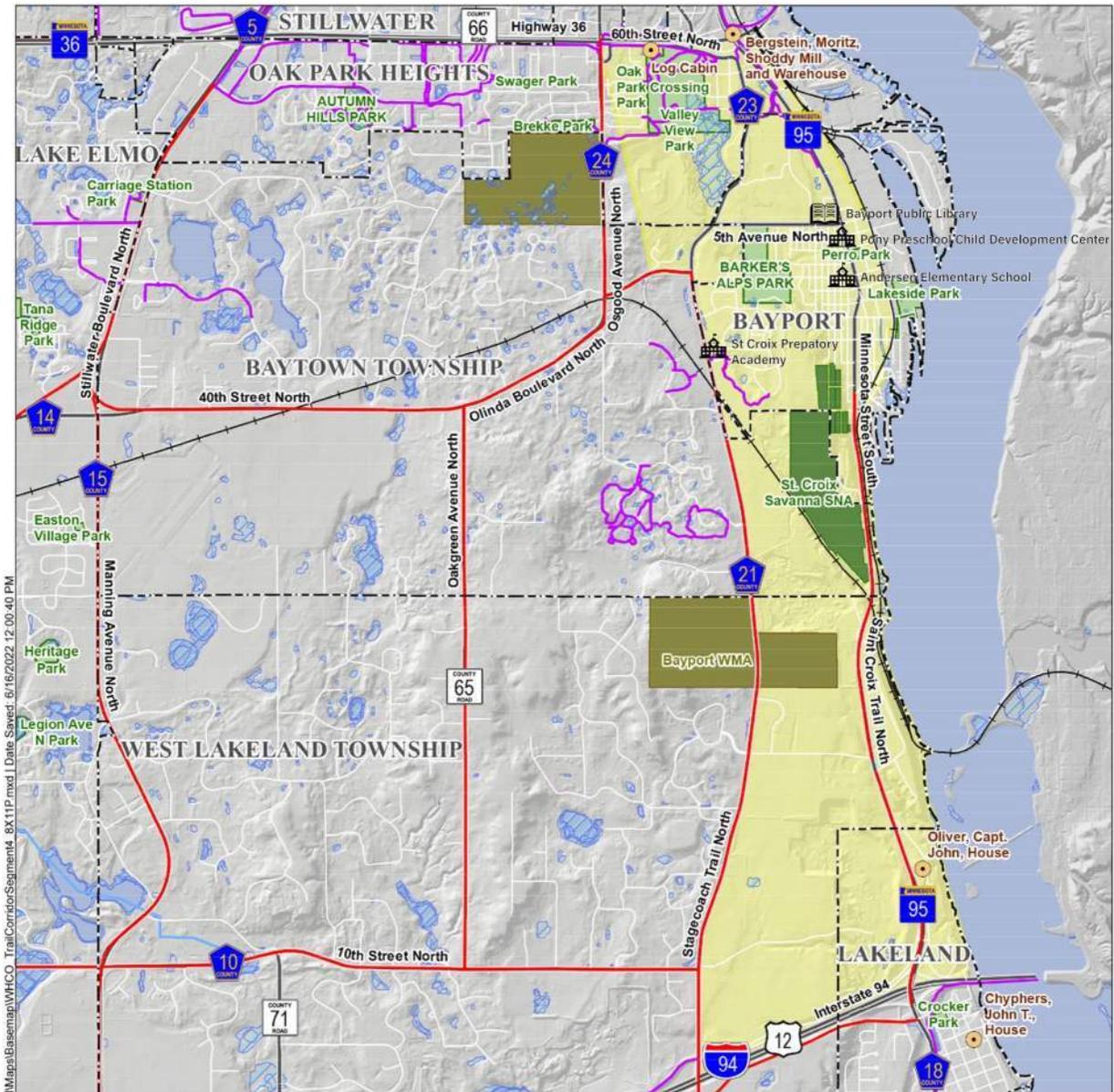


Figure 62: Middle St. Croix Regional Trail Project Search Corridor Zone 3



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**LOCATION MAP**



**Legend**

- |                                  |                                |                                   |
|----------------------------------|--------------------------------|-----------------------------------|
| Municipal Boundaries             | Historic Building              | SNA - Scientific and Natural Area |
| Trail Search Area                | Historic District              | Washington County Parks           |
| NWI - National Wetland Inventory | Historic Object                | <b>Trails</b>                     |
| Lakes and Rivers                 | Historic Site                  | Separated Trail                   |
| Rivers and Streams               | Historic Structure             | Natural Trail                     |
| Railroads                        | WMA - Wildlife Management Area | Paved Shoulder                    |

0 0.25 Miles  
Source: MnGeo, Washington County, National Register of Historic Places

Figure 63: Middle St. Croix Regional Trail Project Search Corridor Zone 4

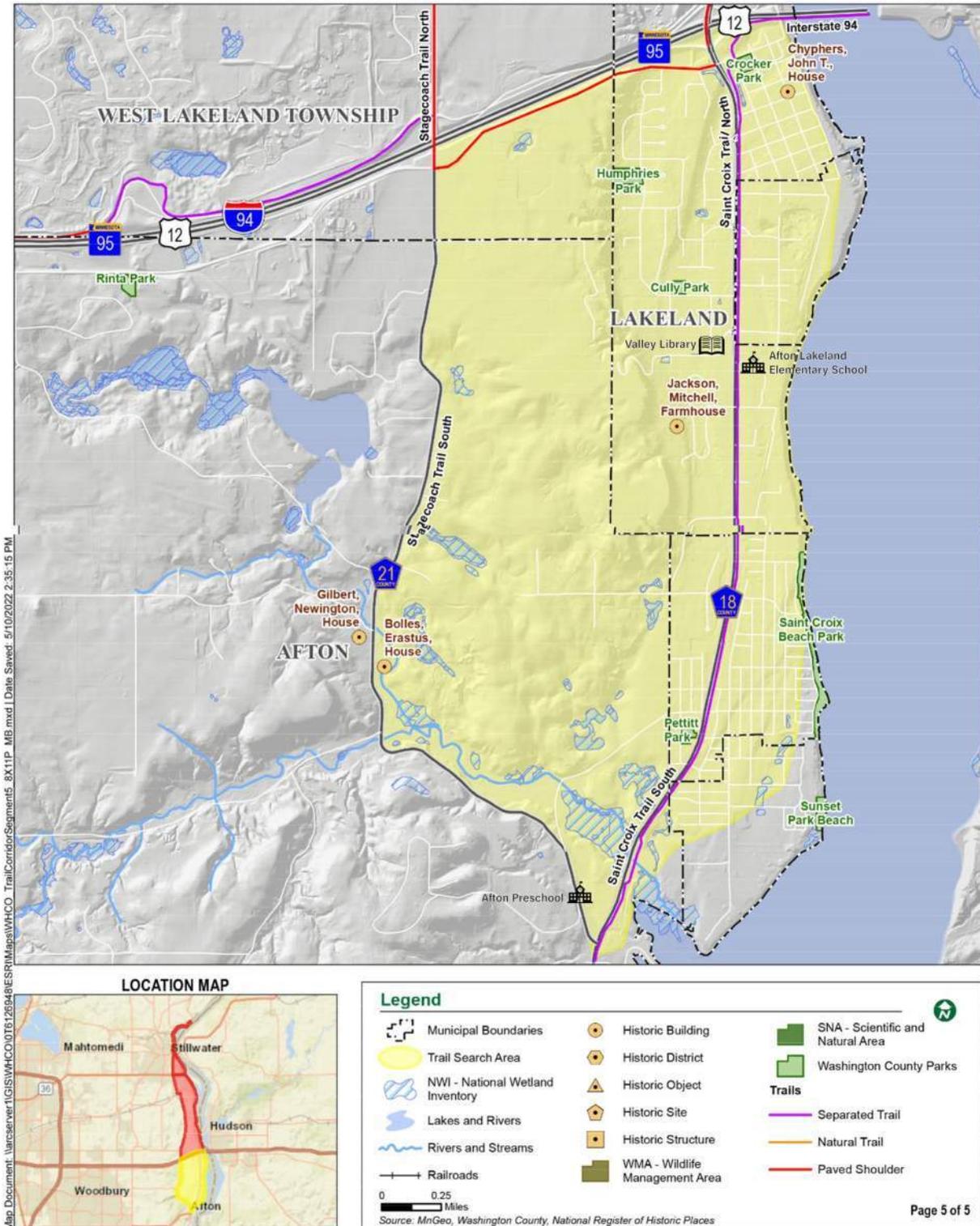


Figure 64: Middle St. Croix Regional Trail Project Search Corridor Zone 5



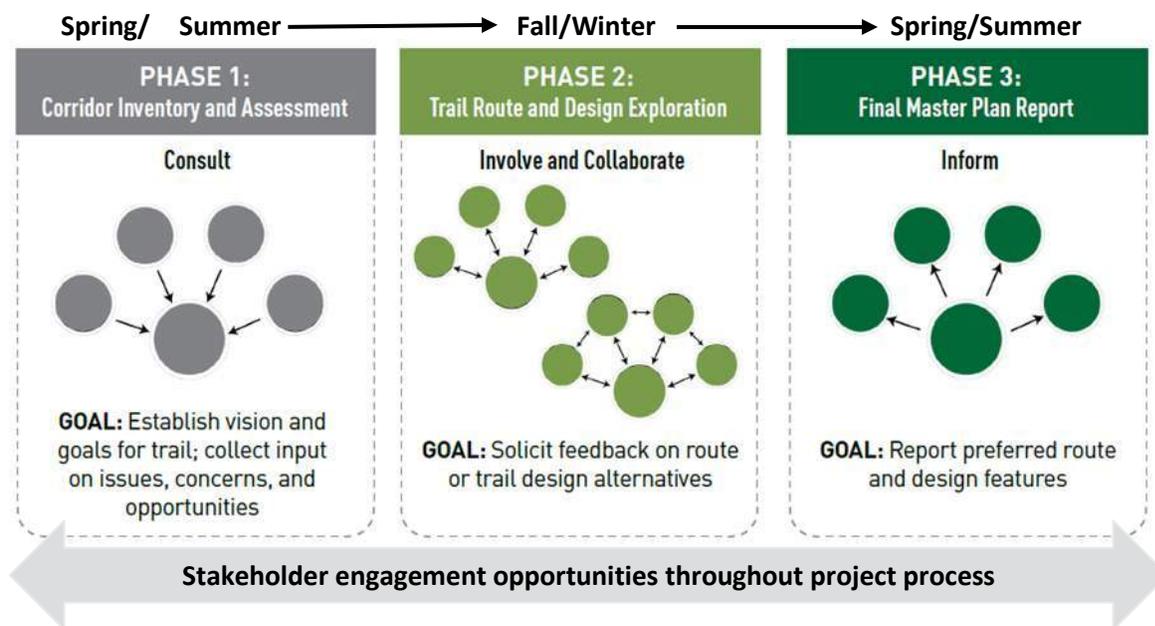
Stakeholder engagement played a key role in defining goals, developing alternatives and identifying a preferred trail alignment for the Middle St. Croix Valley Regional Trail. This chapter outlines the overall engagement strategy for both partner and public stakeholders, summarizes key outcomes from each activity, and identifies how the input has informed the master plan. *Meeting summaries and survey results can be found in **Appendices C and D**, respectively.* Stakeholder engagement followed three primary phases each with unique levels of participation depending on engagement goals and desired outcomes.

After analyzing hundreds of comments, common themes emerged. Key findings include:

- Highlight local parks and destinations
- Make connections between communities
- Explore trail "loop" opportunities/connections
- Provide views to river, where feasible
- Foster stewardship of area natural resources
- Wide trail to accommodate range of users
- Clear wayfinding, high quality/more frequent amenities

## Partner Engagement

A Technical Advisory Committee (TAC) was created for inter-agency collaboration throughout the planning process. The role of the TAC was to provide input from the perspective of their agency and act as project liaisons to respective boards/councils. TAC members were responsible for sharing relevant information, data, and technical expertise with the Project Management Team. The TAC was integral in establishing project priorities and in providing feedback on project options and alternatives.



In addition to Washington County staff representing various departments, the TAC included representatives from the following partner agencies:

- Stillwater Township
- City of Stillwater
- City of Oak Park Heights
- City of Bayport
- Bayport Township
- West Lakeland Township
- City of Lakeland
- City of Lakeland Shores
- City of Lake St. Croix Beach
- City of St. Mary's Point
- City of Afton
- Belwin Conservancy
- Washington Conservation District
- Middle St. Croix Watershed Management Organization
- Metropolitan Council
- National Park Service
- MN Department of Transportation
- MN Department of Natural Resources
- St. Croix County, WI

The TAC was engaged through all phases of project planning. Virtual meetings were the primary engagement activity. Each meeting included a presentation by project staff with updates as well as opportunities for discussion.

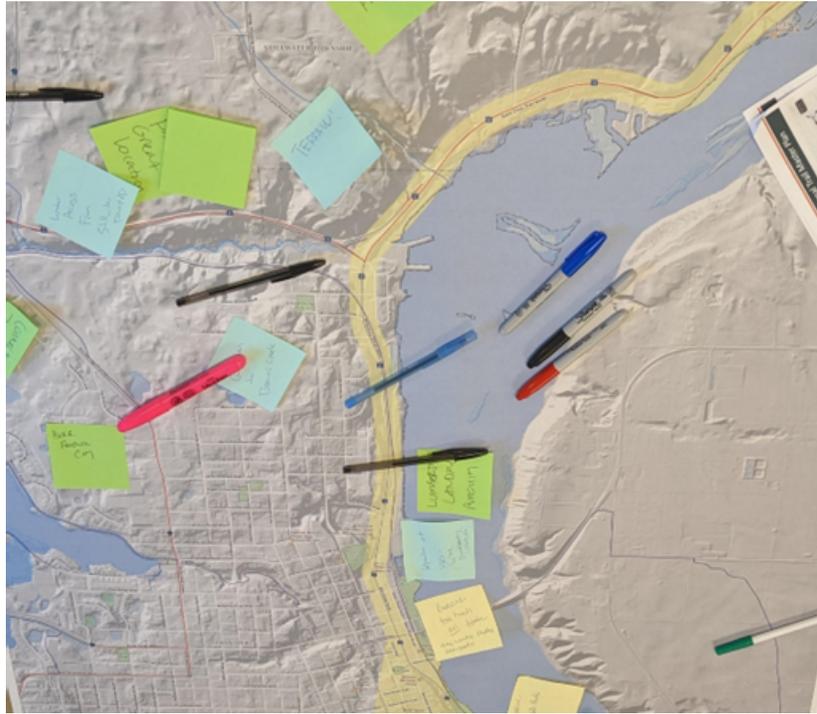


Figure 65: Comments collected during engagement event

The following tables outline the TAC meetings held as part of this planning process.

**Partner Engagement Phase 1**  
(participation level: consult)

Date	Meeting Objective	Primary Outcomes
April 20, 2022 May 19, 2022	Introduce trail search corridor and provide overview of planning process; collect feedback on area opportunities, barriers, and upcoming projects; solicit input on public stakeholders to engage at local events	TAC members shared favorite destinations in the search corridor; marked upcoming projects on interactive map; provided input on stakeholder groups and events; several TAC members provided existing agency planning documents
August 2, 2022	Project team introduced process and project goals; provided summary on public engagement to date	TAC provided feedback on project goals and evaluation measures

Table 13: Partner Engagement Phase 1; Participation level: consult

\*An initial TAC meeting was held to introduce the project to Washington County Staff. The same presentation materials and engagement opportunities were shared at this and the May 19<sup>th</sup> meeting.

**Partner Engagement Phase 2 (participation level: involve and collaborate)**

Date	Meeting Objective	Primary Outcomes
Nov. 16, 2022	Review public engagement, goals, objectives and performance measures; review cost share, operation and maintenance options, potential implementation opportunities, review potential segments	Feedback on potential trail segments and goals, objectives and performance measures.

Table 14: Partner Engagement Phase 2 (participation level: involve and collaborate)

**Partner Engagement Phase 3 (participation level: inform)**

Date	Meeting Objective	Primary Outcomes
Feb. 28, 2023	Review Evaluation Matrix results relative to Goals, objectives and performance measures and indicating viable trail route scoring	Validation of recommended long-term regional trail route, interim opportunities, and general review of evaluation methodology.
Jun 27, 2023	Review trail amenity details and master plan approval process	Feedback on proposed locations of trailheads, wayfinding, and interpretive elements. Set up the final steps.

Table 15: Partner Engagement Phase 3 (participation level: inform)

## Public Engagement

Involving and engaging with the public through community surveys, open houses, pop-up events, and listening sessions has been crucial to the formation and success of the Middle St. Croix River Valley Regional Trail Master Plan. In addition to the discussions with project partners noted in the previous section of this report, Washington County also led a process to engage stakeholders and the public throughout the project. These engagement opportunities involved small group focus groups with property owners and communities within the regional trail search corridor, in addition to the tools mentioned above. Received input has been critical to informing the recommendations in this plan.

**Public Engagement Phase 1 (participation level: consult)**

Key objectives in the first phase of public engagement were to solicit input on corridor issues and opportunities as well as feedback on what makes a high-quality trail experience. Input collected informed the project goals and identified key destinations in the search corridor. Phase 1 engagement strategies with public stakeholders included in-person pop-up events and an online survey. The online survey was promoted through County and TAC agency social media accounts.

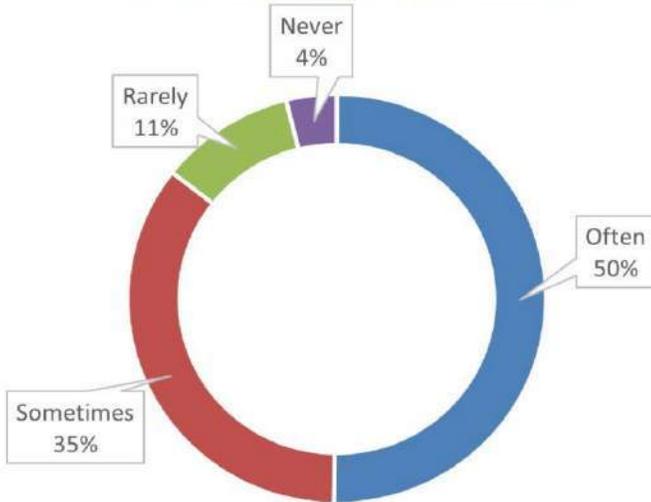
*Online Survey*

An online survey was launched on July 16, 2022, to solicit feedback on current trail use, desired activities for the future regional trail, and key characteristics of a high-quality trail experience. A total of 1,103 responses were received by the time the survey closed on September 30, 2022. Survey responses indicated a public consensus that safety and accessibility, a quiet place to connect with nature, well maintained trails, and well-marked and connected trails are top priorities for a future regional trail in the Middle St. Croix Valley Search Corridor. A summary of key findings is available in Figure 66 below and a full breakdown of survey results can be found in **Appendix D**.

# MIDDLE ST. CROIX VALLEY REGIONAL TRAIL ENGAGEMENT

TOTAL RESPONSES: 1,103

## HOW OFTEN DO YOU USE REGIONAL/MULTI-USE TRAILS



## HOW HAS THE PANDEMIC CHANGED YOUR TRAIL USE?

- MORE TIME FOR LEISURE ACTIVITIES
- OUTSIDE MORE TO MAINTAIN GOOD MENTAL HEALTH
- NOT AS WORRIED ABOUT COVID IF OUTDOORS
- INDOOR ACTIVITIES WERE LIMITED
- A REASON TO LEAVE THE HOUSE

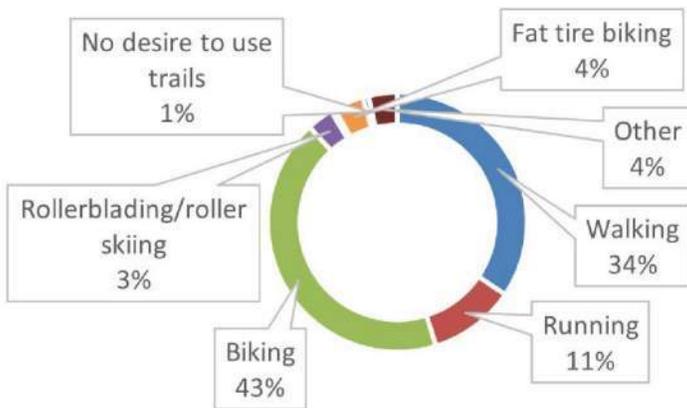
### TOP PRIORITIES:

- SAFETY & ACCESSIBILITY
- QUIET, SCENIC PLACE TO CONNECT WITH NATURE
- WELL MAINTAINED, SMOOTH TRAIL
- WELL MARKED AND CONNECTED TO OTHER ATTRACTIONS

### TOP DESTINATIONS TO WALK/BIKE TO:

- RIVER & WATERFRONT AREAS
- DOWNTOWN STILLWATER
- AFTON
- BAYPORT

## WHAT IS YOUR MOST COMMON OR DESIRED ACTIVITY ON REGIONAL/MULTI-USE TRAILS?



### RESULTS FROM CONTINUUM EXERCISE:

- PREFERENCE FOR A DESTINATION/INDIRECT TRAIL VS. A CONNECTOR/DIRECT TRAIL
- NO PREFERENCE FOR A NEW TRAIL CORRIDOR VS. EXISTING TRAILS
- PREFERENCE FOR RIVER VIEWS VS. UPLAND/RURAL VIEWS
- PREFERENCE FOR NATURAL AREAS VS. DOWNTOWN CONNECTIONS

Figure 66: Infographic with key feedback from survey



Figure 67: Photo of Elected Officials Work Session, June 29, 2022

*Engagement Events*

The public engagement plan for the project was designed with the goal of spreading awareness of the master planning process, while also providing the community with opportunities to share concerns and desires for the future trail. The information and materials shared at events helped attendees orient themselves to the search corridor and provided resources for attendees to stay informed on project happenings, including the project schedule and website.

Date	Event	Primary Outcomes
June 9/15, 2022*	Learn to Ride Events, Landfall and Cimarron Mobile Home Communities	Establish contact with underrepresented groups in the search corridor and better understand barriers to trail use and desires in future trail amenities.
June 29, 2022	Elected Officials Work Session, Washington County Government Center	Discuss the schedule, process, and goals. Opportunity to discuss concerns, constraints and opportunities at the local level with other elected officials.
July 14, 2022	Lumberjack Days Ice Cream Social, Stillwater	Share information on the project and the planning process. Provide opportunity to share opportunities and challenges for project consideration.
July 27, 2022	Pop-Up Event at Selma’s, Afton	
August 2, 2022	Heritage Days, Lake St. Croix Beach	
August 3, 2022	Washington County Fair	

Table 16: List of Engagement Events for Corridor Selection and Planning



Figure 68: Imagery from community engagement events

## Public Engagement Phase 2 (participation level: involve and collaborate)

Key objectives for phase 2 engagement were to provide a project overview, including presentation of the goals developed through phase 1, share a summary of the inventory and assessment of the search corridor, and solicit feedback on development of potential trail alignments. Phase 2 engagement activities with public stakeholders included one-on-one meetings with stakeholders, an open house, and in-person pop-up event, and listening sessions.

