

PROJECT OVERVIEW

A public planning process began in August 2016 to determine the future recreational uses of a mostly City-owned, 10-to12mile corridor along the St. Louis River between the Irving neighborhood and Jay Cooke State Park, in West Duluth. The study area includes an existing 3.3 mile long pedestrian trail, an historic rail bed, and five existing or planned river access points. A portion of the historic rail bed has been leased by the City of Duluth to the nonprofit Lake Superior and Mississippi Railroad for seasonal fee-based rail excursions.

Overall Project Goals

The Master Plan's overall project goals include, but are not limited to:

- Increasing connectivity from adjacent neighborhoods to the St. Louis River and Estuary.
- Increasing recreational and development opportunities within and along the St. Louis River Corridor.
- Facilitating a stakeholder community engagement process to gain significant input on the future use of the area.
- · Enhancing neighborhood quality of life.
- Restoring and protecting natural habitat along the trail corridor.
- Determine whether to retain and potentially improve the remaining riverfront rail line and renew the Lake Superior and Mississippi railroad's lease for excursion rail trips.

Master Planning Process

With these project goals in mind, the master planning process will explore options to:

- Extend and improve the Western Waterfront Trail as cited in the 1979 WWFT Master Plan.
- Re-brand the Western Waterfront Trail as a heritage trail that celebrates and interprets the rich culture and natural heritage of the corridor.
- Develop potential new river access nodes opposite Tallas Island and at the area known as Slag Point.
- Develop potential new canoe/kayak water trail entry points at Munger Landing, Boy Scout Landing, and Perch Lake.
- Decide the future use of the City-owned riverfront.
- Create synergy between the Water Trail, the Western Waterfront Trail, and the excursion rail (if the City determines to extend the excursion rail lease).



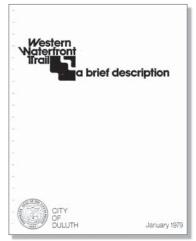


WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

ST. LOUIS RIVER CORRIDOR



PRIOR VISIONING + OVERLAPPING INITIATIVES



1979 Plan



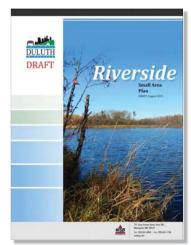
2010 Parks and Recreation Plan



2011 Bikes and Trailway Plan



2012 Morgan Park Neighborhood **Revitalization Plan**



2015 Riverside Small Area Plan & 2013 Gary New-**Duluth Small Area Plan**



2015-2020 St. Louis River **Corridor Projects**



River Restoration Remediation Sites in the St. Louis River AOC

STAKEHOLDER WORKSHOPS SUMMARY







Summary

- Five workshop meetings occurred from September —January (3 hrs duration)
- Topics included:
 - 1. Planning for interpretation and branding implementation
 - Riverfront green space
 - St. Louis River access and put-in sites
 - Trail extension and rail options
 - Planning for trail extension possibilities

Stakeholder Attendees (39)

- Carole Newkumet, Riverside Community Club
- Andy Webb, Lake Superior and Mississippi Railroad
- Dwight Morrison, Wheels on Trails
- Dave Moore, Railway Solutions/LS&M
- Joel Manns, Lake Superior and Mississippi Railroad
- Dean Votgman, Parks and Rec Commission, District 5
- Mike Casey, Friends of West Duluth Parks and Trails
- Wayne Dupuis, Fond-du-Lac Band of Lake Superior Chippewa
- Jill Hoppe, Fond-du-Lac Band of Lake Superior Chippewa
- Jack Ezell, Western Lake Superior Sanitary District
- Daryl Peterson, Minnesota Land Trust
- Hansi Johnson, Minnesota Land Trust
- Rick Staffon, Izaak Walkton League
- Denette Lynch, Friends of West Duluth Parks and Trails
- Charlie Staudahar, Spirit Lake Development
- Bill Majewski, Morgan Park Community Club SLRA
- Amanda Crosby, Parks and Rec Commission Disability Rep
- Alison J. Clarke, Friends of West Duluth Parks and Trails
- Harry Hanson, Friends of West Duluth Parks and Trails
- Virginia Olson, Friends of West Duluth Parks and Trails

- · Joel Manus, Lake Superior and Mississippi Railroad
- Brad Massengill, Lake Superior and Mississippi Railroad
- Debbie Isabell-Nelson, Morgan Park Community Club
- Lisa Angelos, MnDNR Jay Cooke State Park
- John Lindgren, MnDNR
- Erin Endsley, MN Pollution Control Agency
- Glenn Merrick, Izaak Walton League
- David Bolgrien, Environmental Pollution Control Agency
- **Deb DeLuca**, Duluth Seaway Port Authority
- Will Munger, Izaak Walton League
- Mike Bares, MN Pollution Control Agency
- Scott Cieniawski, Environmental Protection Agency
- **Keith Okeson,** Lake Superior Muskies
- Pat Okeson, Lake Superior Muskies
- Craig Sterle, Izaak Walton League
- **Kevin Johnson**, *MnDNR Parks and Trails Two Harbors*
- Charlie Nelson, Twin Ports Walleye Association
- Dave Nelson, Twin Ports Walleye Association
- Russ Francisco, Marine General







