



Master Trails Plan

Lewiston, MN

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ACKNOWLEDGEMENTS/SOURCES

The Lewiston Master Trail Plan was created by community members, with assistance from Winona County Planning and Environmental Services staff. Sources for some of the information contained within the plan include: City of Lewiston Comprehensive Plan, 2011; Winona County Trail Plan, 2013; United States Department of Transportation – Federal Highway Administration; and the State of Minnesota Department of Natural Resources, 2007.

It is the intent of this document to convey a trail plan as accurately as possible relating to current onsite conditions and also documenting historical items. Should information contained in the plan not convey the truth, an apology is extended and we encourage you to contact the City of Lewiston to make them aware of the error so that it may be corrected in future plan updates.

Cover aerial photo taken by Russell Marsolek.

The Lewiston Master Trails Plan was adopted on March 12, 2014 by the Lewiston City Council:

David Sommer – Mayor

Sean Sannes – Council Member

Larry Rupprecht – Council Member

Sharon Trester – Council Member

Michael Harrison – Council Member

 _____ (Mayor)

3-12-2014 _____ (Date of Signature)

EXECUTIVE SUMMARY

Overview:

The Bicycle & Trail Advisory Committee of Lewiston, in collaboration with the Winona County Trail System Plan Committee and other local groups, has taken steps to study, design and implement a pedestrian and bicycle trail system throughout the city of Lewiston and surrounding area.

Additionally, Lewiston has been selected as the 'hub' for multiple Winona County trail loops and other regional trails that will pass through the area in the Winona County Trail Plan. Local trail connections and loops within these regional and legislatively authorized state trails are also being researched and planned.

Recommended/Allowable Uses:

The following are the recommended trail uses:

- Bicycling
- Hiking and Walking
- Running and Jogging
- In-line Skating, Skate skiing
- Snowmobiling
- Bird watching
- Environmental Education and Nature Study

Accessibility is a key component to trail development to ensure that trails are available to all user groups, including the young, elderly and disabled.

Trail Management:

The plan contains recommendations for location, construction, maintenance, enforcement, and interpretation of natural and cultural resources. The plan recommends that an adequate level of enforcement be provided via a multifaceted approach to help maintain a safe and secure trail environment and to encourage trail users to understand and obey trail rules and respect other trail users and adjoining properties.

Natural and Cultural Resources:

The trail segments will be acquired, developed, and managed to minimize impacts on natural resources. Native grasses, flowers, trees and shrubs will be planted and managed within the trail corridor. Interpreting the natural/cultural features and stormwater management solutions along the trail by users is recommended.

GOALS OF THE TRAIL PLAN

Residents of Lewiston, surrounding cities, Winona County and visitors to the area will all benefit from a pedestrian and bicycle trail system within and surrounding the city of Lewiston.

Benefits of a trail system include:

- improved access to outdoor resources for recreation and education;
- linking schools to residential neighborhoods, providing children with the opportunity to walk or bike to school;
- capitalizing on tourism and economic development opportunities;
- promoting of healthier lifestyle opportunities for a variety of users;
- providing users multi-modal options for transportation requirements

The City of Lewiston's Master Trails Plan will assist and guide the trail system's vision to implementation.

The goals and actions of the trail planning process are:

Goal 1

To develop a unified, coordinated vision for the trail and amenities to serve as a blueprint to guide the development of the trail through the process of right-of-way acquisition, development, and maintenance.

This goal is being achieved through the following actions:

Identifying potential interpretive themes; and
Outlining basic design concepts; and Identifying user groups and allowable trail uses.

Goal 2

To identify opportunities and constraints for the trail and to address any potential conflicts or problems through an open, fair, public participation process.

This goal is being achieved through the following actions:

Public meetings, circulating copies of the draft plan, and soliciting comments from potential trail users, owners of the property it passes through, landowners, and government officials;

Assessing the impacts of the trail in order to inform the decision-making process; and Supporting outreach efforts, partnerships, and processes that will help to implement the plan.

Goal 3

To inventory and to organize information on existing conditions on and around the trail area to guide trail supporters as they make the trail system a reality.

This goal is being achieved through the following actions:

Inventorying the natural and cultural resources;
Identifying potential connections to other recreational opportunities, present and future;
Identifying exiting trail plans/projects so trails can be integrated into existing infrastructure.

Goal 4:

To identify potential corridors so that the process of securing the trail alignment can begin.

This goal is being achieved through the following assessment means:

Aerial photography, property ownership information, field visits, community meetings, public workshops, and the resource inventory to identify opportunities and constraints to outline potential corridors for each segment.

Goal 5

To provide a clear, compelling rationale and strategies for funding and constructing the trail.

This goal is being achieved through the following objective:

Explaining how the trail alignments could potentially be funded through a variety of financial sources.

HISTORY/PURPOSE OF COMMITTEE

Lewiston's Bicycle & Trail Advisory Committee is comprised of passionate volunteers who are focused on making the trail system a reality. Committee members consist of City Council and Economic Development Authority representatives, active members of the community, and local school representatives. The committee meets monthly to plan, gather facts, prioritize trail development, conduct research, and discuss regional trail activities as a member of Southeast Minnesota Association of Recreational Trails (SMART). The committee hosted a community forum on April 19, 2012 to explore and discuss the future of trails within and around the city.

HISTORY OF LEWISTON

In the mid-1850s, while Winona was becoming the port city for southeastern Minnesota, the vast area of Minnesota's rich farmland was being marketed on leaflets and posters in Europe and the eastern United States as some of the best agricultural land available anywhere. Settlers arriving by steamboat at Winona headed west to the prairies of southeast Minnesota.

In 1855, the railroad began building a roadbed west along nearly the same route taken by early pioneers in covered wagons. The railroad wanted to purchase flat, buildable land at the top of the hill from Stockton for a depot and elevator. Price gouging began by landowners adjacent to the best sites. Property owner Jonathon Smith Lewis sold the Winona & St. Peter Railroad, the property on which the depot would be located. Because Mr. Lewis had proven himself to be an honest and honorable man, the Winona & St. Peter Railroad designated the station as Lewiston.