### Engagement Events

Date	Event	Primary Outcomes
Sept. 14, 2022	Open House #1	Identification of desired destinations or routes within the search area; feedback on project goals; paired topic considerations.
October 3, 2022	Bayport Farmer's Market	Input gathered on the trail corridor and key destinations within the area.
October 6, 2022	She Ascends Hiking Group *	Feedback on desired trail amenities and barriers to trail use for women.
Various dates	Stakeholder Listening Sessions: Oak Park Heights, Stillwater, Bayport, Afton, Lower St. Croix Valley Alliance, Belwin Conservancy, Lower St. Croix Watershed, Andersen Windows, Xcel Energy, MnDNR, MnDOT	Shared project information and gathered input on specific areas and issues specific to the stakeholder.

Table 17: List of engagement events and listening sessions with the public

\* She Ascends is a Minnesota-based hiking and wellness nonprofit organization that empowers women through hiking and wellness events.

**Public Engagement Phase 3 (participation level: inform)**

Phase 3 engagement strategies with public stakeholders included an open house as well as presentations with communities in the search corridor. The purpose of the Phase 3 Engagement activities was to share the route alignment and plan recommendations. These conversations included showing how the recommendations reflected the project goals/objectives and the public input we heard during earlier phases of the engagement process.

*Engagement Events*

<b>Date</b>	<b>Event</b>	<b>Primary Outcomes</b>
April 13, 2023	Open House #2	Consensus on recommended route with some desire for different local connections with community downtown districts and more exploration of major road crossings.
Various dates	Municipal Support Request Meetings: Afton, Stillwater, Oak Park Heights, West Lakeland Township, Middle St. Croix Valley Watershed, Belwin Conservancy, Lakeland Shores	Washington County staff presented project process and plan recommendations. Requested municipal support in the form of resolutions or letters of support

*Table 18: List of engagement events and listening sessions with the public in Phase 3*

# Part 3: Evaluation & Route Recommendation

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## 6. Route Alignment Evaluation

Careful effort was taken to ensure that all potential regional trail routes within the search corridor were considered during this planning process. To obtain more critical review from local jurisdictions throughout the process, the zones defined in previous chapters were used to easily explore suitability of each trail segment. After an initial round of review by the Project Management Team (PMT), Technical Advisory Committee (TAC), and agency partners, non-viable routes were eliminated. The remaining routes were evaluated using a matrix of goals and objectives to generate suitability scores for the remaining routes. These findings informed the recommended regional trail route presented to the TAC and the community.

### Key Takeaways

- An evaluation matrix was used to quantify opportunities and tradeoffs among viable trail segments for each project goal.
- Routes A, B, and C were identified based on segments that scored well with both the evaluation matrix and the “boots on the ground” inspection.
- A long-range, aspirational regional trail route was identified, along with a recommendation for an interim route that utilizes existing infrastructure.

## Search Corridor Overview

Multiple routes were identified early in the planning process as having the potential to connect current and future trail users with existing services and destinations. These routes were evaluated using goals and objectives developed with stakeholder input that was gathered earlier in the planning process. Several of the initial routes identified were eliminated because of misalignment with one or more of the project goals. Remaining routes were extensively evaluated using data relating to project goals and objectives.



*Figure 69: Project Team evaluating potential trail routes.*

## Evaluation Process

In considering potential routes in each zone, the project team reviewed terrain, existing barriers, publicly owned right-of-way, city boundaries, and proximity to existing natural, cultural, and historic resources.

The first stage of evaluations included a comprehensive exploration of potential routes within the search area, known as the “spaghetti-on-the-wall” approach. The Project Management Team (PMT) asked for feedback on significant challenges or fatal flaws from the Advisory Committee (TAC). Opportunities between new and existing trails centered around implementation, simplifying the experience for the end user, and recommending additional features through the master plan. Some identified segments were removed from regional trail consideration for failing to meet the goals and objectives criteria developed through the collaboration of the PMT, TAC, and the public. The adjacent graphic (Figure 70) shows how this review resulted in several proposed routes being omitted.



*Figure 70: Segments removed during Phase 1 review shown with a red X.*

The remaining 34 potential trail segments were brought forward to the next phase of analysis and were scored using an evaluation matrix. This evaluation matrix applied a data-based assessment of alternative routes, with the process oriented around project goals, objectives, and performance measures.

## Segment Analysis

Composite scores were captured for each potential trail segment according to the five project goals identified previously in this report. Performance measures identified specific and observable ways to measure success of each of the objectives. Scores for each segment were calculated using the metrics from the 39 goal-supporting performance measures listed in Chapter 1. A score between 1 and 4 (with 4 being the highest possible score) was given to all potential trail segments for each of the performance measures included as part of the safety goal. Those scores were then weighted and compiled to provide insight on each segment's alignment with project goals.

For example, the bar graph in Figure 72 shows how composite scoring was used to compare potential trail segments 1-10. Each project goal was assigned a color to provide a visual understanding of the strength of any segment in meeting a specific project goal. The purpose of this section is to capture the logic and tradeoffs the project team considered during the segment evaluation phase (Phase 2) of this project.

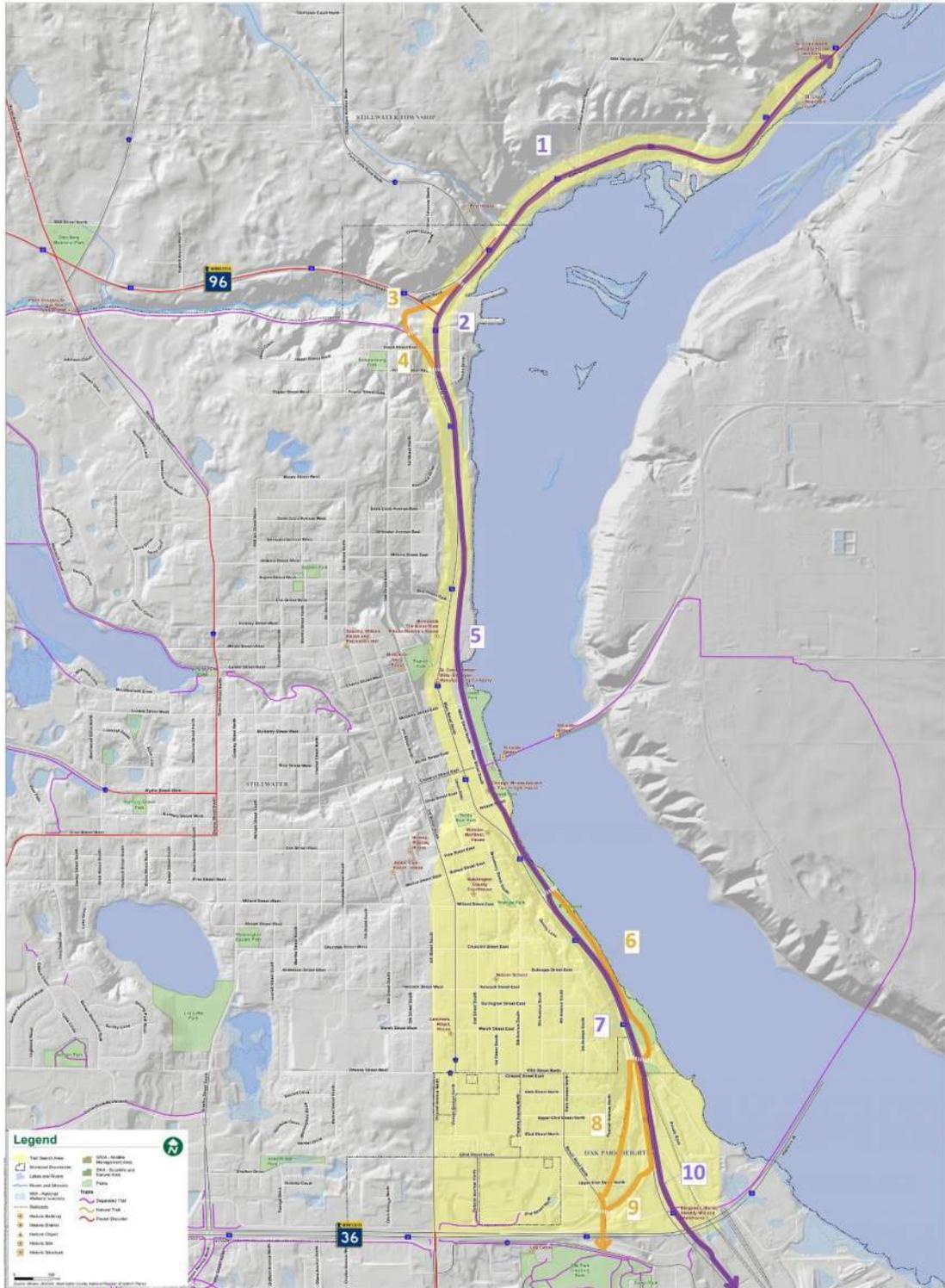


Figure 71: Map showing trail segments 1-10 being evaluated as a part of Zones 1-3

## Zone 1-3 Evaluation

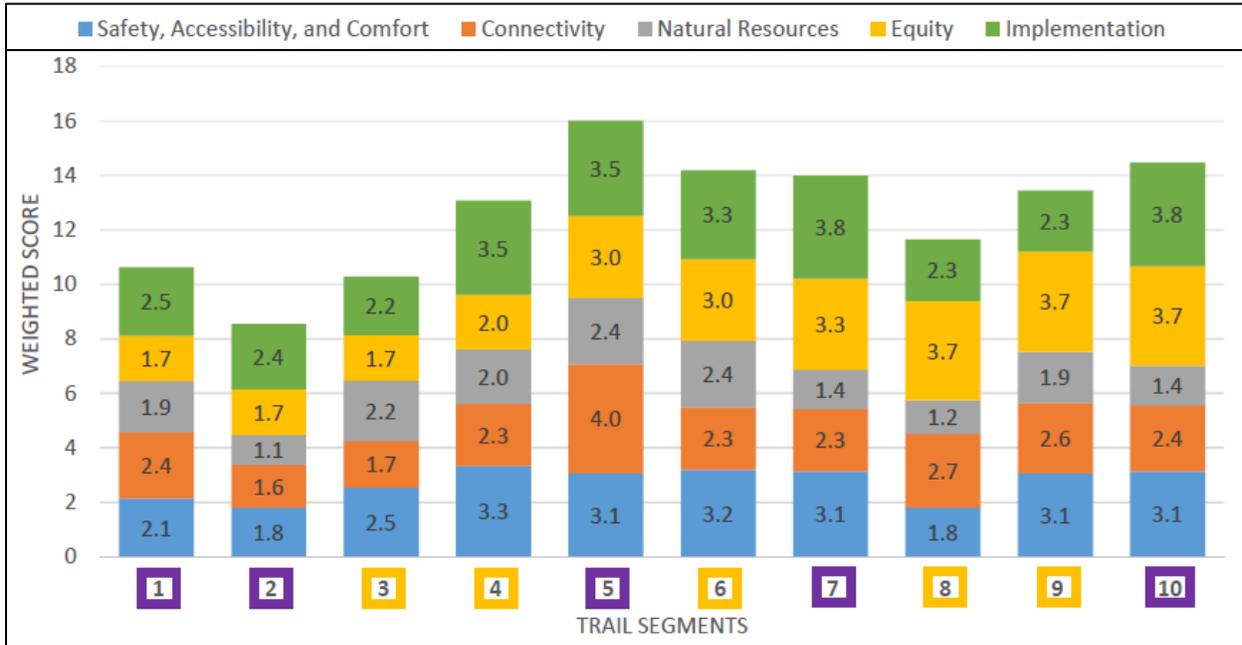


Figure 72: Weighted cumulative scoring for potential trail segments 1-10. Segments along the TH95 corridor are outlined in purple while connector segments are outlined in yellow.

### Zone 1 – St. Croix Boom Site to Brown’s Creek Trail & TH 95

Zone 1 covers the 0.7-mile segment of TH 95 from the St. Croix Boom Site to Brown’s Creek Trail. This section is a scenic, curving highway route in a corridor with historic properties and regional destinations, high in connectivity value but restricting opportunity for positive impact.

### Zone 2 – Brown’s Creek State Trail & TH 95 to Stillwater Lift Bridge

Zone 2 includes the 3-mile stretch through Stillwater consisting predominantly of downtown development. Possible regional trail alignments are compatible with existing state and local trails, including the Brown’s Creek State Trail that parallels TH 95 and the river. Zone 2 can connect and provide wayfinding opportunities to several historically significant areas, commercial destinations and is easily accessible through publicly available parking.



Figure 73: View of Historic Lift Bridge from public parking along Brown’s Creek State Trail. (Source: Google Street view)

### **Zone 3 – Stillwater Lift Bridge to TH 36**

Zone 3 focuses on destinations between the Stillwater Lift Bridge and TH 36. This route forks into two parallel and comparable segments near the Oasis Café on TH 95, analyzed as segments 6 & 7. Figure 72 shows the nearly identical scores for these segments, with segment 7 being closer to TH 95 and segment 6 offering better access to the river and natural resources.

Segments 9 and 10 traverse the same quarter mile north of TH 36. Segment 10 would follow the existing trail parallel to TH 95 and function as a direct route to Oak Park Heights under the TH 36 overpass, segment 9 would create a new path within MnDOT right-of-way, up a hill linking TH 95 with Beach Road North before crossing an existing bridge over TH 36. This route would require trail users to cross over TH 95 from east to west. The route would provide incredible views of the river, the St. Croix Crossing Bridge, and the King Plant stack. It also takes trail users within a short ride to the existing overlook on Lookout Trail.



*Figure 74: View of TH 36 St. Croix Crossing Bridge and King Plant.*



*Figure 75: View of TH 36 St. Croix Crossing Bridge from an historic overlook.*

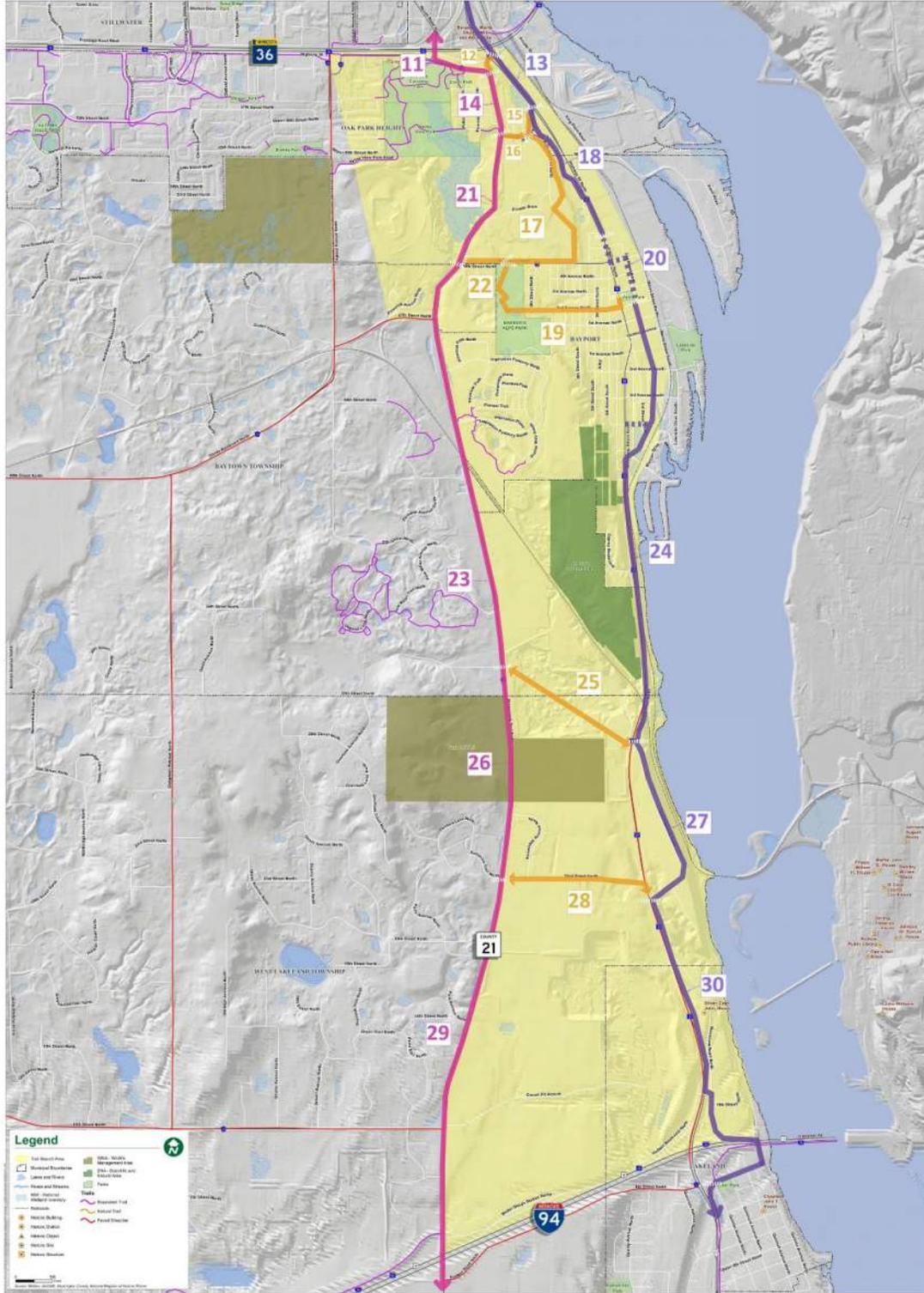


Figure 76: Map showing trail segments 11-30 being evaluated as a part of Zone 4

## Zone 4 Evaluation

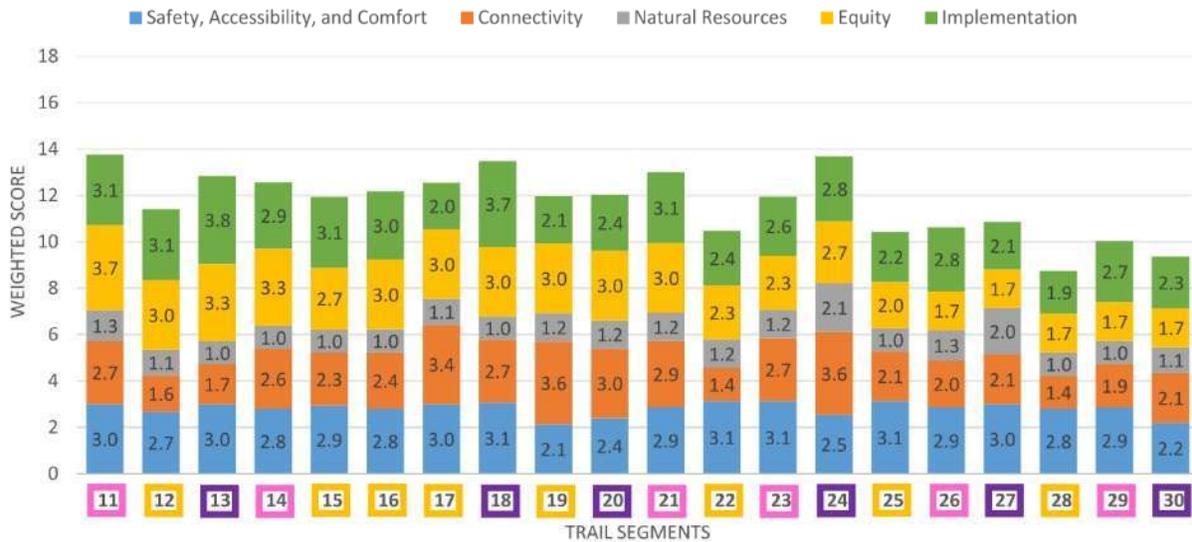


Figure 77: Weighted cumulative scoring for potential trail segments between Oak Park Heights and Lakeland. Segments along the TH95 corridor are outlined in purple, those along Stagecoach Trail are pink, and connector segments are outlined in yellow.

### Zone 4 – TH 36 to I-94

Zone 4 comprises the 5.5 miles between Oak Park Heights and Lakeland and consists of two primary route options, CR 21 and TH 95. This zone is comprised of 20 possible segments. Loop and connector segments between the primary routes were also evaluated.

Segments 15 and 16 include an existing trail along 56<sup>th</sup> Street North and provide a connection between Stagecoach Trail North and TH 95. Another segment within Bayport provides an opportunity to educate regional trail users about water quality by routing patrons along a portion of Perro Creek, a stream emanating from Perro Pond in Valley View Park and winding through Bayport before flowing into the St. Croix River. Aligning with segment 20 on Figure 76, Perro Creek appears as a ditch section alongside 3<sup>rd</sup> Avenue N by Perro Creek Park and continues along the east side of the park following 2<sup>nd</sup> Street N.

Segment 27/30 proposes a trail along Quant Avenue and connects into an existing sidewalk under the I 94 bridge over the St. Croix River. Improvements to this stretch would require coordination with MnDOT.