GUIDING PRINCIPLES Goals and Objectives

Western Waterfront Trail Vision (1979 to present): To create a multi-use recreational trail along the shoreline of the historic St. Louis River and Estuary from the Irving neighborhood up river to the Fond du La neighborhood in West Duluth. The lineal pathway system will provide a unique and safe experience for trail users of all abilities, and will also educate, honor, and celebrate our rich history along this great body of water. The trail corridor shall include quality site amenities, offer spectacular views and interpretation opportunities at key points of interest while also providing improved water access for picnicking, boating and fishing activities.

Community Connection

• Enhance sense of community by creating a lineal trail system that links the waterfront to adjacent residential neighborhoods, and provides transportation alternatives to nearby businesses, recreational destinations, and public green spaces. Provide a better connection to the larger network of trail systems throughout the City.

Unique Duluth Experience

• Implement the natural and cultural history into the design of the trail. Educate on natural habitat, resource management, and local heritage. Ensure points of interest and viewsheds are preserved and enhanced.

Equitable Experience

• Maximize accessibility and provide economic equality for all people by ensuring corridor is affordable and designed to ADA standards where feasible, minimize trail crossings, or provide safe access points. Be respectful to immediate landowners and neighbors.



GUIDING PRINCIPLES Goals and Objectives

Technically & Economically Feasible

• Be mindful of technical and economic feasibility. Ensure trail design is realistic and can be maintained long term for community benefit.

Environmentally Sustainable

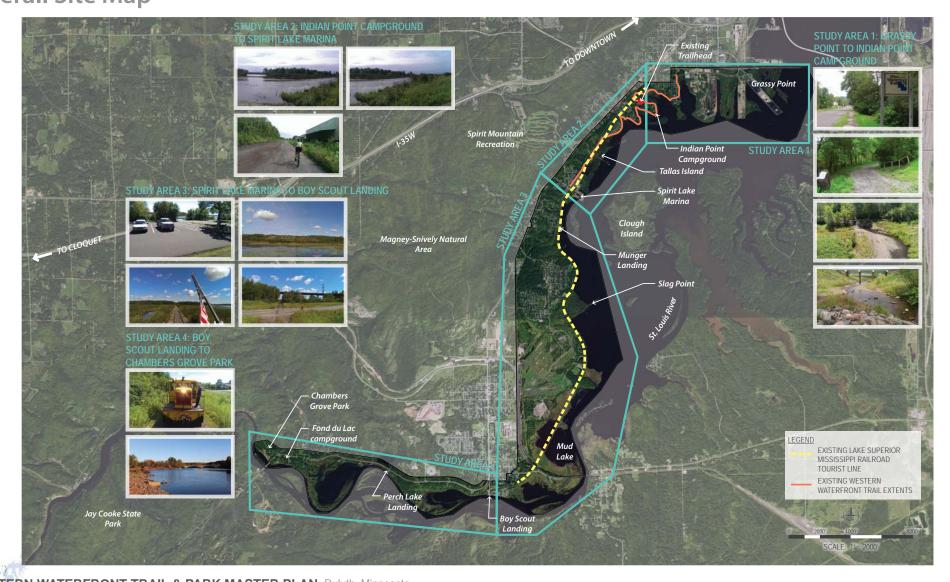
• Minimize disruption to the natural terrain and sensitive environmental areas. Implement low impact development and sustainable best management practices to avoid degrading natural environment.

Promote Economic Development

• Recognize opportunities and encourage future development by connecting other regional areas of interest, neighborhoods, and commercial districts.