Over the last 150 years, Lewiston has remained the heart of Winona County's richest agricultural region. Today, Lewiston, population 1,620, is a city of excellent schools, strong churches and a wonderful, caring community in which to live. (*City of Lewiston Comprehensive Plan, 2011*)

In April of 2011, the City of Lewiston approved the Lewiston Comprehensive Plan. The plan was created using a planning process that engaged citizens and elected officials in a manner that addressed physical, social, and economic factors that are contained in the community while overlaying general trails and needs such as housing, education, land use, transportation, and recreation. The Master Trails Plan compliments the Comprehensive Plan and provides the citizens and community leaders the guidance to further implement the plans.

RECOMMENDED TRAIL USES

Bicycling

Bicycling is recommended as a use throughout the entire trail system. An asphalt surface is recommended for bicycling but dependent on funding or natural conditions, there may be segments where an aggregate surface is appropriate.

Hiking and Walking

Hiking and walking are recommended as uses throughout the entire trail system.

Running and Jogging

Running and jogging are recommended as uses throughout the entire trail system.

In-line Skating, Skate skiing

These uses are recommended wherever an asphalt surface is developed as part of the trail.

Snowmobiling

Snowmobiling does occur within the boundaries of the city. Snowmobiling should be considered as a use as trail alignments are acquired, as a seasonal amenity and on non-paved trail treads.

Bird watching

Bird watching is a popular activity in the nature preserve area and the surrounding uplands. The trail should be designed to connect bird watchers to such viewing opportunities.

Environmental Education and Nature Study

Use of the trail for environmental education and nature study, whether for individual trail users or for groups, is encouraged. Nature photography is also a popular activity.

COMMUNITY ASSETS AND NATURAL RESOURCES

Parks and Recreation

The outdoors, recreation, and fitness are important aspects of daily life in Lewiston. Lewiston has an active Parks & Recreation department which tries to improve upon the assets already present within the community, and plans to develop new amenities for residents and visitors to enjoy.

Recreation options in Lewiston are diverse. Its park system, along with sporting leagues, offers recreational options for all ages. The city has an active Parks and Recreation Department made up of community volunteers and city employees.

Lewiston maintains five parks:

- Southside Park with a range of recreational amenities
- City View Park with a ball diamond and a pavilion
- North Park with playground equipment along First Avenue North
- A park area along Cedar Lane on the western edge of the city,
- A picnic area adjacent to the vacant community swimming pool area.



About three miles east of the city of Lewiston is Farmers Community Park. The park is a rural picnic and recreation haven between Lewiston and Stockton. The park is a picturesque kind of place set in a valley with a clear stream winding its way through tree covered hills on either side of the park. On January 31, 1925, H. C. Garvin and his wife Louise donated a large tract of land for a park to the county of Winona. Garvin was deeply interested in 4-H activities and helped many young people start their careers. Garvin also built the Women's Lodge, a large square brick building set back at the far end of the park, utilized as a base for large gatherings of people.

Today, the Farmers Park consists of approximately 15 acres of open area along Garvin Brook and 28 acres of tree covered land on the hillsides and is a valuable location of natural communities and rare species of Winona County. There are several shelters and lodges, some of which can be reserved. Playground equipment is placed throughout the park and a softball diamond is located at the south end of the parking area. In the Fall of 2013, a prairie restoration project began to reclaim portions of the park to a prairie grassed vegetation cover. Winona County oversees maintenance and the administration of the park.

Many regional trail systems are located just beyond Lewiston. To the east of Lewiston are the City of Winona and City of Goodview area trails which provide a connection to the State of Wisconsin trail system. To the west are the St. Charles trails; a new developing Whitewater

Country Loop Trail system; and a Chester Woods Recreational Trail which will tie into the City of Rochester trail system. To the South of Lewiston is the well-established Root River Trail system.

Commerce and Industry

Lewiston has several eating establishments, a privately owned - public 9-hole golf course and country club, bowling alley and convenience store. Lewiston is also home to several long-standing businesses, serving residents in the areas of education, agriculture, transportation, banking, and senior living. The regional office of the Minnesota Department of Natural Resources is located in Lewiston, as well as a United States Department of Agriculture service



center and the Winona County Soil and Water Conservation District offices. Lewiston is home to RiverSide Electronics, a custom electronic manufacturing company that employs more than 320 people. Other employers within the City of Lewiston include: Lewiston/Altura School District, Lewiston Auto, Lewiston Feed and Produce, Lewiston Veterinary Clinic, Security State Bank, Lewiston Hardware, Lewiston Monument, Subway, National Chemical, Winfield Solutions, Benson Farm Services, Kwik Trip, Plasti Cert, Rislow Service Center and a number of small businesses.

Public Facilities

Lewiston's Community Center is an all-in-one type facility and is home to City Hall, Lewiston Police Department, Lewiston Ambulance Service, Lewiston Senior Center and a large community gathering space. The Community Center also contains public restrooms, access to drinking water and information regarding city activities.

The fire station, located on Fremont Street, near U.S. Highway 14, houses a range of emergency response equipment, training and education materials, and 6 fire trucks as well as an ambulance. The Lewiston Volunteer Fire Department has approximately 32 members.

School Facilities

The Lewiston-Altura Elementary and High School buildings are also located within city limits. The school grounds are complete with athletic fields for football, baseball, tennis and track as

well as a large playground area. St. John's Lutheran School is also located in Lewiston and has a large and complete playground on site. (*City of Lewiston Comprehensive Plan, 2011*)

Topography/Geology

The topography and geology of Lewiston are part of a larger region known as the driftless area. This area is uniquely characterized by steep bluffs overlooking river valleys which differentiates it from the surrounding landscapes of rolling hills. Lewiston is located in the transition area between the steep slopes and rolling hills of the ridge land.