Figure 78: Stagecoach Trail southbound corridor character. (Source: Google Street view)



Figure 79: Bayport area Girl Scouts helping plant a native buffer along Perro Creek. (Source: eastmetrowater.org)

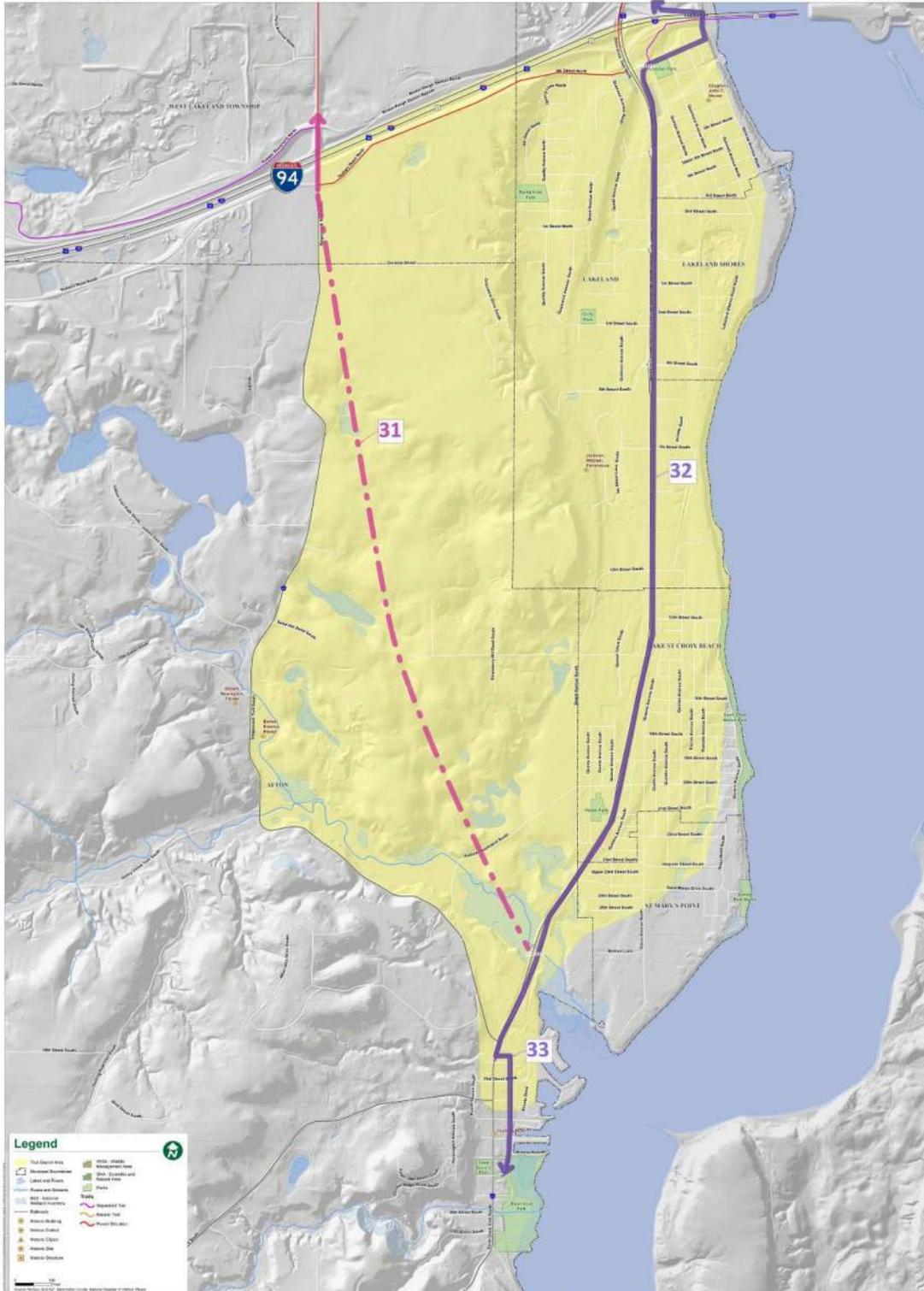
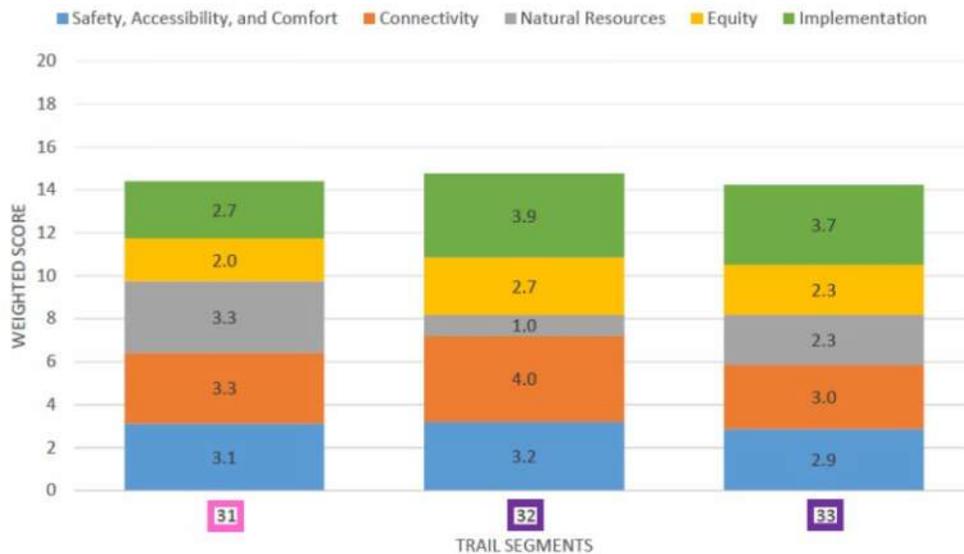


Figure 80: Map showing trail segments being evaluated as a part of Zone 5

## Zone 5 Evaluation



*Figure 81: Weighted cumulative scoring for potential trail segments between I94 and Afton. Segments along the TH95 corridor are outlined in purple, those along Stagecoach Trail and through the Belwin Conservancy are pink.*

### Zone 5 – I-94 to Downtown Afton

Zone 5 focuses on areas of the regional trail search corridor that include the existing Afton to Lakeland Trail from Interstate 94 to Downtown Afton. Segment 32 includes the existing trail that runs parallel to CR 18/St. Croix Trail S. Segment 31 offers a potential trail connection to I 94, the Lucy Winton Bell Athletic Fields Complex, and the larger Belwin Conservancy land holdings. Segment 33 represents a terminus for this regional trail master plan in coordination with the city of Afton.



*Figure 82: Existing Lakeland to Afton Trail along Pike Ave. S. in Afton, MN. (Source: Google Street view)*



*Figure 83: Belwin Conservancy Oxbow Trails (Source: Belwin.org).*

## Route Alternative Identification

After evaluating the trail segments, remaining routes were identified that could provide a contiguous trail through the search corridor.

### Route Alternative A

#### Adjacent Roadways:

TH 95 → 5<sup>th</sup> Ave N → 2<sup>nd</sup> St N → TH 95 →  
Quant Ave → TH 95 → CR 18 (St Croix Trl S)

Route A offers a regional trail experience through Downtown Bayport using existing trails from the St Croix Boom Site. However, pinch points from right-of-way constraints pose challenges in maintaining the desired width, comfort, and safety of a regional trail. To address these issues, an alternative alignment along 2<sup>nd</sup> St N alongside Perro Creek was considered. This alignment allows trail users to interact with the creek and recent restoration efforts, combining the regional trail experience with a unique work around.

Strengths of this route include its proximity to the river, connections to industrial and commercial businesses, and access to Perro Creek Park. After rejoining TH 95, the route continues onto Rivercrest Road N, passing an existing park and ride station, before following the existing Afton-Lakeland Trail. South of Steamboat Park, the plan proposes a new trail along the levee, providing multiple opportunities to connect back to County Road 21 to align with the St. Croix Valley Regional Trail Master Plan.

While the 2<sup>nd</sup> St N alignment avoids downtown arterial traffic on TH 95 and provides potential partnerships with Bayport and the Middle St. Croix Watershed Management Organization to improve water along Perro Creek, it does route trail users through a residential neighborhood. Additional constraints along TH 95 south of Bayport, including lack of right-of-way and challenging topography would result in infrastructure too narrow or costly for comfortable use. Thus, Route A was not recommended as the regional trail route. Instead, this plan encourages bike/ped improvements along 2<sup>nd</sup> St N and TH 95 as part of future improvement projects.

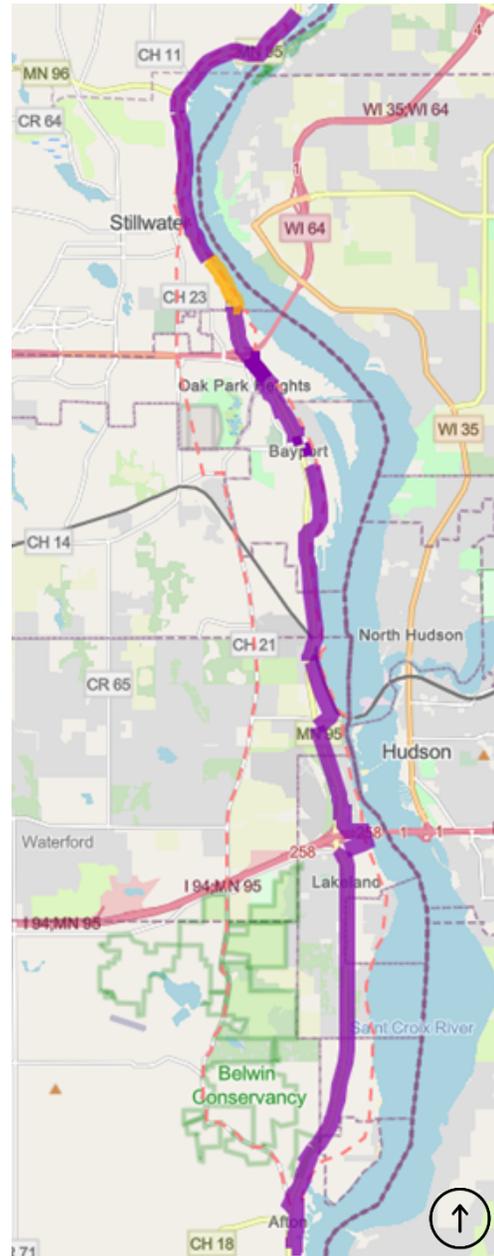


Figure 84: Regional Trail Route A - generally following the Highway 95 corridor.

### Route Alternative B

#### Adjacent Roadways:

TH 95 → New Trail to Beach Rd →  
Stagecoach → Belwin Conservancy

Route B follows the TH 95 corridor and connects the St. Croix Boom Site to Brown’s Creek State Trail and Stillwater’s Lookout Trail before crossing TH 36 using an existing bridge on Beach Road N. This bridge meets regional trail standards, making it suitable for development as a regional trail meeting ADA requirements. This alignment offers convenient trail access to residents near Lily Lake and CR 24, including those living in affordable housing developments, enhancing accessibility for low-income members of the community. Moreover, it is near the Washington County Government Center, connecting essential services such as employment assistance, economic support, and crisis/intervention resources.

South of TH 36 Route B briefly follows an existing trail along CR 23 (Frontage Rd/60<sup>th</sup> St), which transitions into CR 21 (Stagecoach Trail N). Being a County-owned facility, this segment allows greater flexibility for implementing and developing the regional trail along with adjacent support amenities.

Beyond I 94, Route B offers an exciting experience through the Belwin Conservancy, providing trail users with a unique and separated-from-traffic journey. Exploring the various habitats in Belwin gives users access to exceptional recreational facilities and beautiful natural areas not found elsewhere in Washington County. Additionally, this route creates a 10-mile loop opportunity, allowing users to connect with the existing Afton-Lakeland Trail near Afton, Lake St Croix Beach, or Lakeland. For these reasons, Route B has been identified as the recommended regional trail route.

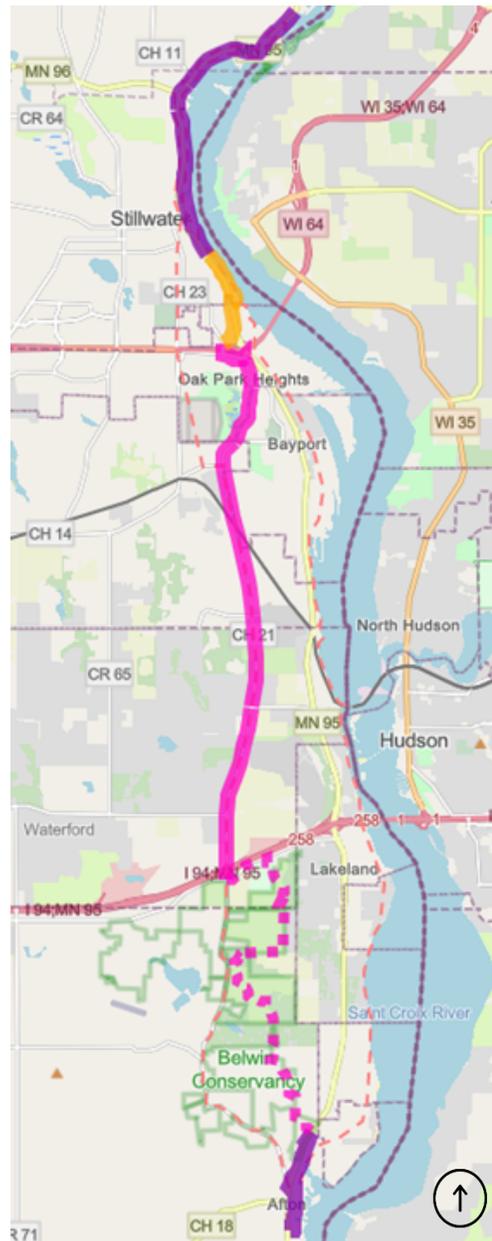


Figure 85: Regional Trail Route B - generally following the Stagecoach Trail corridor.

### Route Alternative C

#### Adjacent Roadways:

TH 95 → CR 21 (56<sup>th</sup> St) → Stagecoach → CR 18 (St Croix Trl S)

Route C leverages portions of both Routes A and B, using the same northern alignment from the St. Croix Boom Site through Stillwater before switching to Stagecoach Trail on the north side of Bayport along CR 21 (56<sup>th</sup> Street N). to rely predominantly on existing infrastructure. From there the trail would continue along Stagecoach Trail over I-94 where it would connect with Hudson Road S. to link with the existing Afton-Lakeland Trail, an action that will require coordination with MnDOT.

Route C would follow the Afton-Lakeland trail along CR 18 (St Croix Trail S.) south of I-94 to the same terminus as that noted in Route A. This trail meets regional trail standards in most locations, is well used and has connectivity with neighborhoods and businesses near the St. Croix River. Because of the reasons noted above, Route C was selected as an interim route for the Regional Trail System.



Figure 86: Existing path along 56th Street N. on the north edge of Bayport. (Source: Google Street view)

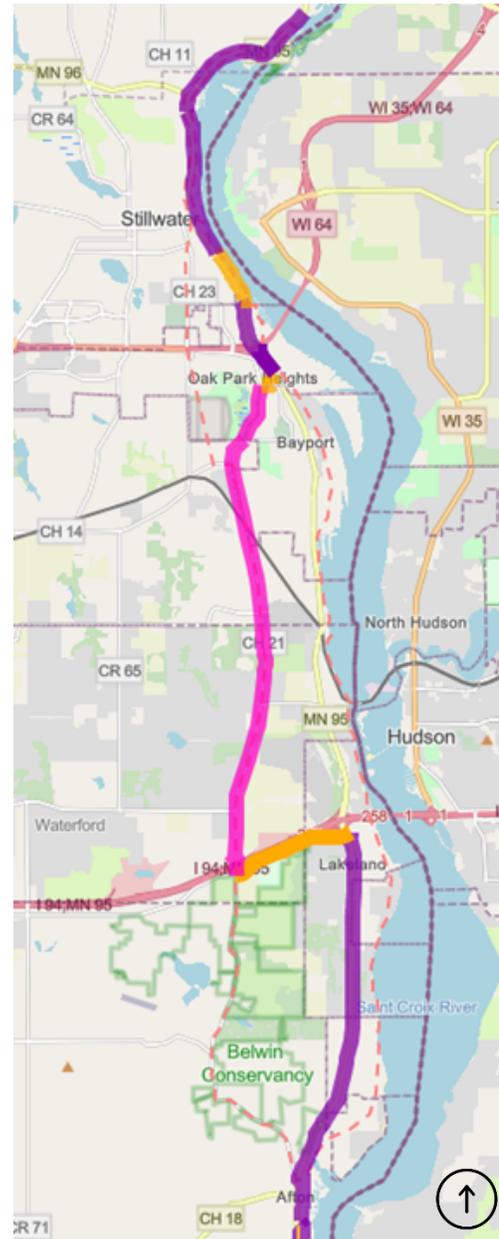


Figure 87: Regional Trail Route C – Leveraging portions of both the TH 95 and Stagecoach Trail corridors.

## Development Concept: Route Recommendation

Given the numerous implementation constraints noted for several of the potential trail segments comprising Route A, the project team focused on the opportunities and limitations of Routes B and C.

“How can we leverage opportunities from existing infrastructure while also establishing an ambitious vision for the future,” was a fundamental mantra throughout the planning process. This was partially to ensure that the recommendation of this master plan remained fiscally responsible while acknowledging the limitations of existing development in this nearly 15-mile search corridor. One creative strategy was to designate interim segments and routes. This would result in existing trail segments being included as the regional route until preferred long-range segments can be constructed. With many variables and timelines that could impact the construction of segments like the TH 95 and Beach Road connection as well as the Belwin Conservancy alignment, this strategy would allow stakeholders to realize benefits from the interim regional trail while logistics for the future regional trail are worked out.

To take advantage of existing infrastructure, the project team recommended Route C for designation as an interim regional trail. For long-range regional trail designation, the project team recommended proceeding with Route B, which differs from Route C by developing a new

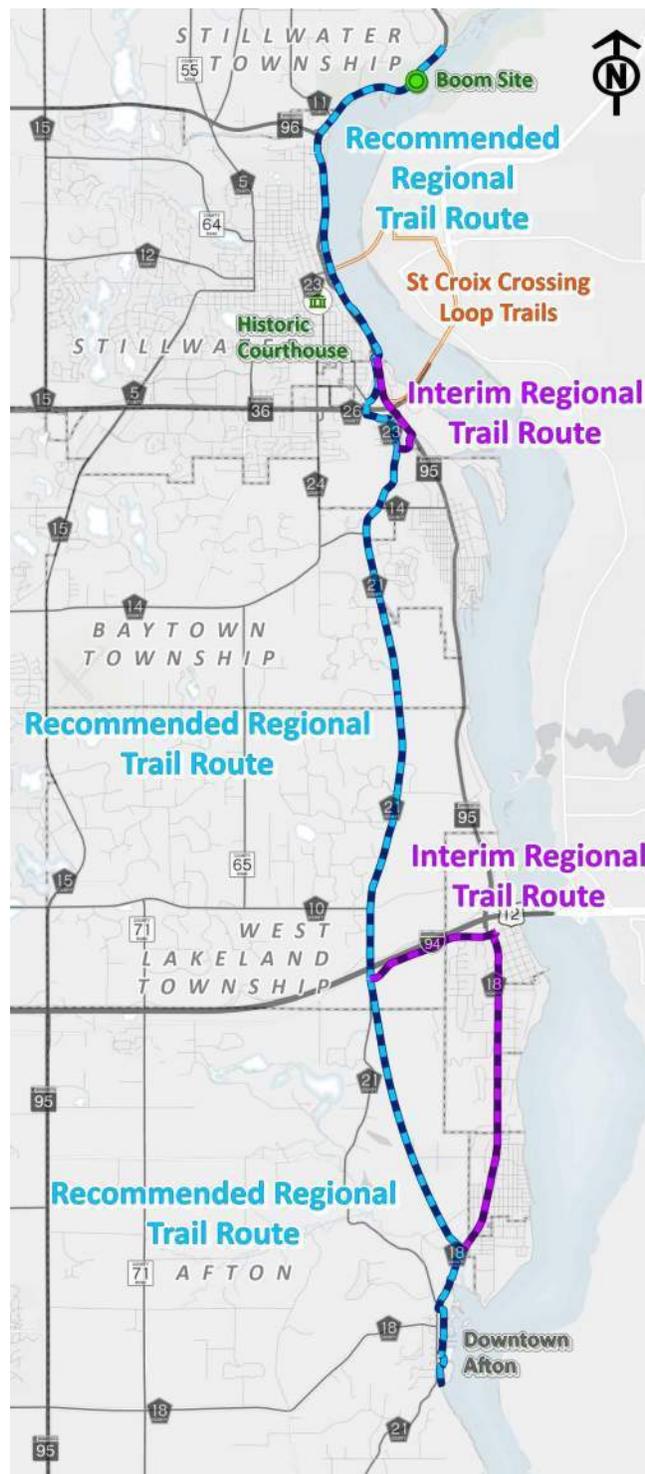


Figure 88: Middle St Croix Valley Regional Trail Master Plan Route

segment at Beach Road to cross over TH 36. This route also includes development of a trail spine through the Belwin Conservancy that will provide patrons with a wholly unique experience in the network.

The specific route through Belwin Conservancy property is currently undetermined. Implementation and alignment details will be assessed as part of future preliminary design study/phases. This master plan provides the direction needed to continue coordination with Belwin Conservancy and other stakeholders on development of this segment of the regional trail system.