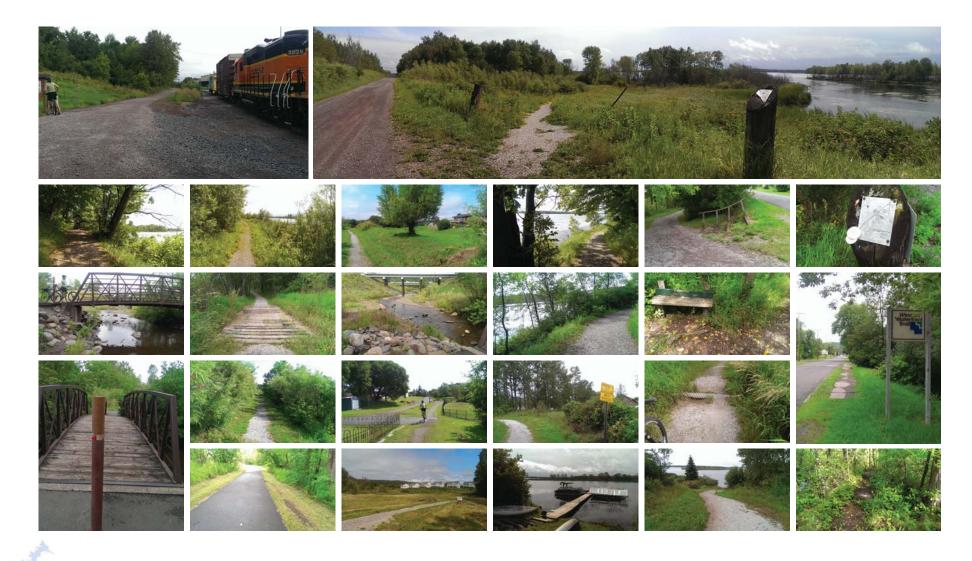
EXISTING CONDITIONS & STUDY AREASOverall Site Map



WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

DULUTH PARKS

EXISTING CONDITIONS Current Extents





RE-BRANDING + INTERPRETATION

Clarifying Our Vision

- We collected information from stakeholder workshops and online survey data to further confirm our project vision. Sampling of questions below:
 - What makes the region unique?
 - What does heritage mean to you?
 - · What makes up our heritage? What are the stories and defining features along the trail corridor that we want to honor and celebrate?
 - What does the future of the Western Waterfront Trail and Park look like to you?

Recommendations + Next Steps:

- Rename trail to better reflect river and region
- New name options will be a co-name to include an English name and an Ojibwe name. The city will work collaboratively with the necessary stakeholders to determine the Ojibwe name.
- Name options include:

English Oiibwe The St. Louis River Heritage Trail Gitche Gami Ziibi The Great Lake River Trail Chi Gami Zibing

- Include storytelling of the cultural, historical, and ecological time along trail.
 - Install interpretive signage
 - Promote unique experiences
 - Provide places for reflection
- In coming years, City will initiate a more in-depth study that will include design guidelines for an historic, cultural and interpretation signage plan

Word Cloud Summary



PLANNING FOR ST. LOUIS RIVER ACCESS

New Sites:

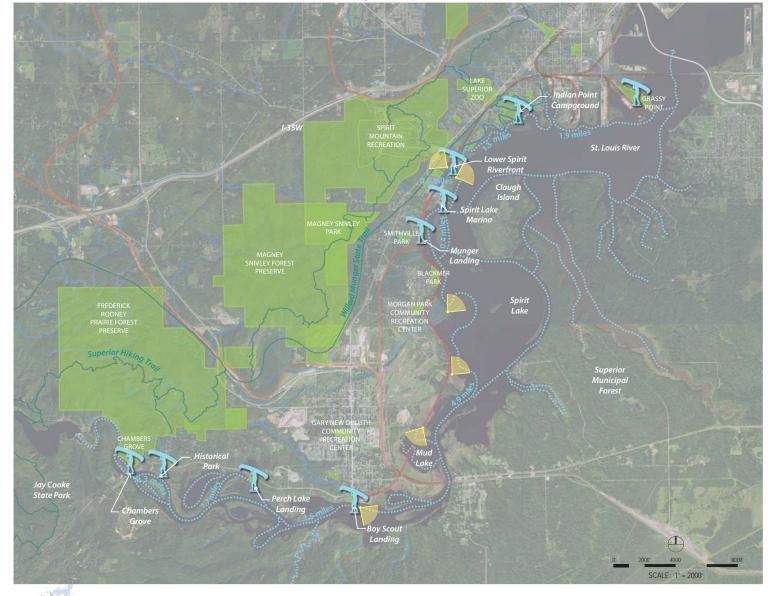
Lower Spirit Slag Point

Existing Sites:

Munger Landing Boy Scout Landing Perch Lake



ANALYSIS: WATER ACCESS, TRAILS + GREEN SPACE



Existing mileage between access points:

ACCESS POINT	DISTANCE
Grassy Point to Indian Point Campground	1.9 miles
Indian Point Campground to Lower Spirit Riverfront	1.3 miles
Lower Spirit Riverfront to Spirit Lake Marina	.5 miles
Spirit Lake Marina to Munger Landing	.4 miles
Munger Landing to Boy Scout Landing	4.9 miles
Boy Scout Landing to Perch Lake Landing	1.5 miles
Perch Lake Landing to Historical Park	1.7 miles
Historical Park to Chambers Grove	.3 miles