The driftless area owes its unique topography to the lack of glaciers during the most recent Wisconsin glaciations. Early in the Wisconsin glaciations the driftless area was completely surrounded by continental ice sheets. The topography was therefore left in a state unaltered by glacial ice. However, melt waters from the glaciers did impact the area through erosion to create the river valleys and bluffs that exist today. The erosion deposited large amounts of outwash, some of which was picked up by winds and deposited as loess soils.

Carbonate rocks such as dolomite and limestone, which dissolve in water over time, create what is called karst topography. Features associated with karst topography include caves, sinkholes, springs, and cold water streams. Over the years, hundreds of sinkholes have been inventoried in Winona County. The size of these features varies between three feet and one hundred feet in diameter and from one foot to thirty feet in depth. Karst features are widespread throughout Winona County and sensitive in nature. Consideration should be given to avoid these features when locating trails.

Water Resources

The Rush-Pine Creek Watershed, located in parts of south-central Winona, northeastern Fillmore, and northwestern Houston counties, drains an area of 135.8 square miles. The watershed begins near the towns of Utica and Lewiston in Winona County and flows primarily in a southeasterly direction before entering the Root River in the City of Rushford. Most of the watershed is agricultural (row crops and grazing) or forested with little development.

Water Resource Recommendations

Recommendation 1: There are state statutes and rules that pertain to wetlands and intermittent/perennial streams. The City of Lewiston should work with the local units of government and the Minnesota Department of Natural Resources (MNDNR) when a specific trail route is being proposed near a water resource feature to ensure that Best Management Practices (BMP) are being met.

Recommendation 2: Minimize trail development and maintenance impacts to adjacent water resources through the use of mulching, geo textiles, silt screen and native seed mixes to establish vegetation and use storm water Best Management Practices (BMP).

Recommendation 3: Strive to limit waterway/drainage crossings and obtain appropriate permits for any crossings.

Recommendation 4: Interpretive displays should emphasize the significance of the water resource, create an awareness of water quality issues, and identify water resource conservation efforts.

Recommendation 5: A trail constructed too close to drainage ways may be subject to enhanced erosion from the surface drainage from adjoining lands. Trail location must consider the potential erosion impact of surface drainage, as prevention or mitigating this process is costly.

Wildlife

The proposed trail concepts will traverse areas with a rich natural history of prairies and woodlands. Most wildlife species common to farmland areas of Minnesota can be found here. Common mammals in the mix of agricultural lands and woodlands found along the trail corridors include white-tailed deer, coyotes, red fox, striped skunks, opossum, fox and gray squirrels, cottontail rabbits, and white-footed mice. Thirteen-lined ground squirrels, pocket gophers and meadow voles are common inhabitants of pastures and meadows. Other grassland species include jack rabbit, badger, jumping mouse and prairie vole. Forest denizens include gray fox, southern flying squirrel, eastern chipmunk, southern red-backed vole, eastern pipitrel, and silver haired, red and big brown bats. Along waterways common animals include muskrats, beavers, raccoons, mink, and otters.

A rich legacy of bird life is found in this part of southeast Minnesota. Over 300 bird species are considered regular or casual in Minnesota and a large percentage of these species have been observed in or near the proposed trail corridor. Only a small number of birds are year round residents. Examples include American Crow, Blue Jay, Hairy, Downy and Red-bellied Woodpeckers, White-breasted Nuthatch, Blacked-capped Chickadee, American Goldfinch, Northern Cardinal, Mourning Dove, Red-tailed Hawk, and Great Horned Owl. Other less common resident species include Pileated Woodpeckers, Barred and Eastern Screech Owls found in larger patches of forested lands.

Three upland game birds are common in Winona County: non-native Ring-necked Pheasant, Ruffed Grouse and Wild Turkey. Of the four native gallinaceous birds, the Prairie Chicken and Sharp tailed Grouse have been extirpated. Natural populations of Bobwhite Quail are probably extirpated.

The majority of birds in Winona County are migrant species that are found in the area seasonally. This leads to an ever-changing bird assemblage throughout the year. A few species travel here for the winter including Dark-eyed Junco, Snow Bunting, Lapland Longspur, Northern Shrike and Rough-legged Hawk. Spring is the best season for bird observation. The

rare Northern Forests and woodlands host a wide variety of migrant and breeding birds including Vireos, dependents on grasslands include Northern Harrier, Meadowlark, Bobolink, Dickcissel, several species of sparrows such as the Vesper Sparrow, Savannah Sparrow, Grasshopper Sparrow and the rare Loggerhead Shrike. Shrikes use grassy, open areas with scattered trees and shrubs such as pasture, prairie patches and grassy roadsides.

Prairie Skink and several snakes including the Racer, Bull Snake and Smooth Green Snake are associated with grasslands.

As in much of the Midwest, natural habitats have been significantly reduced and altered since European settlement. Natural communities are found in a small percentage of the landscape. As a consequence, fauna with habitat requirements requiring large patches and/or those that were considered competitors with human endeavors are no longer found free-ranging in the area or at best exist as transients. Examples include prairie chickens, elk, and bobcat. Nevertheless, a rich legacy remains and a variety of wildlife can be observed in appropriate habitats.

Interrelationship with other Tourism Events and Road Designations

Fools Five

Since 1979 the Fools Five Road Race, a 501(c)(3) non-profit organization, has brought people from around the world to Lewiston to raise funds for cancer research. This annual event includes a live/silent auction, road race, kid's events, and a guest speaker. The race course starts near the high school, proceeds through downtown and continues into the rolling countryside, creating an "out-and-back" style race. The event offers the following distances for entrants: 8k run/walk and 1mile run/walk.