Figure 89: Enlargement Comparison of Routes B (Blue) & C (Pink)

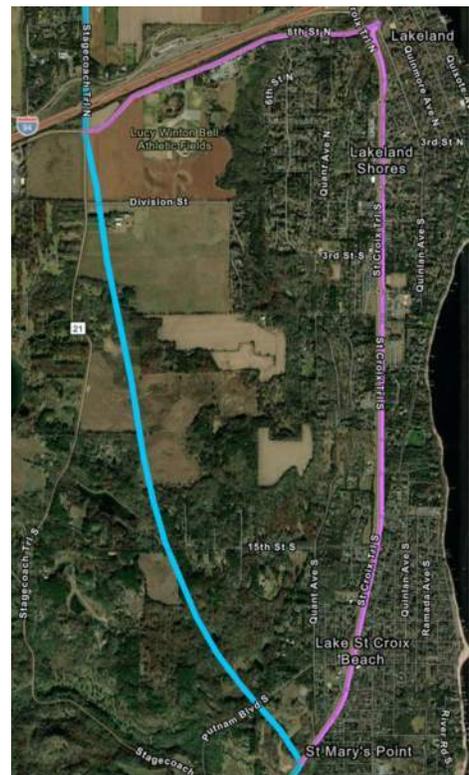
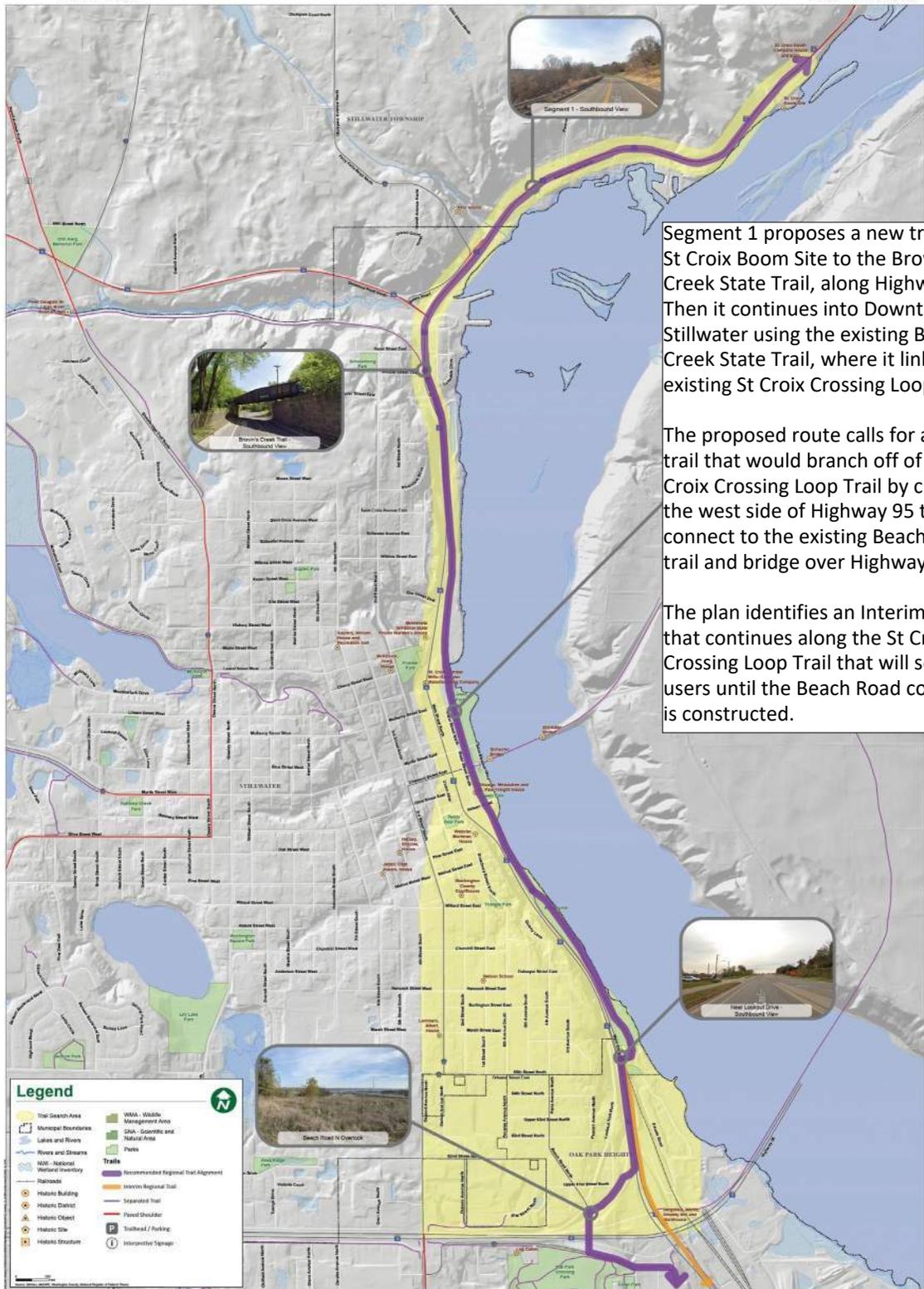


Figure 90: Enlargement Comparison of Routes B (Blue) & C (Pink)

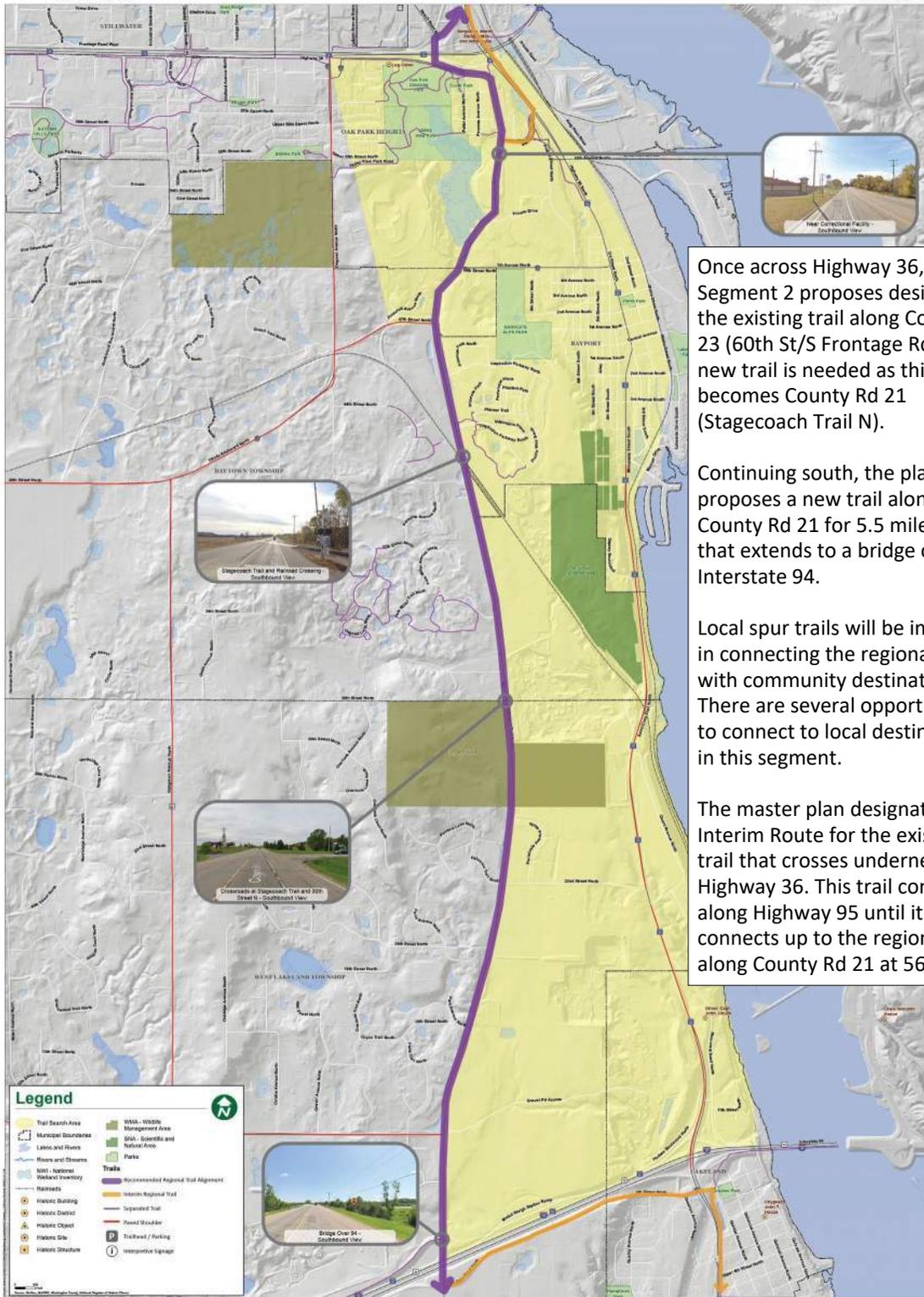


Segment 1 proposes a new trail from St Croix Boom Site to the Browns Creek State Trail, along Highway 95. Then it continues into Downtown Stillwater using the existing Browns Creek State Trail, where it links to the existing St Croix Crossing Loop Trail.

The proposed route calls for a new trail that would branch off of the St Croix Crossing Loop Trail by crossing to the west side of Highway 95 to connect to the existing Beach Road trail and bridge over Highway 36.

The plan identifies an Interim Route that continues along the St Croix Crossing Loop Trail that will serve trail users until the Beach Road connection is constructed.

Figure 91: Recommended Regional Trail Alignment and Interim Regional Trail Segments



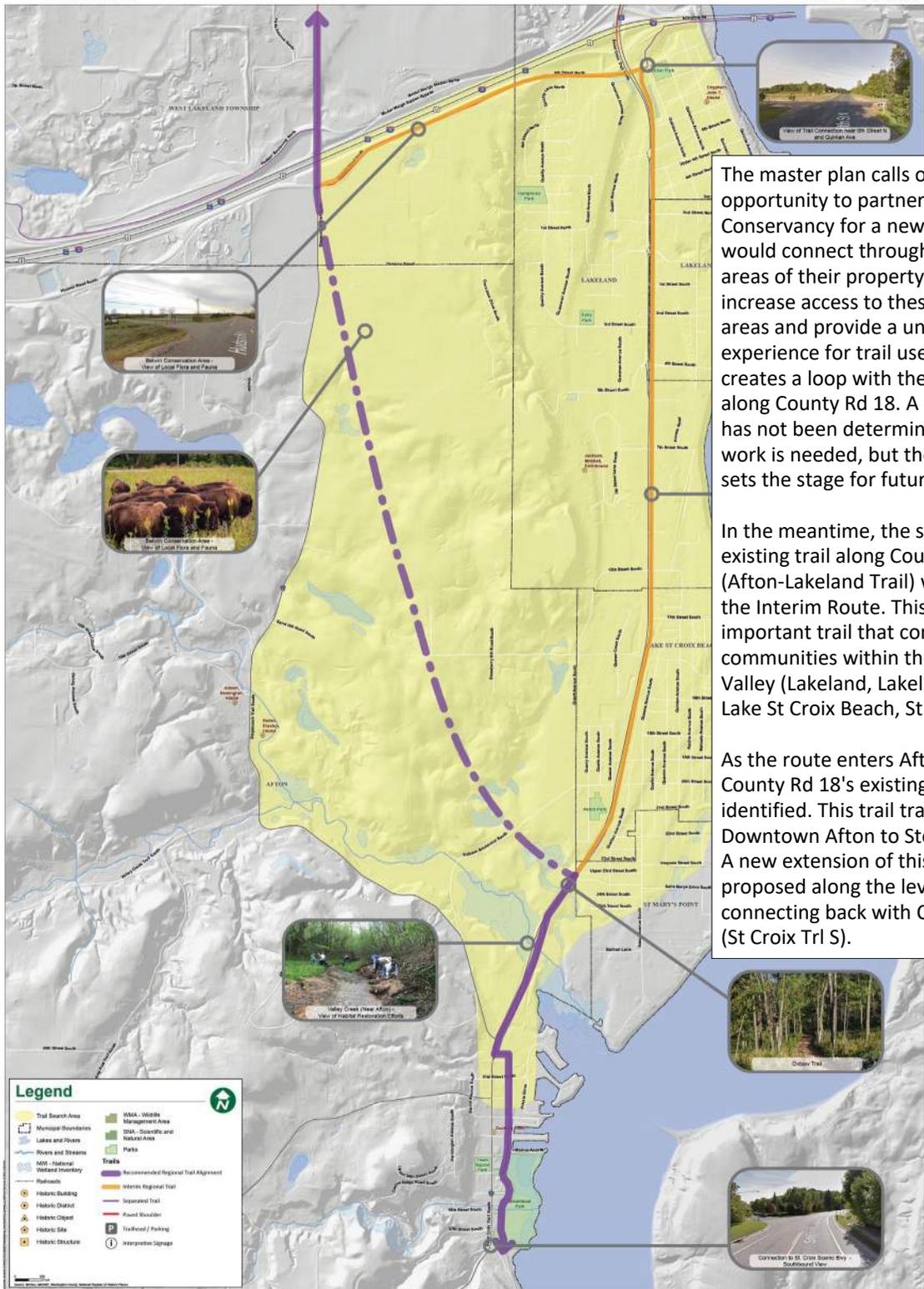
Once across Highway 36, Segment 2 proposes designating the existing trail along County Rd 23 (60th St/S Frontage Rd). A new trail is needed as this road becomes County Rd 21 (Stagecoach Trail N).

Continuing south, the plan proposes a new trail along County Rd 21 for 5.5 mile stretch that extends to a bridge over Interstate 94.

Local spur trails will be important in connecting the regional route with community destinations. There are several opportunities to connect to local destinations in this segment.

The master plan designated an Interim Route for the existing trail that crosses underneath Highway 36. This trail continues along Highway 95 until it connects up to the regional route along County Rd 21 at 56th St N.

Figure 92: Recommended Regional Trail Alignment and Interim Regional Trail Segments



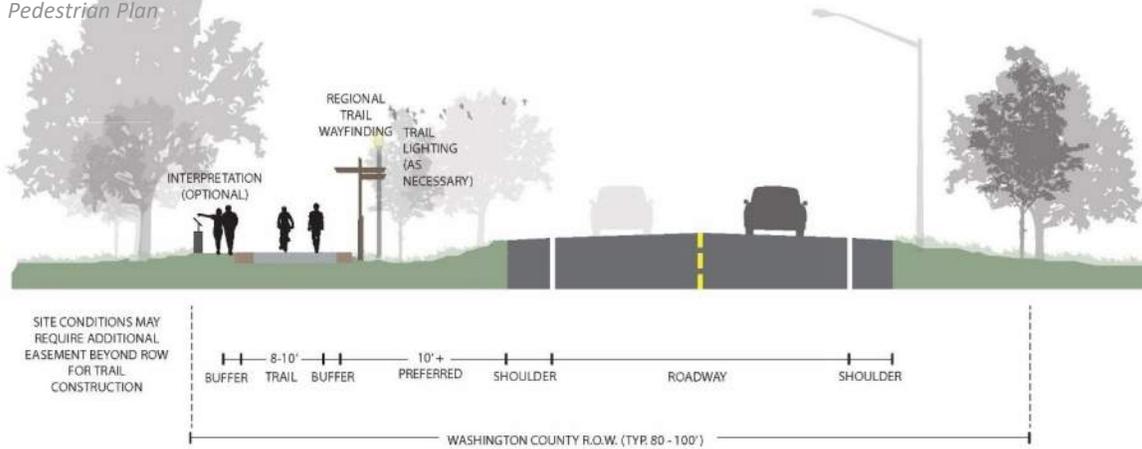
The master plan calls out an opportunity to partner with Belwin Conservancy for a new trail that would connect through different areas of their property. This would increase access to these natural areas and provide a unique experience for trail users, as it creates a loop with the existing trail along County Rd 18. A specific route has not been determined. Additional work is needed, but the master plan sets the stage for future discussions.

In the meantime, the stretch of existing trail along County Rd 18 (Afton-Lakeland Trail) will serve as the Interim Route. This is an important trail that connects several communities within the St Croix Valley (Lakeland, Lakeland Shore, Lake St Croix Beach, St Mary's Point).

As the route enters Afton, the County Rd 18's existing trail is identified. This trail travels through Downtown Afton to Steamboat Park. A new extension of this trail is proposed along the levee, before connecting back with County Rd 21 (St Croix Trl S).

Figure 93: Recommended Regional Trail Alignment and Interim Regional Trail Segments

*Figure 94: Washington County standard trail dimensions and layout, Source: MOVE Washington County Bike and Pedestrian Plan*



## Implementation

It is anticipated that the regional trail will be implemented in stages, with the construction of various stages driven by available funding and local factors, such as timing of adjacent roadway improvements, and public desire to expand the regional trail system. Until the corridor is fully developed, gaps in the regional trail will exist. However, the ultimate trail geometry will attempt to meet the county regional trail standards of a 10-foot-wide (minimum) paved surface, separate from any adjacent roadway.

The development and implementation of unconstructed trail segments and upgrading of certain trail segments to regional trail standards will require additional design phases beyond the master planning phase. These activities typically include the preparation of final construction documents, additional property and natural resource analysis, final cost estimates, city staff review, trail-way cooperative agreements, and public meetings.

At this stage in the planning process, only a general timeline of implementation can be offered.

The first phase of recommendations includes development estimated to occur within five years.

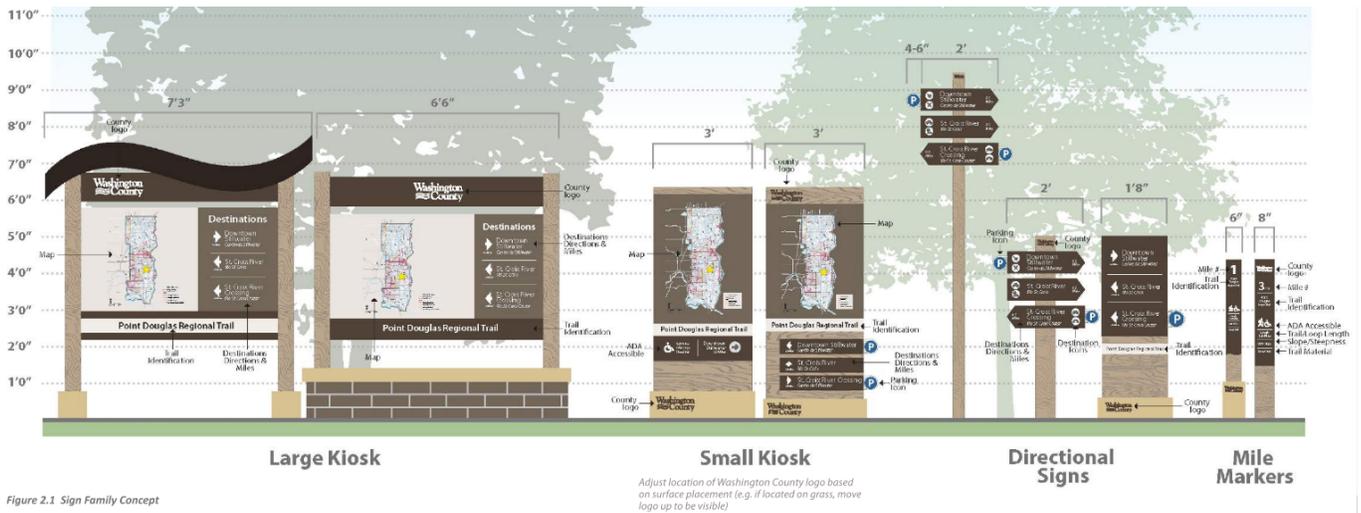
- Segment 3 - Unbuilt segments of trail along the levee in Downtown Afton

The second phase lists development estimated to occur over the next five to ten years

- Segment 2 - Unbuilt segments of trail along CR 21, from TH 36 to I94

The final phase lists development recommendations anticipated to occur ten years and beyond. Improvements that require major easements/acquisitions fall into this phase since they are considered contingent.

- Segment 1 - Unbuilt segments of trail north of Brown's Creek State Trail (to St Croix Boom Site)
- Segment 1 - Unbuilt segments of trail to connect St Croix Crossing Loop Trail with Beach Rd overpass (within MnDOT property) and TH 95 crossing
- Segment 3 - Unbuilt segments of trail within Belwin Conservancy
- Improvements to existing segments of trail (as needed)



MOVE Washington County Wayfinding Plan (2021)

## Trail Amenities

Availability of maintained trail amenities was one critical item noted in survey responses. These amenities include features like shade, benches, drinking fountains, fix-it stations, lighting and signage; wayfinding and interpretive. It also includes parking near trailheads and kiosks to help patrons orient themselves and explore opportunities. The recommended route includes initial identification of parking that may support trailhead or kiosk operations – or that could be constructed in support of new regional trail facilities. Additional features should be determined based on available right of way, proximity to other trail amenities along the route and in consideration of patron needs. Further coordination should occur between Washington County, MnDOT and communities during the design process. Figures 95-97 show recommended locations for trail amenities.

### Wayfinding/Direction Signage/Kiosk

The Middle St. Croix Valley Regional Trail will develop wayfinding and interpretive signage based on other Washington County regional trail signage and in coordination with other regional trail plans. By coordinating these efforts signage will provide consistent visual identity elements users can rely on for guidance. Location maps will be installed at key decision points with information about the trail, local connections and sights and other community and regional facilities. Locations for these maps as well as kiosks will be identified during the design process.

Wayfinding signage will be used along the trail to guide trail users to noteworthy sites and services. Spacing should factor points of decision relative to destinations and should be installed according to a detailed signage plan that will be developed during the design process.

### *Interpretive Signage*

The Middle St. Croix Valley contains several sites of historic or natural significance. It also contains several overlooks providing stellar scenic vistas. A plan for these interpretive signs will be developed during the design process to coordinate branding and interpretation efforts along the regional trail route. Several noteworthy locations along the corridor are noted in the following maps.

### *Pedestrian Lighting*

Survey responses indicated a preference for ample lighting at critical points along the regional trail; particularly at trailheads, kiosks and rest areas. Lighting was a key factor affecting the comfort of trail users and whether they feel safe using facilities. Desired lighting, proximity to electrical service and available existing lighting will be considered during the design process to develop a plan allowing for this desired trail feature.

### *Fix-it Station/Water Fountain*

Few water fountains are available along the regional trail search corridor. Those that are align with businesses and service facilities near Downtown Stillwater or parks in Oak Park Heights, Bayport and Afton. Water service lines are available along much of the proposed route to provide potable water opportunities for trail patrons. Fix-it stations should also be considered along the trail to support users who may run into issues with their bikes or other gear. If electrical is available nearby these could also integrate cell-charging capabilities to further support trail users.

### *Miscellaneous Amenities*

Accommodations should be made for amenities along the trail to evolve in the future as they have in the past. For example, Xcel Energy has a program that provides solar powered charging units (USB) integrated with benches for non-profit organizations. Programs like these might be a possibility for some of the more remote locations on existing and future Washington County trails.

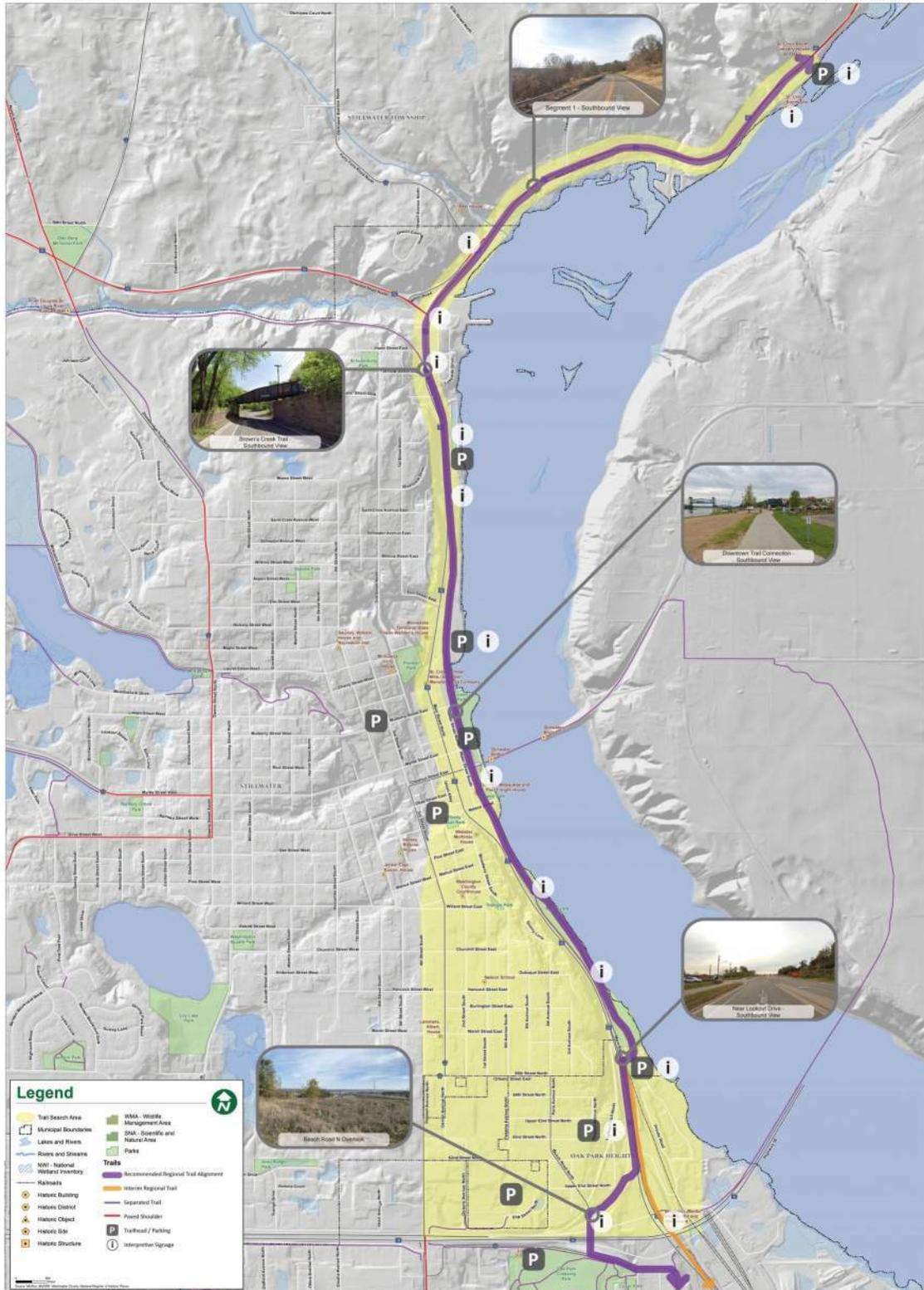


Figure 95: Potential trail amenities and wayfinding opportunities along the Regional Trail network

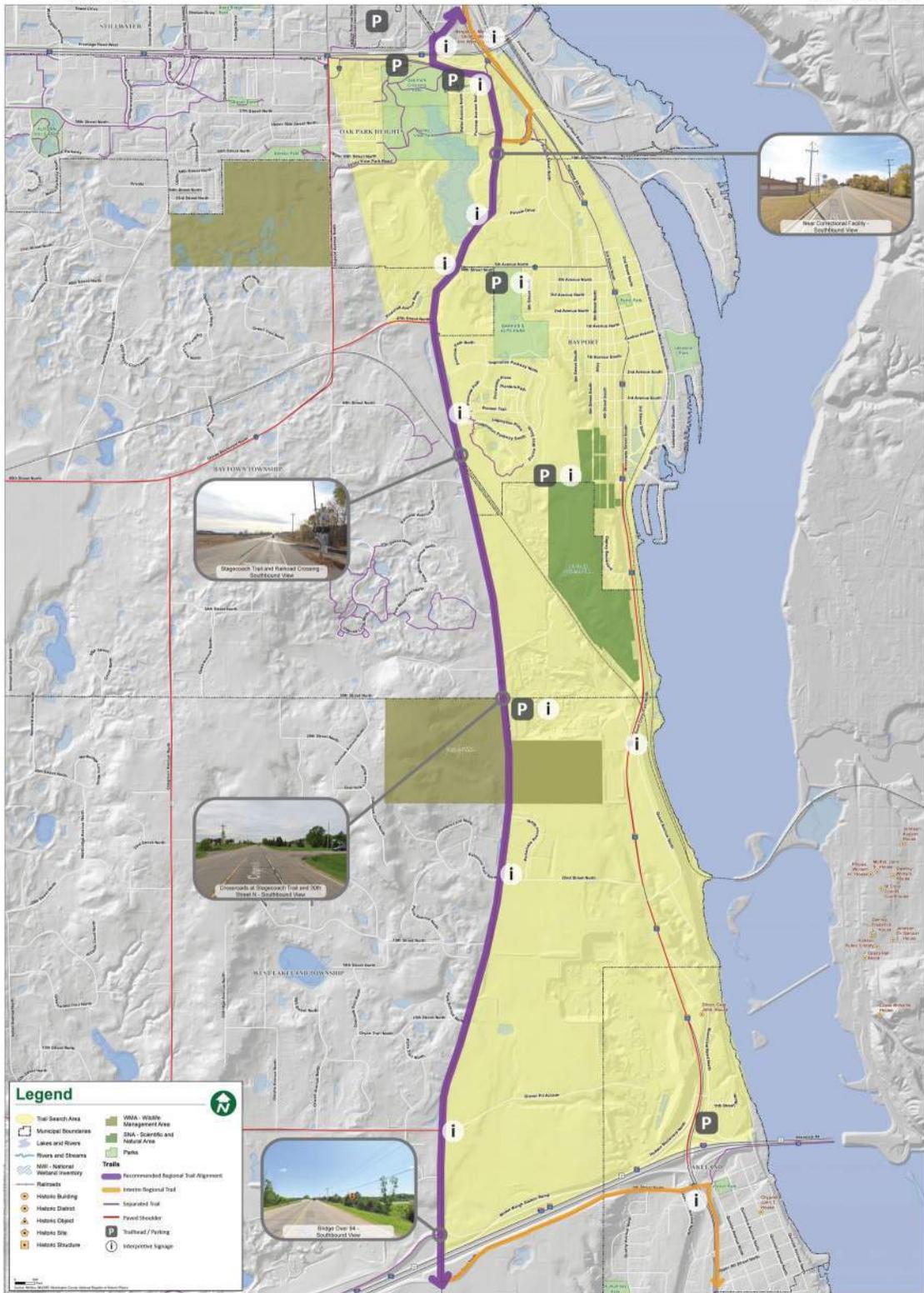


Figure 96: Potential trail amenities and wayfinding opportunities along the Regional Trail network

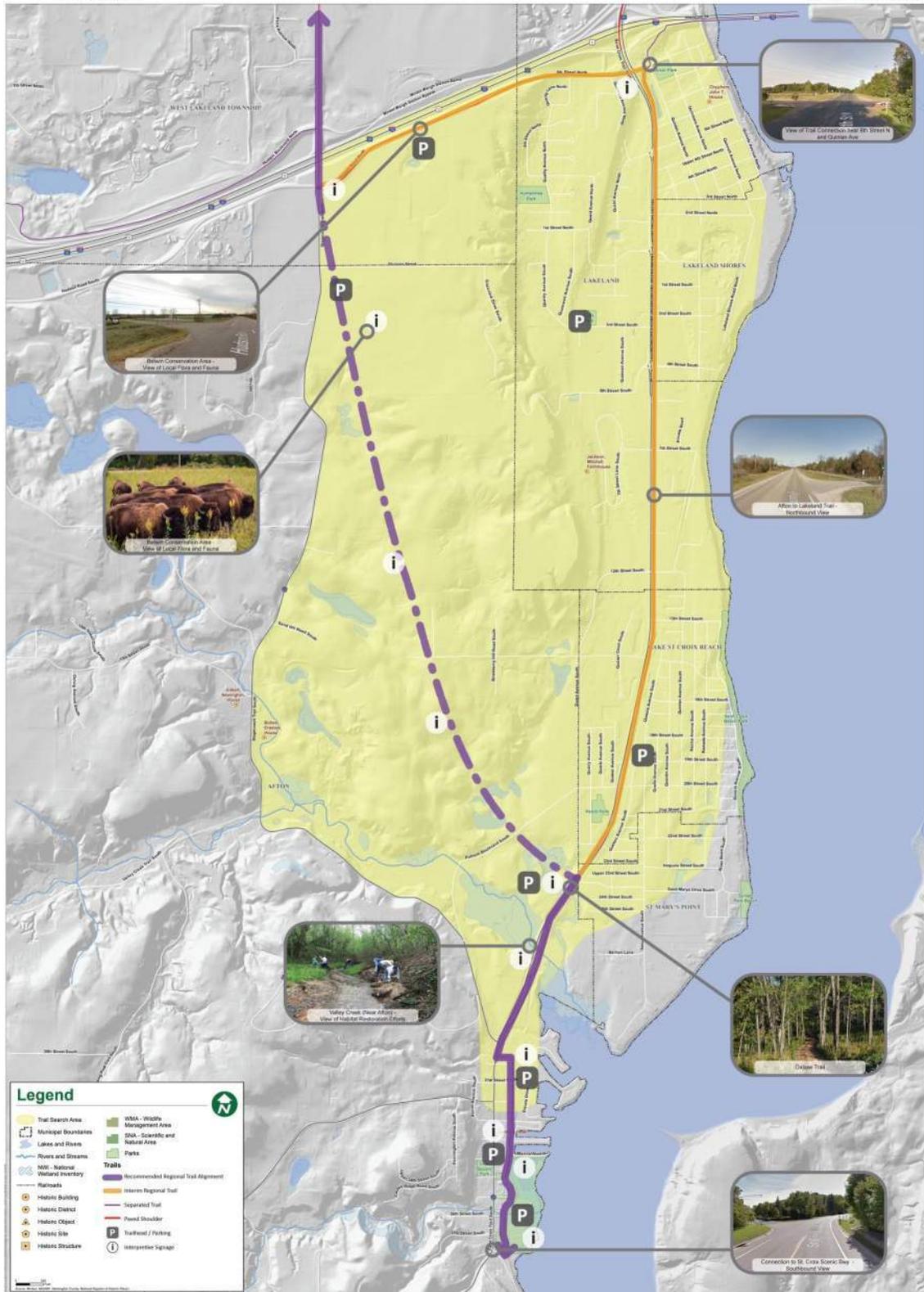


Figure 97: Potential trail amenities and wayfinding opportunities along the Regional Trail network

**Conflicts:** Identification of conflicts with other existing or proposed projects or land uses affecting the park/trail unit, including steps necessary for their resolution.

- **Zone 1 – St. Croix Boom Site to Brown’s Creek State Trail & TH 95**

- Developing a regional trail north of Brown’s Creek is challenging because of existing infrastructure, topography, site constraints, and limited right-of-way. Despite looking at other options, the proposed route along TH 95 was the only feasible connection to the St. Croix Boom Site.

- **Zone 2 – Brown’s Creek State Trail & TH 95 to Stillwater Lift Bridge**

- Several routes were explored through Stillwater to provide better neighborhood connectivity to the regional trail. These alternatives were hampered by existing right-of-way restrictions, constructibility of accessible routes, and existing development hindering river connections.
- Access to the river becomes more difficult south of Stillwater because of industrial and commercial developments like the King Plant and Andersen Windows. Access is also hampered further south by topography and the existing railroad grade between upland hills and the river’s edge. Residential properties fronting the river also limit access as one moves south along the regional trail search corridor.

- **Zone 3 – Stillwater Lift Bridge to TH 36**

- Although two parallel routes south of Stillwater Lift Bridge are built, the project team felt the proposed regional route aligned better with project goals and public preference for connectivity to the river’s edge and greater opportunities for views of the river.
- The proposed new connection from TH 95 to Beach Road would also provide improved access to many neighborhoods and residents in both Stillwater and Oak Park Heights. The lack of safe and accessible connections for these neighborhoods due to the topography was a key challenge.
- For many, their only existing option to access the St. Croix Crossing Loop Trail is Lookout Trail (segment 8) or crossing TH 36 twice, over and then back under. The project team reviewed Lookout Trail (segment 8) as an alternative route but found the right-of-way too narrow to comfortably add a trail. It was eliminated from consideration because of public feedback, right-of-way constraints, and safety challenges presented.
- The project team did review TH 95 trail crossings when exploring potential routes. Further exploration of potential permanent crossing options will need to occur as final alignment and construction of the regional trail moves forward. Page 106 may be used as guide to overcome the challenges that this crossing presents.



Figure 98: Restriping for TH 95 crossing



Figure 99: Reconstruction for permanent TH 95 crossing

Figures 98 and 99 depict the evolution of an at-grade crossing of TH 95 near one of the trailheads for the Browns Creek State Trail. Posted speed in this area increases for north to south traffic as highway pavement widens just north of the intersection with Lookout Trail. With several amenities already in the area (available trailhead parking, historic overlook on Lookout Trail, opportunities to access the river) this seemed like an appropriate area to cross the highway.

- Figure 98 shows improvements that could provide a more visible crossing without changing existing pavement on TH 95. Pavement markings would reduce lanes from 3 to 2 to decrease the distance required by pedestrians and cyclists to cross the roadway. These markings would also serve as a visual cue for motorists to reduce speed. Additionally, crosswalk striping would be added to alert motorists and trail users of the crossing route. It should be noted that this crossing is already present over TH 95. It currently lacks visual cues alerting motorists that motorized traffic may be crossing.

- Figure 99 depicts a crossing with more permanent infrastructure. It would reduce a lane from the west side of the road to provide a buffer between the roadway and trail. It would also add raised medians to restrict motorist movement and signal the need for a reduction in speed while providing a refuge island for trail users. A cost-effective way to implement these improvements is through coordination with MnDOT to ensure they are integrated with TH 95 improvements.

Additional communication should occur in alignment with the recommended trail to evaluate ongoing agency coordination. This includes reviewing existing conditions on bridges foreseen as future trail crossings, such as Beach Road over TH 36 and Stagecoach Trail North over I 94. Washington County will also need to coordinate with state and local agencies for other at-grade crossings; as part of the future regional trail or with trails providing local connections.

- **Zone 4 – TH 36 to I-94**

- Many of the same conflicts in Zones 1-3 continue to hamper regional trail development in Zone 4. Topography is less of an issue along CR 21 but is constraining along TH 95 past the intersection with Quant Avenue near Blueberry Hill. Limited right of way through Bayport and the TH 95 railroad overpass were also critical considerations in determining the recommended regional trail route. Existing land use also contributed to review and selection of an optimal route, with several active quarries, commercial/industrial complexes, residential developments, and natural holdings restricting available land through this section.



*Figure 100: TH 95 right-of-way and topography limitations south of Bayport.*

- **Zone 5 – I-94 to Downtown Afton**

- Conditions are generally favorable for regional trail development in this Zone with the Afton to Lakeland Trail already in place and future opportunities available through cooperation with the Belwin Conservancy.

**Public Services:** During the design process, Washington County will work closely with local communities and partners to design the trail in a manner that has the greatest public benefit.

The recommended regional trail will cross roadways in several locations; requiring careful attention to ensure safe and user-friendly crossings. The type of trail crossing treatments will be designed in accordance with industry standards to minimize conflicts between trail users and vehicular traffic. In all cases, existing roadway configurations, utilities, infrastructure, vegetation and other potential visual obstructions will be evaluated during design of planned roadway improvements or trail-specific projects to ensure infrastructure aligns with regional trail needs.

There are buried utilities, including gas and sanitary sewer in the right-of-way along portions of the proposed regional trail. Overhead powerlines are also located near along segment of the proposed trail, including CR 21. Coordination with utilities will be required during design development to ensure that the trail is constructed without imposing on utility easements or impacting the utility corridors.

Portions of the regional trail may traverse wetlands or streams. In these circumstances, the regional trail may incorporate bridges, boardwalks or other infrastructure to minimize impact to natural systems. Design of these features will be coordinated with appropriate regulatory agencies. In locations where the regional trail is adjacent to a roadway, drainage along the regional trail will be similar to a standard sidewalk, with runoff sheet flowing over the trail pavement to be collected and conveyed by stormwater sewer systems. Where regional trail runs along an independent route design will evaluate alternative stormwater best management practices such as rain gardens, bioswales or infiltration trenches to allow runoff to recharge groundwater systems.

**Public Awareness:** Washington County oversees communications and outreach of services and programs using a variety of platforms; including email blasts, project webpage notifications and several forms of social media. These tools, along with traditional meetings, effectively alert county residents of planned improvements and project updates. Additionally, they promote the regional trail system and its amenities through maps, the County's website, direct mail, press releases, social media and on-site promotions. In addition, Washington County collaborates with a wide range of partners to assist in delivering updates on projects; including local city and township leaders, local businesses, non-profits groups and regulatory agencies. The County will also collaborate with the Metropolitan Council to create awareness and visibility for projects. This includes continued coordination with Metropolitan Council's Metro Transit and Metropolitan Transportation Services (MTS) system to assist in identifying opportunities where this system can provide access to the regional trail.

**Accessibility:** Washington County is committed to providing access and recreational opportunities to all people, including those with disabilities, communities of color and special population groups. The County will work with project partners to ensure this commitment is incorporated through design efforts and in programming considerations by addressing barriers to participation.

All regional trail facilities, including trailheads and amenities, will be designed to accommodate individuals with disabilities and developed in accordance with Americans with Disabilities Act Accessibility Guidelines (ADAAG) standards. Local trail connections are anticipated at regular intervals to provide access to neighborhoods and communities within the search corridor.

## Realignment of 2005 St Croix Valley Regional Trail Master Plan

As part of the master plan approval process, Washington County wishes to amend the St Croix Valley Regional Trail Master Plan (2005). There is a 0.8 miles of trail in Afton primarily along County Road 21 that is identified in the 2005 master plan. The Middle St Croix Valley Regional Trail master plan proposed an updated alignment for this segment along the levee from CR 21 & CR 18, before connecting back with CR 21.

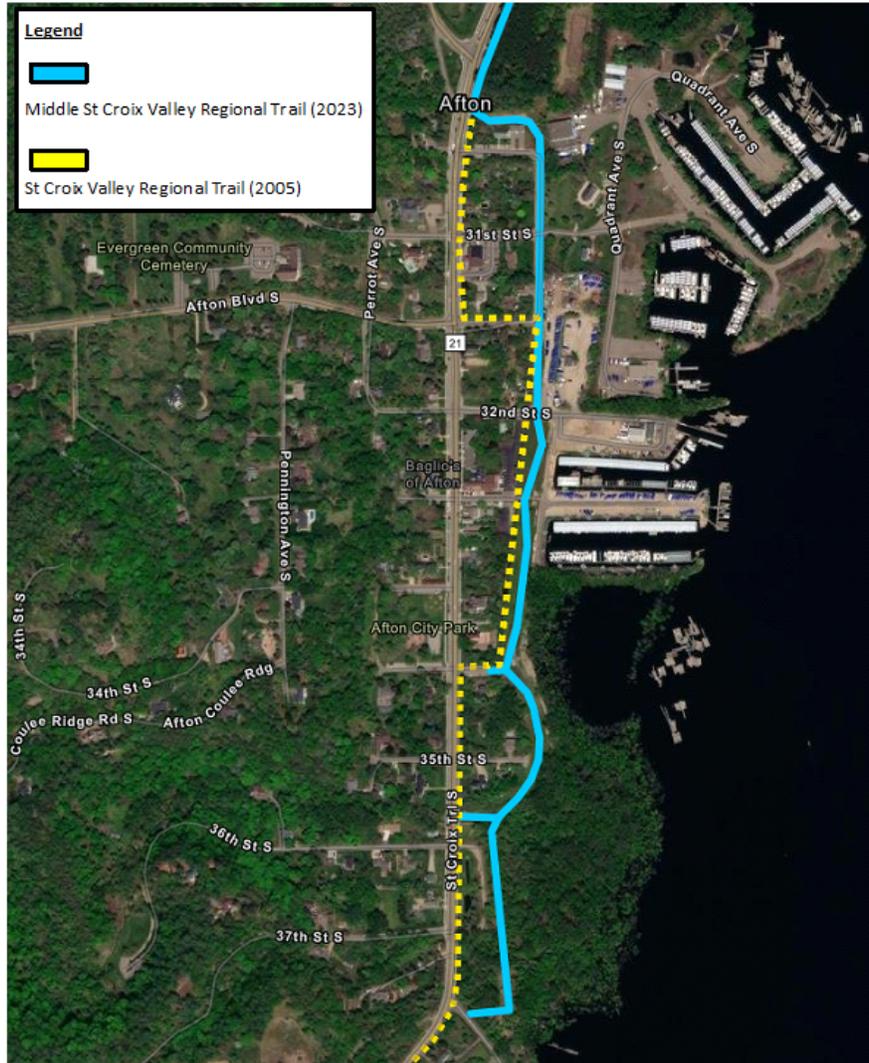


Figure 101: Suggested realignment of initial segments of 2005 Regional Trail Master Plan



## 7. Natural Resources Stewardship Plan

Being of a linear nature, trails require special natural resource management strategies. Depending on how trails are integrated with surrounding infrastructure: cooperation becomes an integral need for stewardship efforts. Washington County already has a history of collaboration with partner agencies and has engaged with many of these agencies through this planning process. The National Park Service, MnDNR, MnDOT, Middle St. Croix Valley Watershed Management Organization and Belwin Conservancy are a few agencies who contributed to this this master plan.

As plans for the Middle St. Croix Valley Regional Trail move forward, efforts to continue fostering these relationships while forging plans considering cooperative stewardship will be critical in support of long-term sustainability of the larger regional trail network in Washington County.

### Key Takeaways

- Provide opportunities for trail users to experience different types of ecosystems but avoid fragmenting habitat through trail development.
- Seek opportunities to develop trails that increase management of adjacent natural resources.
- Leverage views of the St. Croix River and its recognition as a natural and scenic river as a way to educate trail users about the important role of natural resource stewardship.

Given that the alignment of the recommended route largely parallels TH 95 or CR 21 and that the regional trail will largely be within the right-of-way of either road as it winds through the Middle St. Croix Valley, efforts to manage and restore native plant communities will require coordination with several agencies. Over the past 8 years, state agencies have been studying opportunities for changes in roadside vegetation to better support pollinators and promote greater wildlife diversity. These studies have largely happened in support of habitat for bees and butterflies while considering installation and ongoing management costs. From the strategies tested to date they have seen greater stability in vegetation habitat, greater stormwater filtration and increased visual appeal.<sup>1</sup> In addition to this, the trails proximity to the St Croix River in certain segments lends itself to the wants expressed by the community and elected officials through the engagement process to date.

Within Belwin Conservancy, efforts are already underway to preserve unique habitats and restore qualitative habitat. A partnership between Washington County and Belwin Conservancy on natural resource management would provide a unique opportunity for trail users to get a firsthand look at restoration and management efforts.