Black and Yellow Trail (US14)

In 1925, at the request of the State highway agencies, the Secretary of Agriculture appointed the Joint Board on Interstate Highways to develop a plan for marking the

Nation's interstate highways. The Joint Board, which included 21 State highway officials and three officials of the U.S. Bureau of Public Roads, met with State road officials around the country, developed standardized signs, including the original U.S. shield, identified the Nation's main interstate roads, and conceived a system for numbering them. The Joint Board completed its report on the new marking system in October 1925. Within the proposed grid of U.S. routes, the report identified U.S. 14 as a roadway to be designated with historical relevance. The Black and Yellow Trail is approximately 599 miles in length, with Chicago and Yellowstone National Park anchoring the route. (overview provided by Richard F. Weingroff)

TRAIL AMENITIES

Amenity Standards:

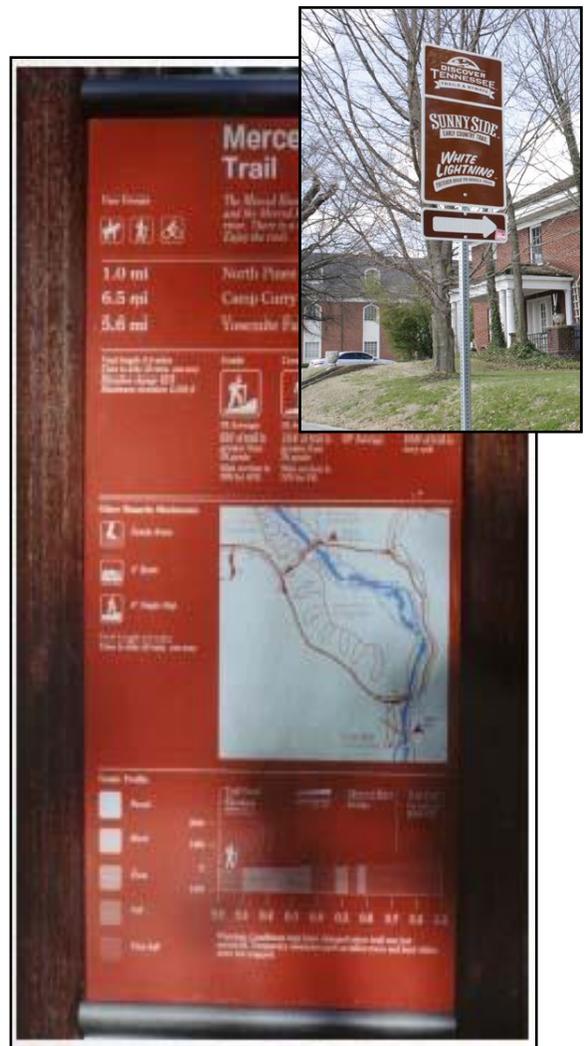
Lewiston's trail system will include signage that provides information, education and safety guidelines, which will tie in to the Winona County Trail System standards. It is the desire of the City of Lewiston's Bicycle & Trail Committee that a theme or branding of the community be established. The city-wide theme will be incorporated into the trail amenity standards, where appropriate.

Signage:

Signage provides useful and necessary information to trail users in a consistent, uncluttered manner.

The sign shown on this page is located at the Merced River Trailhead in Yosemite National Park. It allows users to assess whether or not the trail will meet their personal interests, experience, and skills by providing objective trail access information.

The type and extent of the information provided will vary depending on the trail, environmental conditions, and expected users. For example, trails that attract predominantly



experienced users and located in areas with few safety considerations may require fewer signs containing less detailed information than trails likely to be used by inexperienced people located in areas that will expose users to potential hazards. It is recommended that the following information be objectively measured and conveyed to the trail user through appropriate information formats:

- Trail name;
- Permitted users;
- Trail length;
- Change in elevation over the total trail length and maximum elevation obtained;
- Average running grade and maximum grades that will be encountered;
- Average and maximum cross slopes;
- Average tread width and minimum clear width;
- Type of surface;
- Location and length of any soft or unstable surfaces; and
- Size, location, and frequency of obstacles.

(source: USDOT Federal Highway Administration)

Regulatory/Warning Signs:

Regulatory signs notify users of rules and laws associated with various types of trails, such as designating users, direction of travel and code of conduct. Warning signs alert trail users of potential hazards on or adjacent to a trail.

(State of Minnesota Department of Natural Resources, 2007)



Trailhead/Orientation Signs:

Signs will highlight trail features, indicate interconnections with other trails, and provide general “You Are Here” type of information. Signs come in many forms, depending on the setting and information needs. *(State of Minnesota Department of Natural Resources, 2007)*



Directional Signs & Route Guides:

Signs will provide useful information at key decision points along a trail. They are used to reassure users that they are still on the trail and define their relative location, and where connection trails lead. *(State of Minnesota Department of Natural Resources, 2007)*



(photo: State of Wisconsin Department of Natural Resources)

Trail Identification/Warning Signs for Motorists:

Signs alert motorists about the existence of a trail crossing. *(State of Minnesota Department of Natural Resources, 2007)*



Difficulty-Level Signs:

Whenever a trail is rated anything other than easy, trail difficulty-level signs should be posted at every access point and throughout the trail system at key intersections and along the trail whenever the level of difficulty changes. Mileage associated with a particular segment of rated trail should also be provided. *(State of Minnesota Department of Natural Resources, 2007)*



Interpretive/Educational Trail Signs:

Interpretive trails are popular within established natural park areas. Signage is one of the key distinctions that separate an interpretive trail from a regular hiking trail. Often, but not exclusively, interpretive trails are associated with a nearby nature or visitor



center so that the trail can be used as part of a broader educational program. *(State of Minnesota Department of Natural Resources, 2007)*

User Amenities:

Amenities along the trail will include bicycle racks, information kiosks, benches, areas for trash, and in some locations, drinking water access, restrooms, showers, storage lockers and playground equipment.