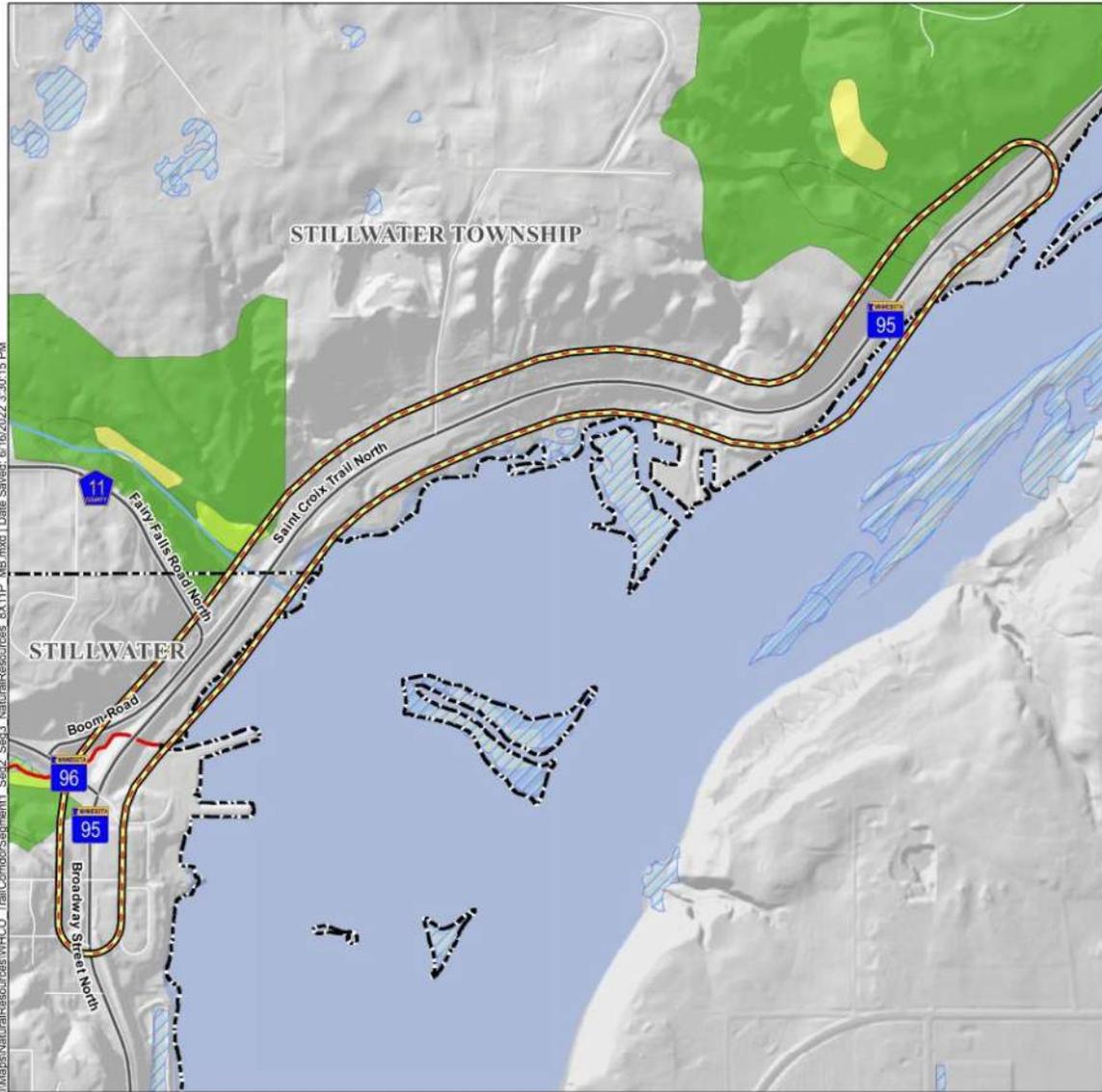
#### *Natural Resource Inventory*

A comprehensive natural resources inventory was conducted for the Middle St. Croix Valley Regional Trail Search Corridor, focusing on its linear nature and the need for specialized resource management strategies. This inventory process aimed to ensure sustainable trail development and integration with surrounding resources and infrastructure. Notably, continued collaboration with partner agencies like the National Park Service, MnDNR, MnDOT, Middle St. Croix Valley Watershed Management Organization, and Belwin Conservancy play a significant role in shaping the trail corridor.

The corridor is predominantly situated outside of the 100-year and 500-year floodplain areas, which is important in maintaining sustainable and resilient trail infrastructure. Existing wetland areas are prevalent along the corridor and a wetland delineation may be necessary to determine the full extent of any potential impacts. This delineation will facilitate discussions on any minor realignments to avoid impacts or identify ways to minimize or mitigate likely impacts. Locations proximate to State Wildlife Management or Scientific and Natural Areas may provide opportunities to further partner with MnDNR to create trail connections and access to those resources. They can also help identify ways to improve vegetation and wildlife corridors to maintain resource connectivity.

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<sup>1</sup> Catalyst, May 22, 2023, 'Strategies Improve Pollinator Roadside Habitat, Reduce Costs,' as accessed by <https://mntransportationresearch.org/2023/06/09/strategies-improve-pollinator-roadside-habitat-reduce-costs/>



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**LOCATION MAP**



**Legend**

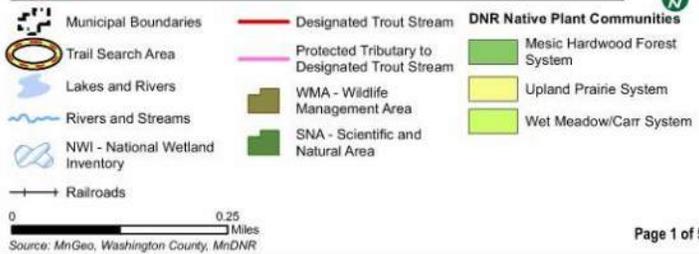
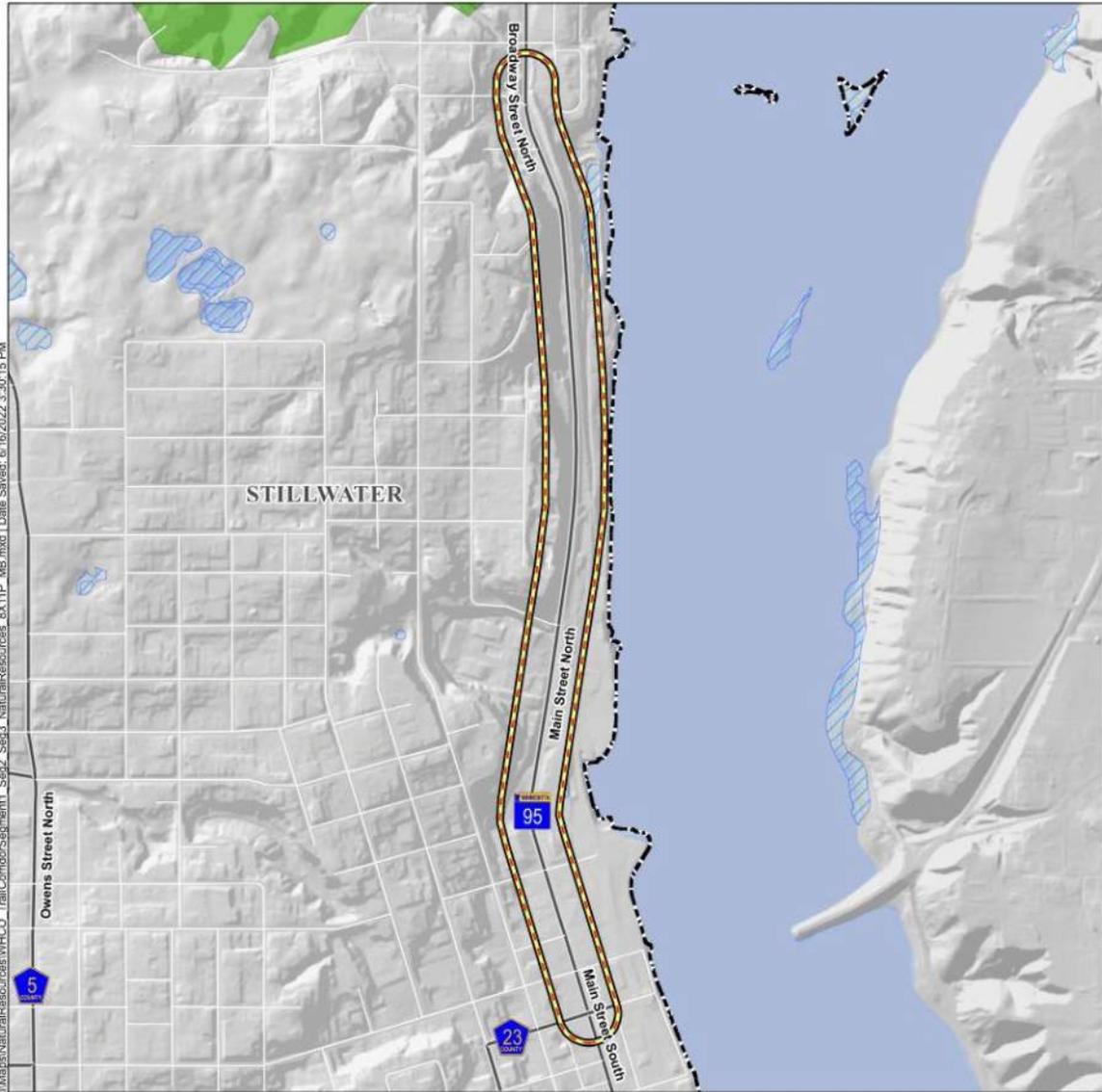


Figure 102: Trail Segment 1 Natural Resources Analysis



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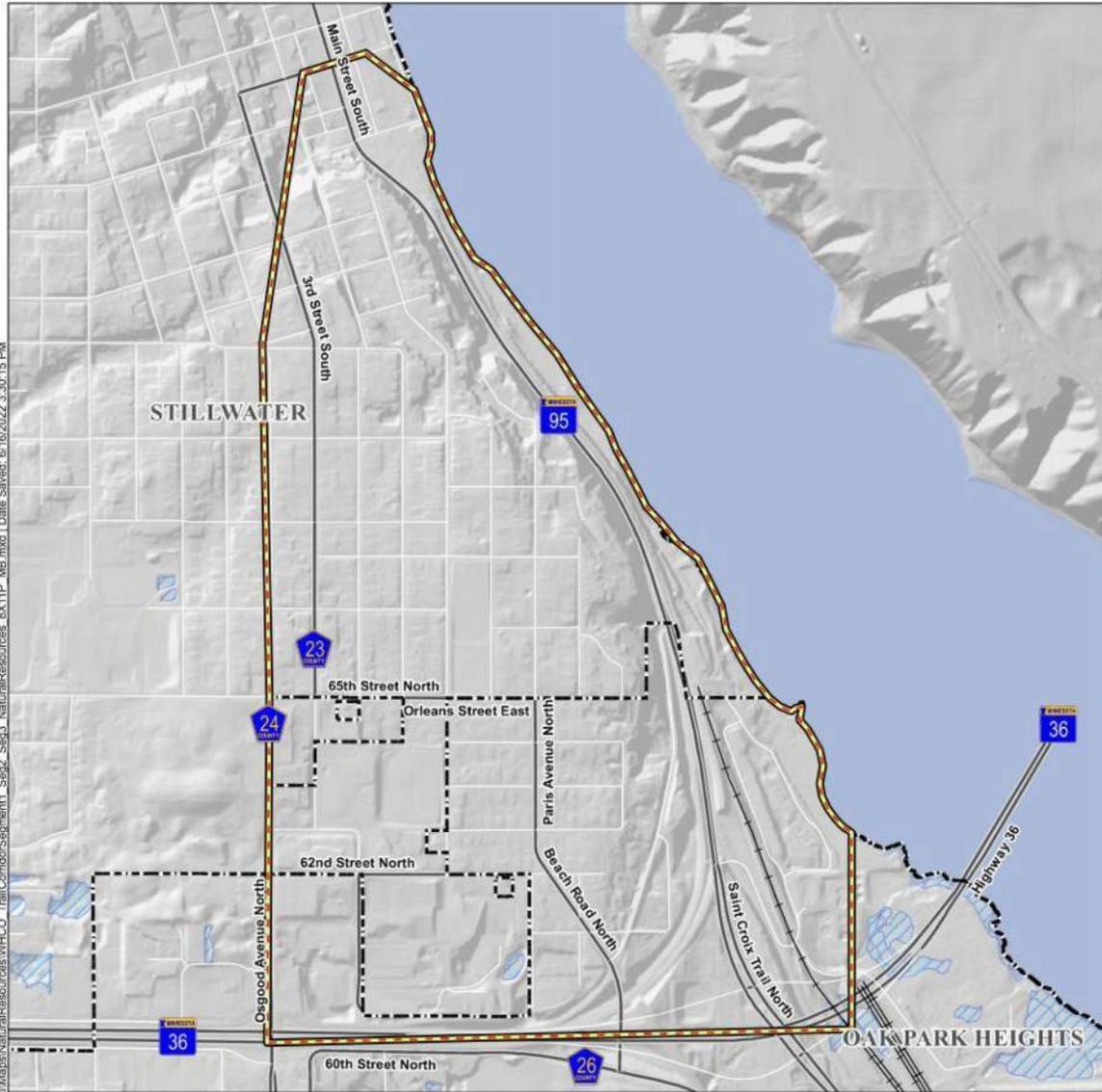
**LOCATION MAP**



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Figure 103: Trail Segment 2 Natural Resources Analysis



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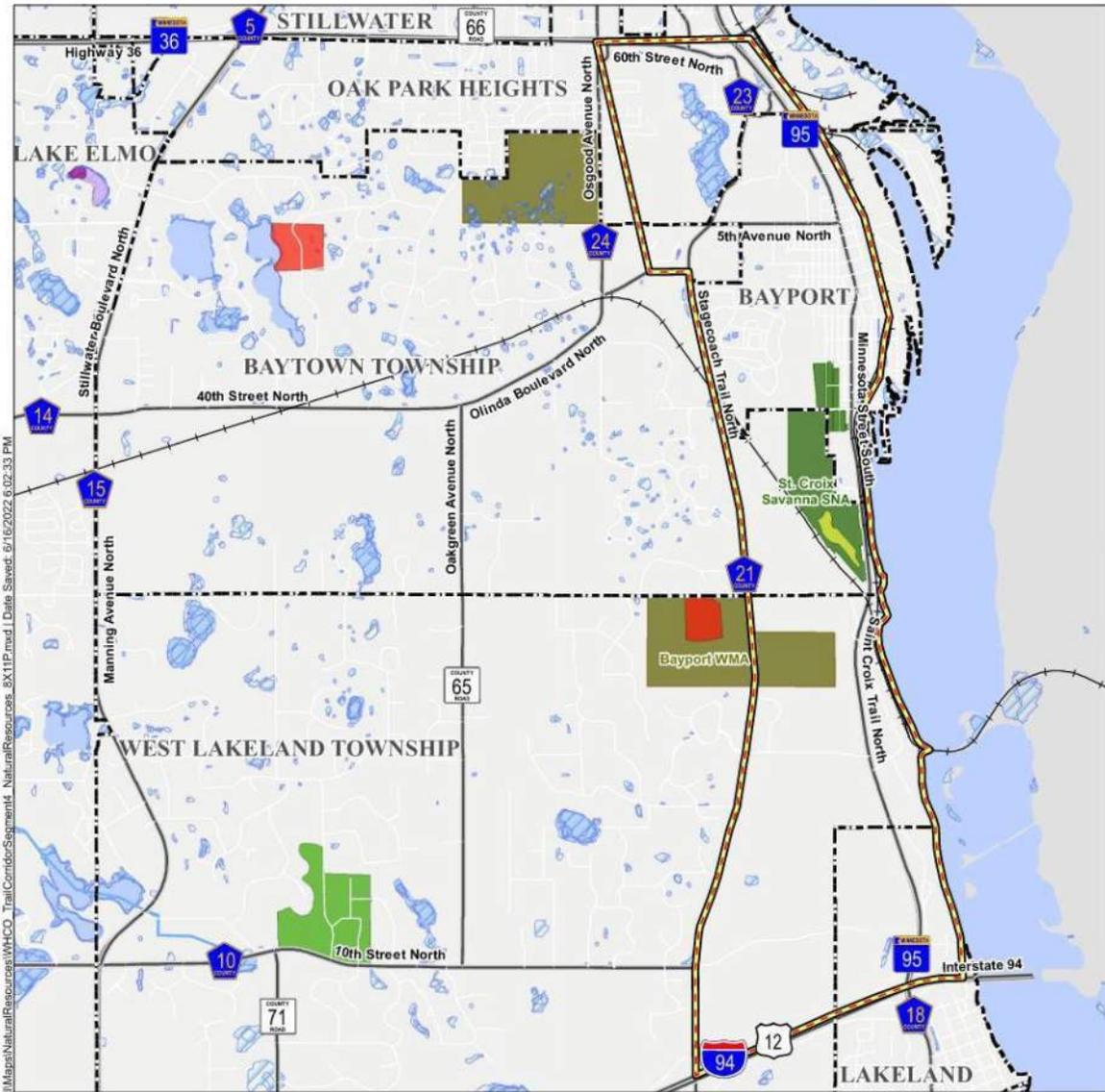
**LOCATION MAP**



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Figure 104: Trail Segment 3 Natural Resources Analysis



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**LOCATION MAP**



**Legend**

- |                                  |  |                                       |
|----------------------------------|--|---------------------------------------|
| Municipal Boundaries             | Designated Trout Stream                        | DNR Native Plant Communities          |
| Trail Search Area                | Protected Tributary to Designated Trout Stream | Acid Peatland System                  |
| Lakes and Rivers                 | WMA - Wildlife Management Area                 | Fire-Dependent Forest/Woodland System |
| Rivers and Streams               | SNA - Scientific and Natural Area              | Mesic Hardwood Forest System          |
| NWI - National Wetland Inventory |  | Upland Prairie System                 |
| Railroads                        |  | Wet Forest System                     |

0 0.25 Miles  
Source: MnGeo, Washington County, MnDNR

Figure 105: Trail Segment 4 Natural Resources Analysis

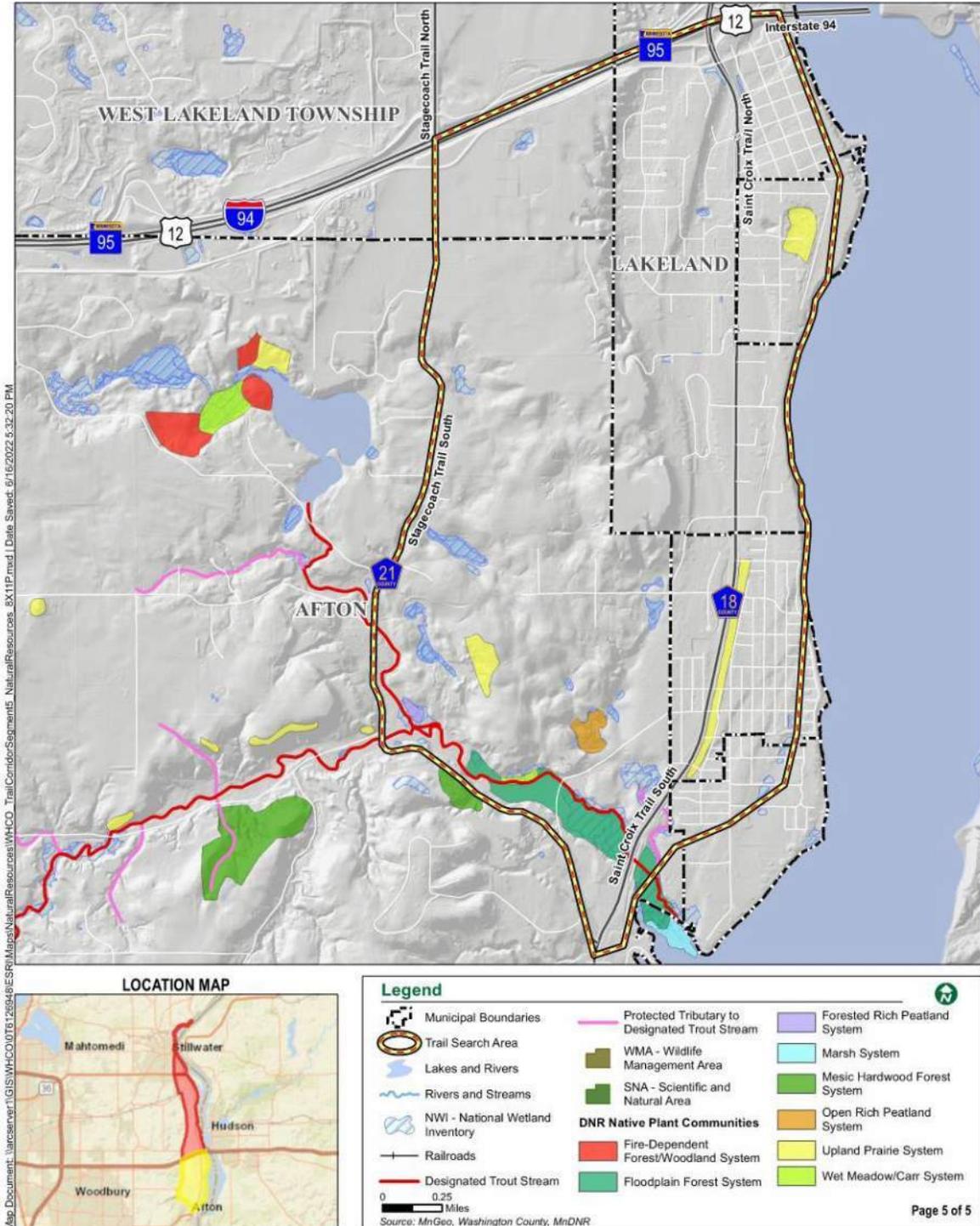


Figure 106: Trail Segment 5 Natural Resources Analysis

## Stewardship Recommendations

Through review of existing plant communities in corridors where construction of the regional trail is recommended, a more thorough review of existing plant species will be necessary to determine appropriate and practical efforts both during and after installation. Knowing what invasive species are present will help Washington County and its partners determine the correct techniques to get these under control in favor of more desirable species.

Stormwater treatment considerations should be given to runoff from all impervious surfaces, whether through rain gardens, bioswales or other best management practices appropriate to each site. Any significant erosion issues will be addressed as they arise along the corridor. In some areas these solutions may require multi-jurisdictional cooperation. An example is erosion along the St. Croix River in areas where the regional trail may be near the river's edge with an existing invasive vegetation complex.

- Partner with local municipalities and state and federal agencies on natural resource restoration
- Look for opportunities to educate trail users of stream restoration practices and water quality treatments.
- Install rain gardens at proposed trailheads to capture surface runoff adjacent to parking lots.

## Stormwater Management in Developed Urban Areas

Stormwater management along regional trails in developed urban areas can take many forms.

Controlling runoff from impervious surfacing is critical for improved water quality along trail corridors; particularly in developed areas. The following strategies should be considered as projects move towards construction in these areas of the corridor.

- Add landscaping where opportunities exist, including rain gardens or other stormwater best management practices
- Evaluate the need for large stormwater management facilities to capture and treat stormwater runoff for large parking lots and impervious surfaces.
- Establish native plants around parking lots to keep soil uncompacted with their deep root systems and facilitate surface water infiltration. These plants will also provide habitat for pollinators.
- Improve water quality with buffer plantings



Figure 107: Bioretention basins supporting parking lot runoff. (Source: <https://www.owp.csus.edu/>)



Figure 108: Streambank Restoration alongside 2nd Street N in Bayport (Source: [eastmetrowater.org](http://eastmetrowater.org))

## Opportunities for Stormwater Management in Right-of-Way Buffers

Several best management practices are available to manage stormwater runoff at trailheads. Further planning will be required to determine which techniques will be most suitable for each unique site.

Practical surface water management practices include:

- Installing rain gardens alongside parking lots and grading runoff to these features.
- Installing rain gardens near drainage outlets to remove suspended solids and treat runoff before excess volumes are discharged.
- Creating depressed planting areas in parking lot islands to capture and treat runoff.
- Direct water with small parking lots onto adjacent groundcover (ideally prairie).
- Plant trees around parking lots to capture rainwater and keep soil uncompacted to allow water to soak in. Trees will also shade pavement to keep it cooler during summer months.
- Restore native plant communities.
- Improve water quality with buffer plantings.



Figure 109: Pollinator-friendly restoration efforts  
(Source: Iowa Living Roadway Trust Fund, [nativerevegetation.org](http://nativerevegetation.org))



Figure 110: Streambank Restoration. (Source: New River Conservancy)

## Stream Restoration Considerations

Stream restoration should be considered along portions of the regional trail route; especially in areas where the trail is near a stream or river. Restoration should be designed by multidisciplinary teams with expertise in streambank hydrology and riparian vegetation systems; along with policy and permitting experience. As these projects move into the design phase Washington County should consider the following strategies:

- Preserve existing moderate and better-quality plant communities.
- Plant native trees and grasses along all future trail projects to shade surfacing and capture stormwater runoff.
- Manage stormwater on-site to reduce runoff and suspended pollutants from entering streams.
- Stabilize riverbanks with acceptable practices, with a focus on bioengineering



*Figure 111: Savanna Hills restoration at Belwin Conservancy. (Source: belwin.org)*

## Mississippi River Corridor Critical Area Program

The MRCCA is a joint state, regional and local program coordinating land use planning and zoning regulations for the 72-mile stretch of the Mississippi River through the second-county metropolitan area. This was designated in 1976 to protect the natural, cultural, and scenic resources of the designated area and is administered through local government land use plans and zoning ordinances. The Middle St. Croix Valley Regional Trail search area is not located within the Mississippi River Corridor Critical Area. The planning, design, and implementation requirements of the MRCCA will not apply to this recommended portion of the Regional Trail System.



## 8. Operations & Maintenance Planning

Each year, Washington County budgets for the operation of its parks and trails system in coordination with the Metropolitan Council. This budgeting process provides resources that allow for facility maintenance and natural resource management. This funding originates from three primary resources.

- Vehicle passes
- Operations and maintenance grants from State general funds
- County levy
- Funds disbursed by the Metropolitan Council from lottery in-lieu sales tax funds

The anticipation is that future regional trail improvements and expansion will allow for increased use, thereby generating additional revenue. As new amenities are incorporated, such as improved trails and amenities, new revenue sources should be explored and leveraged.

### Key Takeaways

- Insufficient maintenance is often one of the most vocally shared concerns by trail users.
- Anticipated operation and maintenance costs have been included in cost tables in Chapter 9 to provide insight on ongoing needs as well as expected life expectancy for various trail amenities.
- Public awareness efforts should be used to keep the public informed of regional trail progress and opportunities.
- Its important that public awareness materials be prepared for different media platforms and in different languages to ensure messaging reaches the fullest extent of regional users.

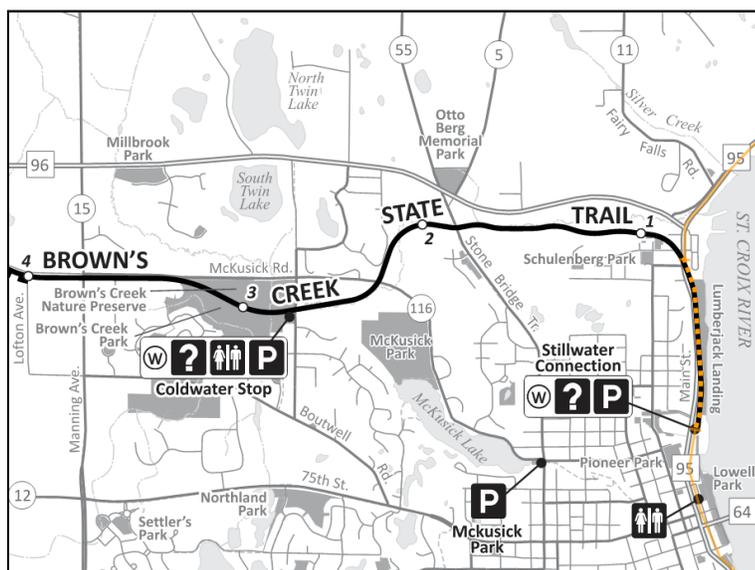
With more than 4,700 acres in its park system currently, The Washington County Parks Department will operate and maintain the Middle St Croix Valley Regional Trail segments on County-owned land in accordance with the Washington County Board of Commissioners' policies, ordinances, and guidelines.

Operations and maintenance are the means by which trails continue to fulfill the needs of the public. Planning for such operations is critical in maintaining high quality amenities. Insufficient maintenance is often one of the most vocally shared concerns by trail users; being represented in multiple ways, from feelings that amenities are unsafe or dirty, to observations that facilities are in poor shape. A robust and attainable operations and maintenance plan has been developed for as part of this master plan to identify needs ensuring maintenance and operations are being considered during planning and continue to be an important aspect of regional trail development.

## General Operations

Washington County trails are operated and managed by both full-time and seasonal staff who work out of Washington County's Public Works North Shop. The Parks Division uses an annual budget of approximately \$4 million to operate and maintain the entirety of its parks and trails system.

The Washington County Board of Commissioner's policies and ordinances specifies regulations to provide for the safe public use of Washington County parks, trails, and facilities. Regional trails are open to the public year-round. Operational considerations may be needed to implement a regional trail within Belwin Conservancy. The county will work with Belwin to determine details during future project phases.



A portion of the recommended regional trail alignment in the Middle St. Croix Valley Regional Trail Master Plan is also currently designated as the Brown's Creek State Trail (highlighted in Figure 112). This segment of the trail will continue to be owned, operated, and maintained by the MN DNR.

*Figure 112: Brown's Creek State Trail segment recommended as dual designation as part of Middle St. Croix Valley Regional Trail*

At the time this master plan was written, Washington County parks and trail rules to be observed by users are as follows:

- The consumption of alcoholic beverages is prohibited
- Parking only permitted in designated areas
- Pets must be leashed at all times (six foot maximum)
- Pets are not allowed on the beaches, campgrounds, picnic areas, or playgrounds
- Dog owners must pick up pet waste
- Trash and recycling are to be disposed of using designated waste and recycling containers
- Motorized vehicle are not permitted on bike trails
- Bicycles must be operated on designated bike trails and roadways and as close to the right hand side of bike trail or roadway as conditions permit
- Bicycles must be operated in a prudent and careful manner or at a speed that is reasonable and safe with regard to the safety of the operator and persons in the immediate area

## Maintenance

Washington County currently oversees and maintains over 75 miles of turf and paved trails that offer users the ability to participate in a variety of outdoor activities, including: walking/running, hiking, biking, cross-country skiing, horseback riding, and other uses. Washington County is dedicated to maintaining its infrastructure at a level that minimizes future maintenance and replacement costs and protects the safety of its residents. Subsequently, the county does not anticipate plowing or otherwise maintaining the Middle St Croix Valley Regional Trail during the winter season. Local communities may elect to operate and maintain regional trail segments during the winter season via a winter use permit.

This master plan calls for the eventual addition of 16.7 miles of regional trail (1.8 along the existing Brown's Creek State Trail). It also makes provisions for another 5.8 miles of interim regional trail in Oak Park Heights, West Lakeland Township, Lakeland, Lakeland Shores, Lake St. Croix Beach and St. Mary's Point as part of existing trails or roadway connections. These additional trails will require ongoing maintenance once constructed, including the following:

- Maintaining surfacing of new trails
- Maintaining interpretive panels and wayfinding signage
- Maintaining trail amenities
- Maintaining vegetation along regional trail route as well as any connecting trails within County-owned rights-of-way
- Maintaining and cleaning stormwater BMP practices

Expected costs for annual regional trail operations and maintenance include upkeep for the trail, shoulder, and buffers as well as support amenities such as kiosks, benches, and pedestrian/bike roadway crossing infrastructure. Annual maintenance for roadway crossing infrastructure is anticipated to be split between transportation and recreation budgets. Anticipated annual O+M costs for the Middle St. Croix Valley Regional Trail these are estimated to include the following.

Facility Type	Annual O+M Cost	Quantity	Estimated Annual O+M Cost
New Bituminous Trail (10' wide)	\$2,500 / Mile	14.4 miles	\$36,000
Existing Bituminous Trail (10' wide)	\$2,500 / Mile	1.8 miles	N/A (MN DNR)*
New Boardwalk	\$20 / Linear Foot	Estimated 2,640 feet	\$52,800
Bike Repair Stations	\$100	4	\$400
Total:			\$89,200

\*Assumption made that Brown's Creek State Trail will continue to be maintained by DNR

## Life-cycle Expectations

The following table is meant to support identified implementation costs included in Chapter 10 by indicating anticipated annual operation and maintenance costs to consider when planning for efforts beyond construction.

Facility Type	Annual O+M Cost	Capital Cost	Estimated Life
Bituminous Trail (8' wide or less)	\$1,200 to \$2,000 / Mile	\$200,000 to \$250,000 / Mile	25+ years
Bituminous Trail (10' wide)	\$1,500 to \$2,500 / Mile	\$250,000 to \$350,000 / Mile	25+ years
On-Street Bikeways (8' wide)	\$1,500 to \$2,500 / Mile	\$500,000 to 700,000 / Mile	20 years
Sidewalks (6' wide concrete)	Minimal	\$45 / LF	25 to 40 years
New Boardwalk	\$15 - \$20 / LF	\$600 - \$800 / LF	15 to 20 years
Crossing Type	Annual O+M Cost	Capital Cost	Estimated Life
Pedestrian/Bicycle Tunnel	\$2,000 - \$5,000 / yr	\$600,000 - \$1,200,000	50 years
Pedestrian/Bicycle Overpass	\$10,000 - \$20,000 / yr	\$1,200,000 - \$2,500,000	50 years
HAWK (Pedestrian Hybrid Beacon Signal)	\$4,000 - \$6,000 / yr	\$100,000 - \$160,000	20 years
RRFB (Rectangular Rapid Flashing Beacons)	Minimal	\$15,000 - \$20,000	20 years
Signalized Intersection	\$6,000 - \$10,000 / yr	\$200,000 - \$350,000	20 years
Flashing Warning Sign	Minimal	\$4,000 - \$8,000	10 to 15 years
ADA Curb Ramp Retrofit	Minimal	\$1,000 - \$2,000 / Ramp	25 to 40 years
High Visibility Crosswalks	Minimal	\$800 - \$2,000	2 to 5 years
Median/Refuge Island (4' to 8' wide)	Minimal	\$20,000 - \$30,000 / 100 LF	25 to 40 years
Crossing Signs	Minimal	\$300 - \$1,200	10 to 15 years
Signage Type	Annual O+M Cost	Capital Cost	Estimated Life
Kiosk-Style Signs	Minimal	\$5,000 - \$25,000	20 years
Wayfinding Sign	Minimal	\$1,000 - \$1,500	20 years
Amenity Type	Annual O+M Cost	Capital Cost	Estimated Life
Bike Repair Station	\$50 - \$100	\$500 - \$1,500	5 years
Bench	Minimal	\$750 - \$2,000	10 years
Trash/Recycling Cans	Minimal	\$500 - \$1,500	10 years
Bike Parking Rack	Minimal	\$500 - \$1,000	20 years

Table 19: Combined cost and Lifecycle expectations of the regional trail and its amenities



## 9. Development & Funding

Successfully realizing the vision of this master plan will depend on Washington County's ability to secure additional funding, working with local jurisdictions and acquiring additional parcels identified in this plan. These efforts will include developing or strengthening partnerships with key jurisdictional agencies and groups who share an interest in reaching regional trail goals. This master plan is therefore intended as a long-term guiding document and considers phased improvements as funding becomes available.

The following section provides guidance on costs anticipated in achieving the recommended components of this master plan. This chapter also identifies potential funding sources that may be useful in assisting with plan implementation.

### Key Takeaways

- This regional trail interfaces with multiple communities, agencies and jurisdictions and will require an integrated effort to fund construction of the long-term regional trail route.
- Implementation costs are expected to range from land acquisition to trail construction and purchase of amenities.
- Construction of this regional trail is expected to occur over several years and include multiple phases. Planning level costs should be adjusted to include inflation as this project comes together.

## Development

The long range recommended regional route identified in the master plan will be eligible for regional park/trail system funding for acquisition and development. The designated interim route will be only eligible if the long-range route is deemed no longer feasible and options to develop the long-range route have been exhausted. The county understands it may pursue regional park and trail funding to complete one route.

The interim route may be identified as the regional route until the long-range recommended route is funded and fully developed. The county has not determined a timeline for implementation of the project and will continue to work with partners during continued development.

## Anticipated Costs

The following costs are planning-level estimates based on information known at the time of preparing this master plan. Each item is based on recommended improvements included in the plan, with associated costs based on relative project data. As improvement projects move from the master plan level into consideration for implementation, costs should be reviewed and updated to reflect available funding, more specific site data, construction costs and additional economic factors.

Estimates included in this plan are based on 2023 costs and should be increased at least 5% per 12-month period to factor inflation. The final section of estimated costs includes a 10% overall Design and Engineering (D&E) Contingency for budget items requiring design and engineering. It also includes an added 20% Construction/Implementation Contingency for all relevant budget items – a standard practice in cost estimation.

The following planning level costs include:

- Development Concept/Infrastructure
- Potential Parcel Acquisition
- Contingencies
- Summary of Overall Estimated Costs

## Estimated Costs

### ***Estimated Development Concept/Infrastructure Costs***

Unit Abbreviations: Each (EA), Linear Foot (LF), Acre (AC), Miles (MI)

The following table captures anticipated construction for the recommended Middle St. Croix Valley Regional Trail as laid out in this master plan.

Regional Trail Improvements	Qty	Unit	Unit Costs	Construction Total	D&E	D&E Total	Total Est. Costs (2023 dollars)	Notes
<b>Stillwater Township</b>								
Boom Site to Fairy Falls Rd N	1.5	MI	\$700,000	\$1,050,000	20%	\$210,000	\$1,260,000	<i>known environmental impacts, grading needs and ROW challenges</i>
<b>Stillwater</b>								
Fairy Falls Rd N to Brown's Creek State Trail	0.3	MI	\$1,400,000	\$420,000	20%	\$84,000	\$504,000	<i>structural needs with historic bridge crossing over TH 95, grading and ROW challenges</i>
Brown's Creek State Trail to near Oasis Cafe	1.6	MI	\$150,000	\$240,000	20%	\$48,000	\$288,000	<i>existing trail (amenities needed for a regional trail)</i>
Near Oasis Café to Main St S	0.4	MI	\$150,000	\$60,000	20%	\$12,000	\$72,000	<i>adjacent to existing state trail; vegetation restoration, river considerations</i>
<b>Oak Park Heights</b>								
TH 95 Crossing to Beach Rd N	0.5	MI	\$500,000	\$250,000	20%	\$50,000	\$300,000	<i>crossing improvements required at TH 95, grading needs up hill to Beach Road</i>
Beach Rd N to Stagecoach Trl N	0.4	MI	\$250,000	\$100,000	20%	\$20,000	\$120,000	<i>existing trail (amenities needed for a regional trail)</i>
Stagecoach Trl N to 56th St N	0.3	MI	\$300,000	\$90,000	20%	\$18,000	\$108,000	<i>some ROW challenges</i>
<b>Bayport</b>								
Stagecoach Trl N from 56th St N to 5th Ave N	0.6	MI	\$350,000	\$210,000	20%	\$42,000	\$180,000	<i>utility conflicts, ROW constraints, grading needs</i>
<b>Baytown Township</b>								
Stagecoach Trl N from 5th Ave N to 30th St N	2.0	MI	\$350,000	\$700,000	20%	\$140,000	\$840,000	<i>grading needs, RR crossing</i>
<b>West Lakeland Township</b>								
Stagecoach Trl N from 30th St N to 22nd St N	1.0	MI	\$350,000	\$350,000	20%	\$70,000	\$420,000	<i>grading needs, some constraints with adjacent property use (quarry, Bayport WMA South)</i>
Stagecoach Trl N from 22nd St N to Hudson Rd S	1.9	MI	\$500,000	\$950,000	20%	\$190,000	\$1,140,000	<i>grading needs, improvement needs with I94 bridge overpass, some utility and ROW constraints</i>

Afton								
Regional Trail Amenities	Qty	Unit	Unit Costs	Construction Total	D&E	D&E Total	Total Est. Costs (2023 dollars)	Notes
Belwin Conservancy	4.7	MI	\$500,000	\$2,350,000	20%	\$470,000	\$2,820,000	off-road trail, clearing, grading and drainage for boardwalk and wetland accommodation
Afton-Lakeland Trail from St Marys Dr S to Upper 34th St S	1.2	MI	\$250,000	\$300,000	20%	\$60,000	\$360,000	existing trail (amenities needed for a regional trail)
Upper 34th St S to River Rd S along levee	0.3	MI	\$450,000	\$135,000	20%	\$27,000	\$162,000	extension of existing trail along levee, grading needs, potential environmental constraints
Kiosk Development	12	EA	\$15,000	\$180,000	20%	\$36,000	\$216,000	strategically located along regional trail alignment
Wayfinding Signage	34	MI	\$3,500	\$119,000	0%	\$0	\$119,000	roughly 3 signs per trail mile
Bike Repair Station	4	EA	\$1,500	\$6,000	0%	\$0	\$6,000	strategically located with kiosks/rest areas
Benches	24	MI	\$1,500	\$36,000	0%	\$0	\$36,000	strategically located with kiosks/rest areas
Bike Parking Rack	6	EA	\$1,000	\$6,000	0%	\$0	\$6,000	strategically located with kiosks/rest areas
Trash/Recycling Cans	12	MI	\$1,500	\$18,000	0%	\$0	\$18,000	strategically located with kiosks/rest areas
<b>Total Regional Trail Improvement Costs:</b>						<b>\$36,000</b>	<b>\$8,975,000</b>	

Interim Regional Trail Improvements	Qty	Unit	Unit Costs	Construction Total	D&E	D&E Total	Total Est. Costs (2023 dollars)	Notes
Oak Park Heights								
Main St S to CR 36	0.6	MI	\$150,000	\$90,000	20%	\$18,000	\$108,000	existing trail (amenities needed for a regional trail)
CR 36 to King Plant Rd	0.3	MI	\$150,000	\$45,000	20%	\$9,000	\$54,000	existing trail (amenities needed for a regional trail)
56th St N from TH 95 to Pickett Ave N	0.1	MI	\$150,000	\$15,000	20%	\$3,000	\$18,000	existing trail (amenities needed for a regional trail)
56th St N from Pickett Ave N to Stagecoach N	0.1	MI	\$150,000	\$15,000	20%	\$3,000	\$18,000	existing trail (amenities needed for a regional trail)

West Lakeland Township								
Hudson Road from Stagecoach Trl S to Quinlan Ave N	0.9	MI	\$350,000	\$315,000	20%	\$63,000	\$378,000	Grading, shoulder improvements, crossing improvements at TH 95, amenities needed for regional trail use
Lakeland								
Afton-Lakeland Trail from 8th St N to 4th St N and 4th St S to 12th St S	1.4	MI	\$150,000	\$210,000	20%	\$42,000	\$252,000	existing trail (amenities needed for a regional trail)
Lakeland Shores								
Afton-Lakeland Trail from 4th St N to 4th St S	0.7	MI	\$150,000	\$105,000	20%	\$21,000	\$126,000	existing trail (amenities needed for a regional trail)
Lake St. Croix Beach								
Afton-Lakeland Trail from 12th St S to 23rd St S	1.1	MI	\$150,000	\$165,000	20%	\$33,000	\$198,000	existing trail (amenities needed for a regional trail)
St. Mary's Point								
Afton-Lakeland Trail from 23rd St S to St Marys Dr S	0.1	MI	\$150,000	\$15,000	20%	\$3,000	\$18,000	existing trail (amenities needed for a regional trail)
Regional Trail Amenities	Qty	Unit	Unit Costs	Construction Total	D&E	D&E Total	Total Est. Costs (2023 dollars)	Notes
Kiosk Development	3	EA	\$15,000	\$45,000	20%	\$9,000	\$54,000	strategically located along regional trail alignment
Wayfinding Signage	2	MI	\$3,500	\$7,000	0%	\$0	\$7,000	roughly 3 signs per trail mile
Bike Repair Station	1	EA	\$1,500	\$1,500	0%	\$0	\$1,500	strategically located with kiosks/rest areas
Benches	6	MI	\$1,500	\$9,000	0%	\$0	\$9,000	strategically located with kiosks/rest areas
Bike Parking Rack	2	EA	\$1,000	\$2,000	0%	\$0	\$2,000	strategically located with kiosks/rest areas
Trash/Recycling Cans	3	MI	\$1,500	\$4,500	0%	\$0	\$4,500	strategically located with kiosks/rest areas
<b>Total Interim Regional Trail Improvement Costs:</b>						<b>\$9,000</b>	<b>\$1,248,000</b>	

### **Administrative Boundary & Potential Land Acquisitions & Easements**

The page 133 table and Figure 113 identifies likely acquisition and easement needs required to fully realize the regional trail identified in this master plan. These were identified with the assumption that new regional trail infrastructure would be constructed to meet the following design standards: be 10 feet wide with 2-foot shoulders on either side and including a 10-foot buffer between adjacent roadway pavement and the trail shoulder. These assumptions represent the boundary used to determine the Administrative Boundary.