A trailhead structure, consistent with the community's established theme and possibly designed to replicate the original train depot, should be located near the downtown business district of the city. The trailhead structure and surrounding property would provide parking, access to drinking water, as well as information about the trail system and the community. Potentially, the structure could be utilized as a self guided tour of the history of Lewiston, a

community library could also be housed within the structure, bike repair amenities, and shower/restrooms.



Transportation and recreation facilities are mandated by the federal Americans with Disabilities Act of 1991 (ADA) which requires that certain design standards are followed to be in compliance with the law. Consideration of ADA compliance is crucial when the plan enters in the detailed design and construction phases.

TRAIL CONSTRUCTION

Sustainable Trails:

Sustainable trails will serve the needs of users for future generations by ensuring that all trails are thoroughly planned to:

- minimize ecological impacts
- decrease maintenance costs through responsible location and design
- encourage strong stewards of the trails

These three core criteria will be implemented by the City of Lewiston through the guidelines/recommendations devised by MN DNR that strive to build trails that are ecologically

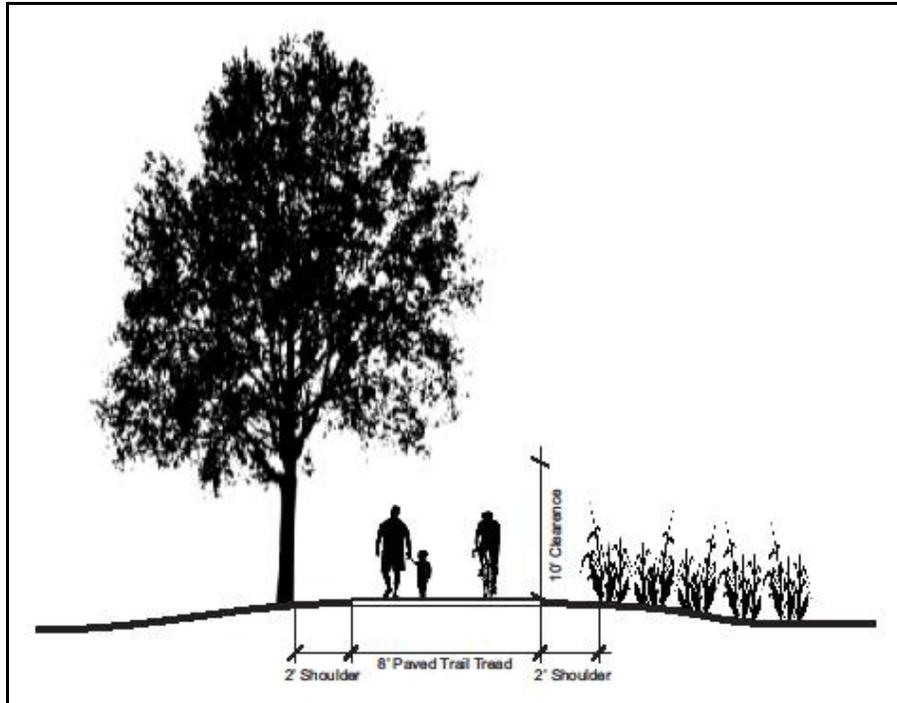
sustainable through balancing the desire to locate trails for the highest recreational value while minimizing adverse impacts to natural resources.

Sustainable trails are also defined by the National Park Service (NPS) and should be considered when trail concepts are further developed in the design phase of implementation. The following list highlights components of the NPS sustainable trails definition:

- Supports current and future use with minimal impact to the area's natural systems
- Produces negligible soil loss or movement while allowing vegetation to inhabit the area
- Recognizes that pruning or removal of certain plants may be necessary for proper maintenance
- Does not adversely affect the area's animal life
- Accommodates existing use while allowing only appropriate future use.
- Requires little rerouting and minimal long-term maintenance.

General Design Guidelines:

The following is a brief overview of trail construction details that should be considered when construction details are created. "MNDNR Trail Planning, Design and Development Guidelines", chapter 5, outlines construction details that will guide development of shared-use trails within the system. Note that the following guidelines are not intended to substitute for site-specific design and engineering that responds to local conditions, development requirements, and safety concerns. Further detail regarding sight distances, curve radius, gradients, design speeds, clearance zones, storm water drainage control, road intersection crossings, railroad crossings, and accessibility standards will need to be explored in finer detail once specific trail alignments are determined.



Trail Width

The trail width should be a minimum of eight feet for a multi-use trail. The recommended trail width allows for a comfortable physical space between all types of proposed trail uses. A clearance height of ten feet from any overhanging objects should be observed across the entire trail width.

Surfacing

The preferred surfacing treatment for the trail system is asphalt. Understandably, trail surfacing may be dictated by fund availability. A crushed aggregate material could also be used to establish the trail tread if funding is limited.

A cross slope of 1.5-2% of the trail tread should be maintained throughout the trail system to allow for proper drainage of surface water. Exceeding 2% cross slope has been identified as an annoyance for users, making the trails less accessible to a wide range of uses and should be avoided.

Shoulder Width (Recovery Zone)

The shoulder area is utilized when users of the trail need to recover and regain control from any conflicts that arise on the trail tread. The shoulder area adjacent to the trail tread should be a minimum of two feet in width and be free of obstructions; this would include amenities and signage. The shoulder area should be a vegetated ground cover, which is typically mowed to keep brush and woody material from encroaching on the trail.

Portions of the proposed trail alignments are adjacent to property that will be used for agricultural purposes; either pasturing of animals or tillage of crops. In these areas, creating a buffer between the shoulder and the tillable/fenced area will be vital to managing both and avoiding conflict. A slope not exceeding 5% of the full width of shoulder should be maintained throughout the trail network allowing surface drainage to distribute and allow for users to navigate the shoulder area in a safe manner. The area between the shoulder edge and adjacent land uses (agriculture, road ditch, and drainage ways, etc...) must be managed in a manner that does not increase the likelihood of soil erosion. When site specific designs are formulated, it is recommended that the plans be reviewed by the Winona County Soil and Water Conservation District and the Winona County Planning Department to verify that Best Management Practices (BMP) are being incorporated.

TRAIL MAINTENANCE

Adequate maintenance of the trail system is critical to provide and sustain an excellent trail experience. Maintenance activities are numerous and diverse, as the following list illustrates:

- Monitoring trail conditions, which includes scheduling and documentation of inspections
- Monitoring the condition of railings, bridges, trail surfaces, and signage
- Hazard tree inspection and removal of debris such as downed trees
- Scheduling of maintenance tasks
- Mowing of vegetation: shoulders, rest areas, and parking lots
- Tree and shrub pruning
- Trash removal
- Trail repair, i.e. fixing washouts and controlling erosion
- Maintaining bridge decking and railings
- Trail drainage control
- Trail surface maintenance
- Checking and repairing fence lines and gates
- Mowing and sweeping agricultural/farm crossings

- Cleaning out ditches and culverts, replacing failing culverts
- Controlling noxious weeds
- Maintaining equipment
- Painting posts and picnic tables
- Graffiti control and vandalism repair, especially to signs
- Maintaining boundary signs, and working to resolve encroachment issues
- Coordination of volunteer efforts
- Training and supervision of employees, volunteers, Minnesota Conservation Corps, or Sentence to Service crews
- Sweeping the asphalt surface

Maintenance Recommendations

Recommendation 1: Maintenance funding should be established to maintain the trail system as it is developed.

Recommendation 2: The portions of trail system that will be covered in bituminous material should be seal coated approximately six years after initial development. Research shows that this will prolong the life of the trail.

Recommendation 3: The portions of trail system that are covered in crushed aggregate material should be graded/deburmed on a regularly established schedule based upon the amount of use the trails system encounters.

EXISTING TRAIL LOCATIONS/PROJECTS

Safe Routes to Schools and Shared Lane Marking (Sharrows)

In 2011, the City of Lewiston was awarded a “Safe Routes to School” (SRTS) grant, which will be completed in the fall of 2013. SRTS will provide a safe connection to the Lewiston-Altura High School, the Lewiston-Altura Elementary School, and St. John’s Lutheran School all within the city limits. The route is located along Williams Street and portions of Fremont Street and County Road 29. Another portion of the route is located west of the elementary school and will aid students in traveling to school from the surrounding residential neighborhoods. SRTS signage and two additional bike racks are planned to be installed along the route.



Following the completion of the SRTS work, the City of Lewiston will fund and direct the Public Works Department to paint sharrow markings on Williams Street an estimated 2,640 feet; County 25 from Highway 14 to the south city limits an estimated 5,280 feet; Fremont Street from Highway 14 south and continuing on County 29 south to the city limits an estimated 5,280 feet.

Completion of the Safe Routes to School projects and sharrow installation should provide for seamless user interaction between existing trail projects and conceptual trail locations.

CONCEPTUAL TRAIL LOCATIONS

Conceptual trail locations have been created to guide future trail development in a systematic, organized, and opportunistic approach. Onsite details and trail design features will need to be further explored at a time when the concepts are developed. The concepts utilize existing features/amenities of the city, identify locations for potential trailheads/kiosks, natural resource showcase locations, and create multiple loops that will allow users to determine the distance level that they would like to experience.

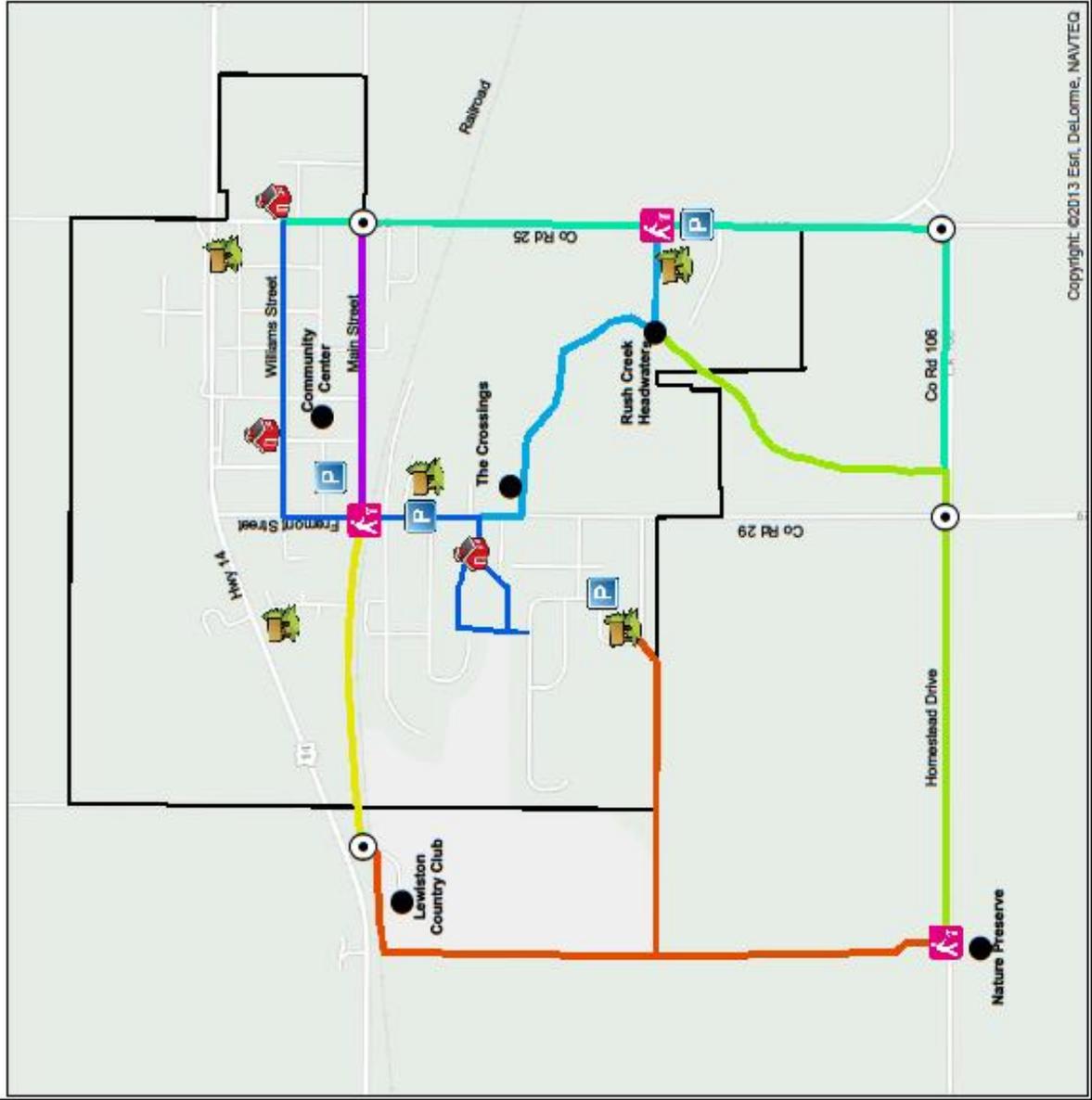
Through the trail planning process, potential trail development within the high school property was identified. Should the opportunity arise for a looped trail at the high school, the City of Lewiston trails, regional trails, and county trails should align to benefit from another looped segment.