The map identifies parcels that may be impacted by future regional trail development, and graphically highlights the entire parcel. These acquisition and easement values represent privately held land along the desired route supporting the desired long-term network. 128

Estimated acreage anticipated for potential acquisition and easement needs are included in the Potential Acquisitions Table below. Ongoing communication with property owners will be required to fully understand acquisition or easement needs for each of the identified parcels. Initial implementation of long-term regional trail infrastructure is expected to be a shared cost between local agencies and Washington County, with the County contributing 50% of the initial construction costs. Replacement and repaving costs would be 100% handled by Washington County.

Washington County will work with the Metropolitan Council to acquire, develop and implement the Middle St. Croix Valley Regional Trail according to the 2040 Regional Parks Policy Plan. Regional facilities in Washington County are owned and maintained by the County in compliance with Parks Policy Plan requirements, unless otherwise stipulated through documented agreements; such as the Brown’s Creek State Trail that will be maintained by MNDNR. Ongoing discussions will also be required between Washington County and Belwin Conservancy to chart a course for development and maintenance of the regional trail through this area of the search corridor. An agreement, such as a Joint Powers Agreement, may be needed to formalize these details.

***Environmental Screening for Site Suitability***

Incorporating a sustainable design approach to trail development projects may include an environmental screening process to help identify environmental constraints and opportunities. By analyzing GIS data layers and using web-based assessment tools, the environmental screening process would identify sensitive habitats, water resources, historic sites, and contamination concerns due to proposed trail locations. Having this information during the pre-design phase will help avoid or incorporate areas based on project goals.

This transparent and inclusive approach contributes to informed decision-making, minimizes risk, and balances recreational benefits with environmental preservation, ultimately shaping a responsible and sustainable trail project.

An example of an environmental screening table is provided below. The Social, Economic, or Environmental (SEE) factors identified below can be expanded to include additional criteria.

**Environmental Screening Factors and Planning Considerations Table**

Social, Economic, or Environmental Factor	Considerations	Existing/Planned Conditions
<b>Social and Community</b>	<ul style="list-style-type: none"> <li>• Access and compatibility considerations</li> <li>• Hospitals, schools, libraries, churches, government buildings</li> </ul>	Through GIS tools, identify schools, community buildings and centers, recreational amenities, religious facilities, and other important community assets and their proximity to the proposed project. Assess any potential impacts from the proposed project.
<b>Environmental Justice (EJ)</b>	<ul style="list-style-type: none"> <li>• Low-income</li> <li>• BIPOC communities</li> <li>• Ethnic areas</li> </ul>	Identify impacts through the EPA’s EJScreen web-based tool and assess how these populations could be impacted – positively or negatively – by the proposed project.

<b>Rare Natural Features</b>	<ul style="list-style-type: none"> <li>• Rare, Threatened and Endangered Species</li> <li>• Critical habitat</li> <li>• Habitat corridors</li> </ul>	Identify rare natural features within the project study area and assess how the proposed project may impact these resources. Recommend reviewing both federal and state-level resources.
<b>Soils and Geology</b>	<ul style="list-style-type: none"> <li>• Underlying geologic features</li> <li>• Soils – hydric, suitability, slopes</li> <li>• Karst or other rare features</li> </ul>	Identify soils and geologic conditions within the project study area and assess how the proposed project may impact these resources.
<b>National Wetlands Inventory (NWI)</b>	<ul style="list-style-type: none"> <li>• Wetlands</li> </ul>	Identify NWI wetlands within the study area and assess impacts to resources.
<b>Public Waters Inventory (PWI)</b>	<ul style="list-style-type: none"> <li>• Public water bodies</li> <li>• Watersheds</li> <li>• Impaired waters</li> </ul>	Identify public waters within the project study area and assess how the proposed project may impact these resources.
<b>Public Water Supply</b>	<ul style="list-style-type: none"> <li>• Public water supply wells</li> <li>• DWSMA</li> </ul>	Identify public water supply within the project study area and assess how the proposed project may impact these resources.
<b>MPCA What's In My Neighborhood (WIMN)</b>	<ul style="list-style-type: none"> <li>• Hazardous waste producers</li> <li>• Construction stormwater polluters.</li> <li>• Other recorded permits</li> </ul>	Identify permits and hazardous or contaminated sites within the project study area and assess how the proposed project may impact these resources.
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>• Recorded archaeological or NHPR-listed sites within and immediately adjacent to the proposed project area</li> </ul>	Identify public waters within the project study area and assess how the proposed project may impact these resources.
<b>Transportation</b>	<ul style="list-style-type: none"> <li>• Roads, traffic level of services</li> <li>• Transit locations</li> <li>• Bike/Ped trails or lanes</li> </ul>	Identify transportation corridors and infrastructure within the project study area and assess how the proposed project may impact these.
<b>Permits, Approvals &amp; Additional Reviews</b>	Local, State and Federal Regulations	<ul style="list-style-type: none"> <li>• Sec 404 – if wetland impacts anticipated</li> <li>• Stormwater Pollution Prevention Plan (SWPPP)</li> <li>• Water Appropriations (DNR) – if groundwater use or any dewatering is anticipated</li> <li>• MnDOT District Water Resources approval</li> <li>• County SWCD approval</li> <li>• City approval</li> <li>• Watershed District/Commission approval</li> <li>• DNR – State species review</li> <li>• USFWS – Federal species review</li> <li>• SHPO/THPO – Project review</li> <li>• Karts topography review</li> </ul>

		<ul style="list-style-type: none"><li>• MnDOT – Best management practices (invasive species, vegetation practices, etc.)</li><li>• Visual quality and aesthetics review</li><li>• Wellhead protection reviews for high vulnerability Drinking Water Supply Management Area (DWSMA)</li><li>• Air/Dust &amp; Noise Analysis reviews</li><li>• Climate Change and Greenhouse Gas reviews</li><li>• Traffic management and access review</li><li>• Accessibility review</li></ul>
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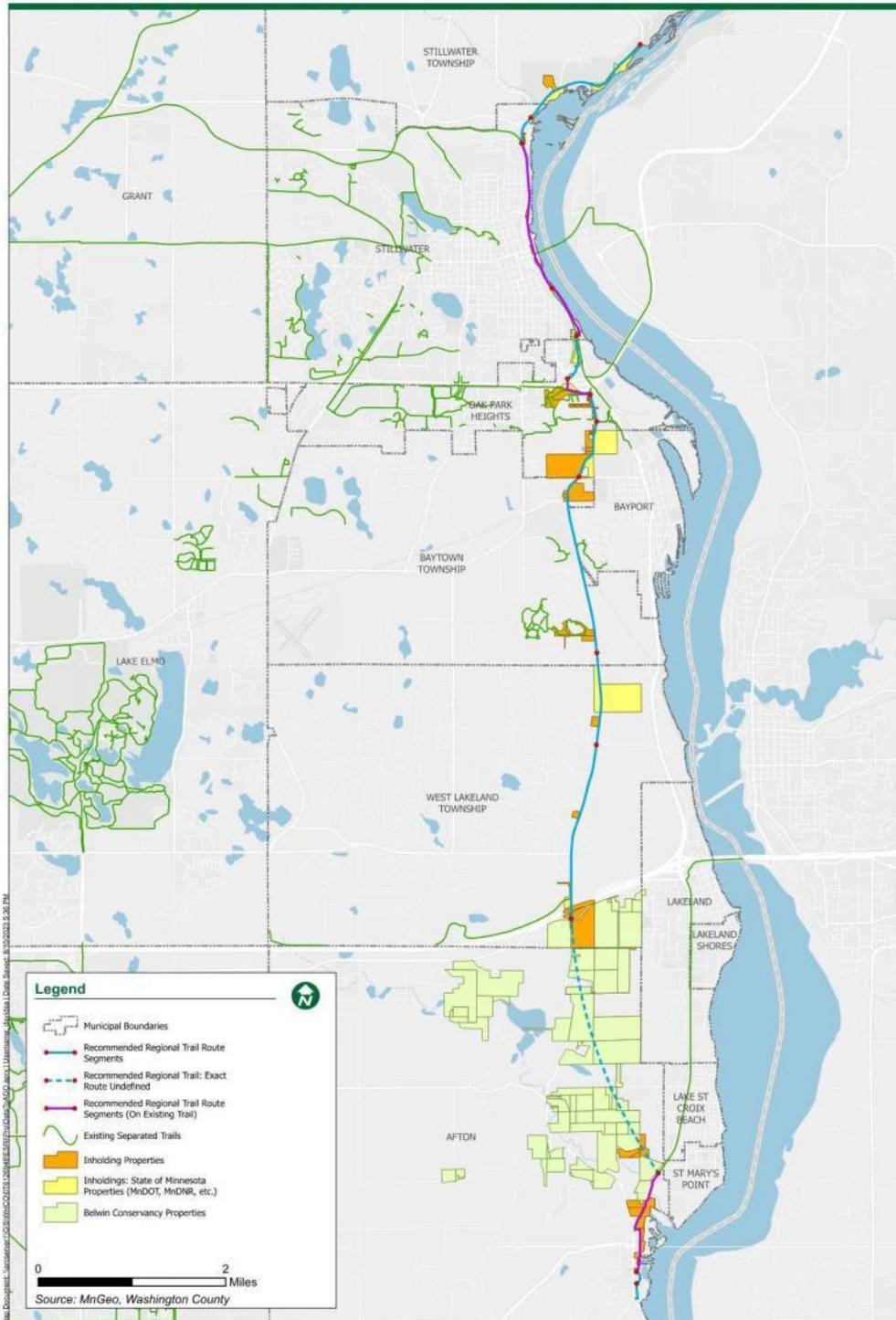


Figure 113: Administrative Boundary & Potential Parcel Acquisition Map

Potential Acquisitions	Estimated Number of Parcels	Estimated Acreage	Number of Parcels Currently Owned by a Public Entity	Acreage of Currently Owned Public Entity Parcels	2023 Avg. Acre Value	2023 Assessed Tax Value of Parcels Owned by Public Entity	2023 Assessed Tax Value of Parcels not Currently Owned by Public Entity
<b>Stillwater Township</b>							
Boom Site to Fairy Falls Rd N	7	5.00	6	4.70	\$39,313	\$184,771.10	\$11,793.90
<b>Stillwater</b>							
Fairy Falls Rd N to Brown's Creek State Trail, Brown's Creek State Trail to near Oasis Café, Near Oasis Café to Main St S	30	3.28	11	0.87	\$39,313	\$34,202.31	\$94,744.33
<b>Oak Park Heights</b>							
TH 95 Crossing to Beach Rd N, Beach Rd N to Stagecoach Trl N, Stagecoach Trl N to 56th St N	38	4.33	15	2.48	\$119,126	\$295,432.48	\$220,383.10
Main St S to CR 36, CR 36 to King Plant Rd, 56th St N from TH 95 to Pickett Ave N, 56th St N from Pickett Ave N to Stagecoach Trl N	7	0.24	7	0.24	\$119,126	\$28,141.13	\$0.00
<b>Bayport</b>							
Stagecoach Trl N from 56th St N to 50th St N	2	2.00	2	2.00	\$39,313	\$78,626.00	\$0.00
<b>Bayport Township &amp; West Lakeland Township</b>							
Stagecoach Trl N from 50th St N to 30th St N, Stagecoach Trl N from 30th St N to 22nd St N, Stagecoach Trl N from 22nd St N to Hudson Rd S	14	4.23	3	2.81	\$39,313	\$110,469.53	\$55,824.46
<b>Lakeland, Lakeland Shores, Lake St. Croix Beach, St. Mary's Point</b>							
Hudson Road from Stagecoach Trl N to Quinlan Ave N, Afton-Lakeland Trail from 8th St N to St Marys Dr S	21	4.18	21	4.18	\$87,930	\$367,163.67	\$0.00
<b>Afton</b>							
Afton-Lakeland Trail from St Marys Dr S to Upper 34th St S, Upper 34th St S to River Rd S along levee	22	4.69	0	0.00	\$114,751	\$0.00	\$538,182.19
<b>Potential Easements</b>							
Belwin Conservancy	19	12.93	0	0.00	\$39,313	\$0.00	\$508,317.09
<b>Total Estimated Regional Trail Acquisition Costs:</b>	<b>160</b>	<b>40.87</b>	<b>65</b>	<b>17.27</b>	<b>\$61,491.71</b>	<b>\$395,304.81</b>	<b>\$1,429,245.07</b>

The table below summarizes anticipated costs for interim and long-term regional trail infrastructure development; including identified likely parcel and easement acquisitions. Estimated costs for interim and desired long-term regional trail infrastructure are separated below, mirroring methodology included earlier in this chapter. Risk and Construction Contingency estimates cover infrastructure recommended for development on publicly owned land and privately held inholdings.

Regional Trail Summary Table		Estimated Totals
Development/Infrastructure		\$9,011,000.00
10% Risk Contingency		\$901,100.00
20% Construction Contingency		\$1,795,000.00
Parcel Acquisition		\$1,429,245.07
<b>Regional Trail Development:</b>		<b>\$13,136,345.07</b>
Interim Regional Trail Summary Table		Estimated Totals
Development/Infrastructure		\$1,248,000.00
10% Risk Contingency		\$125,700.00
20% Construction Contingency		\$249,600.00
Parcel Acquisition		\$395,304.81
<b>Interim Regional Trail Development:</b>		<b>\$2,018,604.81</b>
<b>Total Trail Development:</b>		<b>\$15,154,949.88</b>

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## Funding Opportunities

The table below highlights grant funding opportunities Washington County could pursue to address development of the Middle St. Croix Valley Regional Trail recommendation outlined in this master plan. Because eligibility criteria and existence of each grant is not guaranteed each year, the County should confirm grant details prior to establishing funding plans.

Grant Program	Category	Sponsor Agency	General Information	Eligibility	Link
<b>America Walks</b>	Outdoor Recreation	Other - Minnesota	America Walks awards stipends to communities for projects related to creating healthy, active, and engaged places to live, work and play.	School Districts, City, County	<a href="https://america.walks.org/community-change-grants/">https://america.walks.org/community-change-grants/</a>
<b>American Trails, Trails Capacity Program</b>	Trails	American Trails Organization	Supports partners to complete trail research, design, planning, stewardship, and maintenance projects that are inclusive, foster improved trail user behavior and connect trail assets to a broader user group.	City, Non-Profits	<a href="https://www.americantrails.org/the-trail-fund">https://www.americantrails.org/the-trail-fund</a>
<b>Building Resilient Infrastructure &amp; Communities</b>	Natural Resources, Sustainability	Federal Emergency Management Agency (FEMA)	This program aims to shift the federal focus away from reactive disaster spending and toward research-supported proactive investment in community resilience.	City, County, State Agency, Tribal	<a href="https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities">https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities</a>
<b>Credit Enhancement Program</b>	Outdoor Recreation	Minnesota Public Facilities Authority (PFA)	Helps cities and counties reduce the costs of borrowing to build certain public facilities.	City, County	<a href="https://mn.gov/deed/pfa/funds-programs/credit-enhancement.jsp">https://mn.gov/deed/pfa/funds-programs/credit-enhancement.jsp</a>
<b>Economic Adjustment Assistance Program</b>	Community Development	US Economic Development Administration (EDA)	Grants are awarded to help communities across the nation plan, build, innovate, and put people back to work through construction or non-construction projects designed to meet local needs.	Tribal, City, County, State Agency, Township	<a href="https://www.eda.gov/economic-adjustment-assistance-american-rescue-plan-u.s.-economic-development-administration">Economic Adjustment Assistance - American Rescue Plan   U.S. Economic Development Administration (eda.gov)</a>

<b>Environment and Natural Resources Trust</b>	Natural Resources	Environment and Natural Resources Trust Fund (ENRTF)	ENRTF aims to protect, conserve, preserve, and enhance Minnesota's air, water, land, fish, wildlife, and other natural resources.	City, County, State Agency, Federal Agency, Tribal	<a href="https://www.lc.cmr.leg.mn/">https://www.lc.cmr.leg.mn/</a>
<b>Federal Recreational Trail Program (MN)</b>	Outdoor Recreation, Trails	MN Dept. of Natural Resources (DNR)	Encourage the maintenance and development of motorized, non-motorized, and diversified trails.	City, County, State Agency, Private	<a href="#">Federal Recreational Trail Program   Minnesota DNR (state.mn.us)</a>
<b>Active Transportation State Infrastructure Program</b>	Trails	MN Pollution Control Agency (MPCA)	New program in 2022 funded by the State of Minnesota and administered through MnDOT. The program provides funding for infrastructure that facilitates more safe and effective transportation for cyclists and pedestrians.	City	<a href="#">Infrastructure - Active Transportation Program - MnDOT (state.mn.us)</a>
<b>National Outdoor Recreation Legacy Partnership (ORLP) Program</b>	Outdoor Recreation	MN Dept. of Natural Resources (DNR)	To create or reinvigorate parks and other outdoor recreation spaces in areas with populations of 30,000 or more people.	City, County, State Agency, Tribal, Township	<a href="#">National Outdoor Recreation Legacy Partnership (ORLP) Program   Minnesota DNR (state.mn.us)</a>
<b>Local Trail Connections Program</b>	Outdoor Recreation, Trails	Minnesota Department of Natural Resources (MNDNR)	To provide grants to local units of government to promote short trail connections between where people live and desirable locations, not to develop significant new trails.	City, County	<a href="https://www.dnr.state.mn.us/grants/recreation/trails_local.html">https://www.dnr.state.mn.us/grants/recreation/trails_local.html</a>
<b>Regional Solicitation</b>	Transportation	Metropolitan Council	A competitive process to award federal transportation funding to projects that meet regional transportation needs within the Twin Cities Metro Area.	City, County, State Agency, School District, Tribal	<a href="#">Regional Solicitation - Metropolitan Council (metrocouncil.org)</a>
<b>Minnesota Off Highway Vehicle Trails Assistance Program</b>	Outdoor Recreation	Minnesota Department of Natural Resources (MNDNR)	Facilitates development and maintenance of trails for use by All-Terrain Vehicles, Off-Highway Motorcycles, and Off-Road Vehicles.	City, County	<a href="https://www.dnr.state.mn.us/grants/recreation/gia_ohv.html">https://www.dnr.state.mn.us/grants/recreation/gia_ohv.html</a>

<b>Natural and Scenic Area Grants</b>	Natural Resources	Minnesota Department of Natural Resources (MNDNR)	To increase, protect and enhance natural and scenic areas.	City, County, School Districts	<a href="https://www.dnr.state.mn.us/grants/land/natural-scenic-app-cycle.html">https://www.dnr.state.mn.us/grants/land/natural-scenic-app-cycle.html</a>
<b>No Child Left Inside</b>	Outdoor Recreation	Minnesota Department of Natural Resources (MNDNR)	Support and increase efforts to expand programming that connects youth to the outdoors.	City, County, Private	<a href="https://www.dnr.state.mn.us/grants/index.html">https://www.dnr.state.mn.us/grants/index.html</a>
<b>State Park Road Account Program</b>	Outdoor Recreation	Minnesota Department of Natural Resources (MNDNR)	Assist local governments in improving access to public recreation facilities.	City, County	<a href="https://www.dnr.state.mn.us/grants/recreation/parkroads/index.html">https://www.dnr.state.mn.us/grants/recreation/parkroads/index.html</a>
<b>Grant Navigator</b>	Civil/Municipal	League of MN Cities	The program provides funding to assist LMC member cities in preparing government grant programs. The funding is provided to communities for consultant fees to complete their grant applications.	City	<a href="#">Grant Navigator - League of Minnesota Cities (lmc.org)</a>
<b>Hydration Station Competitive Grants</b>	Water Resources	MN Department of Health (MDH)	To provide water-bottle filling stations (hydration stations) to qualifying applicants.	City, County, Tribal, School Districts	<a href="#">Drinking Water Protection Grant Information - MN Dept. of Health (state.mn.us)</a>
<b>Otto Bremer Trust Grants</b>	Livable Communities	Otto Bremer Trust	Provides funding to support critical assistance, health and well-being, and community engagement.	City, County, State Agency, Federal Agency	<a href="#">Home - Otto Bremer Trust</a>
<b>Outdoor Recreation Grant Program</b>	Outdoor Recreation, Trails	MN Department of Natural Resources (DNR)	To increase and enhance outdoor recreation facilities in local and community parks throughout the state.	City, County	<a href="#">Outdoor Recreation Grant Program   Minnesota DNR (state.mn.us)</a>
<b>Recreation Economy for Rural Communities</b>	Outdoor Recreation, Trails	US Environmental Protection Agency (EPA)	Provide planning assistance for rural communities looking to leverage the outdoor recreation economy.	City, County, Tribal, Non-Profits	<a href="#">Recreation Economy for Rural Communities   US EPA</a>

<p><b>Rivers, Trails and Conservation Assistance Program</b></p>	<p>Trails, Parks, Outdoor Recreation</p>	<p>National Park Service (NPS)</p>	<p>Supports community-led natural resource conservation and outdoor recreation projects across the nation.</p>	<p>City, County, State Agency, Federal Agency, Tribal</p>	<p><a href="https://www.nps.gov/rtca/">Rivers, Trails, and Conservation Assistance Program (U.S. National Park Service) (nps.gov)</a></p>
<p><b>Transportation Alternatives – GM FY2027</b></p>	<p>Civil/ Municipal, Transportation</p>	<p>MN Department of Employment &amp; Economic Development (MN DEED)</p>	<p>To help finance infrastructure that results in economic development opportunities, jobs, and improve all types of transportation systems statewide.</p>	<p>City, County, Townships</p>	<p><a href="https://www.mn.gov/transportation-economic-development">Transportation Economic Development Infrastructure (TEDI) Program / Minnesota Department of Employment and Economic Development (mn.gov)</a></p>
<p><b>Wellmark MATCH Grants</b></p>	<p>Other</p>	<p>Wellmark</p>	<p>The Wellmark Foundation supports projects designed to encourage healthy lifestyles for years to come in the following areas: Access to and the consumption of healthy foods and safe environments in which to be physically active.</p>	<p>City, County, Private</p>	<p><a href="https://www.wellmark.org/">The Wellmark Foundation: Supporting Iowa and South Dakota</a></p>