Portions of the proposed trail system do extend outside of the municipal boundaries of Lewiston. Collaboration between Utica Township, Winona County, Minnesota Department of Transportation, and the Minnesota Department of Natural Resources will need to occur when trail concepts are further developed. Alignment with proposed trail location concepts located in the Winona County Trail Plan will promote regional trail connectivity.

The use of private landowner easements for trail development would be pursued as the opportunity presents itself with willing landowners. The trail plan does not advocate using private land as a principle method of obtaining property for trail development. This method should be considered when there is a willing landowner offering to accommodate trail development.

Lewiston Master Trails Plan Conceptual Trail Locations

- Community Assets
- Proposed Regional Trail Connection
- Parking
- Proposed Koala Location
- Schools
- City Parks
- Existing Project - Safe Routes to School
- Downtown Bike Route
- Outover Trail
- Lewiston Loop Trail
- Rush Creek Headwaters
- English Gardens Link
- Nature Preservative Trail
- City Boundary



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CUTOVER TRAIL

The Cutover Trail segment would allow current and future residential areas of the city to connect with the core of the city. This segment would also allow for users to experience a shorter route compared to the looped system around the city providing for a variety of distances. The City of Lewiston Comprehensive Plan recommends that the area surrounding this trail segment be developed into residential housing. This segment would allow users off-road access to the school system, Christian Crossings Event Center, residential housing, City View Park and also the core of the city.



The development of this segment must consider the established grassed waterway system and utilize Best Management Practices (BMP) when considering trail development near agricultural land uses.

Key Connections

- City View Park
- Existing and future residential housing
- Christian Crossings Event Center
- Elementary School

Criteria for Alignment

- Harmonious with agricultural practices
- Off-Road, multi-use trail

Potential Trail Alignments

- City View Park area along County Road 25
- Private landowner easement opportunities

RUSH CREEK HEADWATERS TRAIL

The creation of the Rush Creek Headwater Trail between City View Park on County Road 25 and the nature preserve will allow trail users to experience the headwaters of Rush Creek and a wide variety of upland prairie wildlife. The creation of this link will complete the southern portion of a larger loop system that allows users to determine the length of trail use based upon user ability, time and comfort.



Information/education kiosks may have interpretive elements that include: geology, plant communities and plant species found in and adjacent to the trail corridor, wildlife species likely to be observed by trail users, and agricultural practices.

Key Connections

- City View Park
- Existing and future residential housing
- Connection to future regional trail systems entering the city
- Nature Preserve
- Upland Prairie Habitat and Wildlife
- Agricultural setting

Criteria for Alignment

- Harmonious with agricultural practices
- Off-Road, multi-use trail

Potential Trail Alignments

- Existing utility easements
- County Road 106/29 right of way
- Homestead Drive (Utica Township) right of way
- Private landowner easement opportunities

Lewiston Loop Trail

The Lewiston Loop Trail showcases the agricultural significance surrounding the Lewiston area and allows users to experience the gentle rolling hills commonly found in the surrounding area. Locally, portions of this segment are known as the 'Lewiston Loop'.

Information/education kiosks may have interpretive elements that include: geology, plant communities and plant species found in and adjacent to the trail corridor, wildlife species likely to be observed by trail users, and agriculture practices.



The close proximity to the high school allows for the Lewiston Loop Trail to be used as an outdoor classroom not only for natural resource learning but also physical education. The opportunity presents itself for the construction of an outdoor exercise equipment course, also known as a fitness trail. A fitness trail consists of a path or course that is equipped with obstacles or stations distributed along its length for exercising, promoting healthy activities for trail users.

Key Connections

- City View Park
- Existing and future residential housing
- Connection to high school
- Connection to future regional trail systems entering the city
- Connection to Downtown Bike Route
- Connection to community employer

Criteria for Alignment

- Harmonious with agricultural practices
- Off-Road, multi-use trail

Potential Trail Alignments

- County Road 25/106 right of way
- Existing sidewalk areas along County Road 25
- Private landowner easement opportunities

ENGLISH GARDENS LINK

The naming of this trail link derives from the settlement days of Lewiston when English gardens were created to welcome potential settlers when they arrived by rail. Potentially areas along the link and railroad could be planted with flower gardens and become a gateway to the downtown along West Main Street.

Information/education kiosks may have interpretive elements that include: community history, topography information, geological facts, plant communities and plant species found in and adjacent to the trail corridor, wildlife species likely to be observed by trail users, and agriculture practices.



The link would connect the City of Lewiston Trail system to the proposed Winona County Trail System and also be the connection to the legislatively authorized trail systems known as the, Blufflands Trail System (Minnesota Statutes 85.105 subd. 7.)

Key Connections

- Connection to future regional trail systems entering the city
- Downtown
- Future trailhead
- Residential housing

Criteria for Alignment

- Multi use trail
- Harmonious interaction between roadway, railroad and trail
- Natural barrier between railroad and trail

Potential Trail Alignments

- Main Street right-of-way
- Railroad right-of-way
- Private landowner easement opportunities

NATURE PRESERVE TRAIL

The Nature Preserve Trail would anchor the western portion of the loop system and expand the locally popular ‘Lewiston Loop’, allowing users to experience one of Winona County’s hidden treasures, the Nature Preserve area. This trail would allow for connection to the elementary school and also to future residential housing development surrounding the golf course.



The Nature Preserve area has become a destination for many area local, regional, and national birdwatchers. Since the decommissioning of the sewage ponds, birds on their migratory route have used the area as a resting point in their migration, allowing for birders to capture a variety of bird species. In recent years, birders have documented approximately 300 species of birds at the site. In the Fall of 2013, conversion of the vegetation cover to prairie grass was started, allowing for even more diversity of wildlife.

Information/education kiosks may have interpretive elements that include: bird migration information, bird species list, as well as geology, plant communities and plant species found in and adjacent to the trail corridor, wildlife species likely to be observed by trail users, and agriculture practices.

Key Connections

- Connection with Southside Memorial Park
- Existing and future residential housing
- Connection to elementary school
- Connection to future regional trail systems entering the city

Criteria for Alignment

- Harmonious with agricultural practices
- Off-Road, multi-use trail

Potential Trail Alignments

- Private landowner easement opportunities
- Railroad right-of-way

Downtown Bike Route

The Downtown Bike Route will be a designated bike route utilizing Main Street, and the link the east and west sides of the city. In recent years, Main Street has been upgraded to include a wider parking lane. Since the road is part of a designated truck route and a county highway, appropriately sized vehicle lanes have been constructed.

The Bike Route will also act as the main travel path for users of future regional trail systems that would be using Lewiston as a 'hub'. This alignment will bring users directly to the core of the city. Future land use development of a centralized trail head with user amenities outlined in the English Gardens Link concept trail would promote redevelopment of buildings/businesses in the downtown area.



POTENTIAL FUNDING SOURCES

The following are funding and grant sources that the City of Lewiston and trail developers may utilize to construct/develop/maintain trails.

- **General Funds**
General funds could be used to develop the trail system with City Council approval. These funds are best used for smaller projects such as completing trail gaps that may not be eligible for grant funding. General funds typically are the primary funding source for on-going trail and bikeway maintenance costs such as striping, seal coating, mowing, snowplowing and street/trail sweeping.
- **Capital Improvement Funds**
Trail and bikeway projects could be part of City of Lewiston's Capital Improvement Project fund (CIP) just like road, sidewalk, and utility improvements pending approval by the City Council. A general rule of thumb is that walking and biking accounts for 5-10% of trips so transportation funding for trails and bikeways should roughly follow that proportion. The transportation role and funding for trails should be in addition to and complement the recreation role of trails and bikeways.
- Other potential funding sources would include:
 - Grants
 - Partnerships
 - Donations
 - State Aid funds
 - Property development exaction funds
 - Park and Trail Dedications

Grants can be awarded from a variety of sources:

- Minnesota DNR
- Minnesota DOT
- Clean Water, Land and Legacy Amendment
- National Park Service Rivers Trails Conservation Assistance Program
- Recovery and Reinvestment Act
- Safe Routes to School
- Legislative Citizen Commission on Minnesota resources
- Foundations and Non-Profit Organizations.

IMPLEMENTATION PLAN

The implementation of the trail plan will be based upon the opportunistic willingness of the affected land owners, availability of funding, and the passion to develop trails in the community. The following list of actions outline the next steps for the development of the trail system.

- Retain existing citizen advisory committee, as recognized by the Lewiston City Council, consisting of municipality citizens along with other interested citizens/businesses.
 - Based upon the following criteria, the advisory committee should weigh the criteria and rank proposed trails for development:
 - Connection to schools
 - Funding Opportunities
 - Connection to residential land uses
 - Connection to existing regional trail
 - Connection to Nature Preserve
 - Potential users amounts
 - Opportunity for economic development
 - Opportunity to improve trail connections to nearby regional/state trails.
- *** The advisory committee is encouraged to further develop the list of criteria to guide proposed trail development.
- Conduct a Strength, Weakness, Opportunities, Threats (SWOT) analysis to determine the best potential location for a trail head in the downtown area of the city.
 - Establish an approved design for trail way-finding signage that considers regional systems already in place and the uniqueness of Lewiston's trail system for effectively informing the public of trail opportunities.
 - Work with local partners/stakeholders (Utica Township, Winona County, Soil and Water Conservation District, MNDNR, MNDOT) to establish communication/review early in the trail development process.

- Create development guidelines for future residential/commercial/industrial land uses to include trail development within the project area to tie into the Lewiston Trail Plan and design be based upon standards outline within the Lewiston Trial Plan.
- Research and assist with establishing a funding toolbox with annual application deadlines for potential grant opportunities ranging from local and state to national funding sources.
- Define and establish trail management and maintenance funding as needed.
- Establish a trail maintenance and habitat preservation plan.
- Provide public education and awareness materials on trail development and work with willing land owners/developers on potential linkages.
- Keep abreast of roadway projects within and around Lewiston, especially the Winona County and State of Minnesota CIP programs along other jurisdictional road construction planning where the opportunities exist for trail integration.