LEGEND

PARKLAND



WATER TRAIL ACCESS POINT

.. WATER TRAIL

STREAMS

BNSF LINE LSMR LINE DMIR LINE

EXISTING TRAIL

EXISTING WESTERN WATERFRONT TRAIL

VIEWS TO POINTS OF INTEREST (SPIRIT LAKE, CLOUGH ISLAND, SPIRIT MOUNTAIN, US STEEL, ESTUARY BAYS)

WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

DULUTH PARKS

ST. LOUIS RIVER WATER TRAIL ACCESS POINTS **Site Plan Concepts**





Lower Spirit Proposed Improvements

- New trailhead with directional signage
- Drop-off and parking (10) and trailer (3)
- Portable toilet with changing enclosure
- Staging area for outfitting
- Accessible kayak launch
- Beach access(2) with shore fishing
- Landscape Restoration Planting

Munger Landing Proposed Improvements

- New trailhead with directional signage
- · Swimming beach and natural kayak launch
- Accessible kayak launch
- Staging area for outfitting
- Picnic area
- Additional parking (20)

ST. LOUIS RIVER WATER TRAIL ACCESS POINTS

Site Plan Concepts



Boy Scout Landing Proposed Improvements

- New trailhead with directional signage
- Drop-off
- Additional parking (±12)
- Portable toilet with changing enclosure
- Beach access (2) with shore fishing
- Pedestrian bridge
- Accessible kayak launch
- Concrete pad for seasonal concessions and event staging

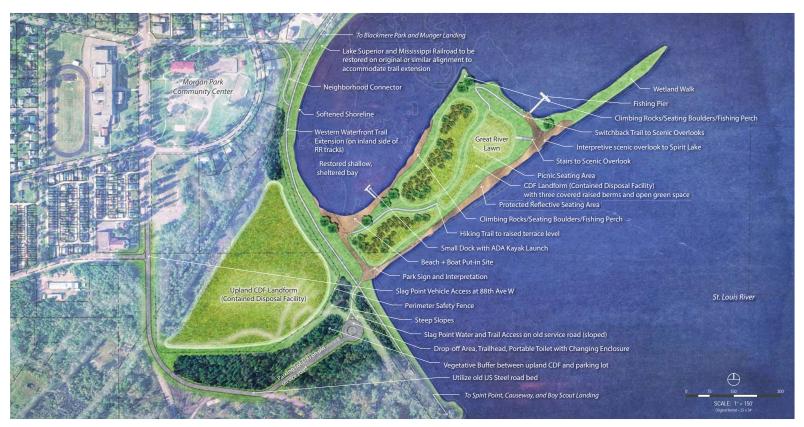
Perch Lake Proposed Improvements

- ADA trail access
- Additional parking (± 10, ± 6)
- Picnic area
- Beach access with shore fishing
- Portable toilet with changing enclosure
- Scenic overlook





ST. LOUIS RIVER WATER TRAIL ACCESS POINTS **Site Plan Concepts**



Slag Point Proposed Improvements

- Trailhead with directional signage
- Accessible kayak launch
- Portable toilet with changing enclosure
- Drop-off area and parking (18)
- Beach/staging area and shore fishing
- Picnic and hiking loop
- Interpretive/scenic overlooks



PRECEDENTS

Rail to Trail

Vermont's Island Line

Vermont

- 14 miles, 3.5 of which are a causeway over water
- Asphalt and gravel
- Biking, inline skating, fishing, walking, x-country skiing

Elroy Sparta State Bike Trail

Wisconsin

- •32 miles
- Crushed stone
- Hiking, jogging, x-country skiing, snowmobile,













Rail and Trail

Heritage Rail Trail County Park and Maryland's Torrey C. Brown Rail Trail

Maryland and Pennsylvania

- 44.4 miles combined
- Crushed stone and dirt
- Walking, biking, horseback riding, x-country skiing

Astoria River Walk

Oregon

- 17 miles
- Asphalt, dirt and boardwalk
- Horseback riding, mountain biking, walking













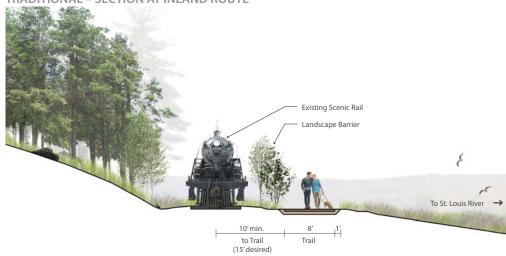
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ST. LOUIS RIVER CORRIDOR

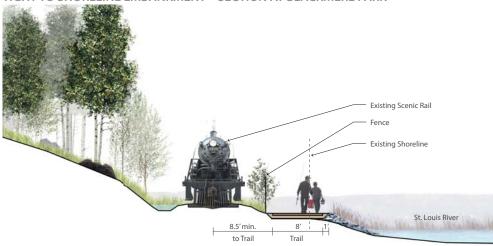


TRAIL TYPES

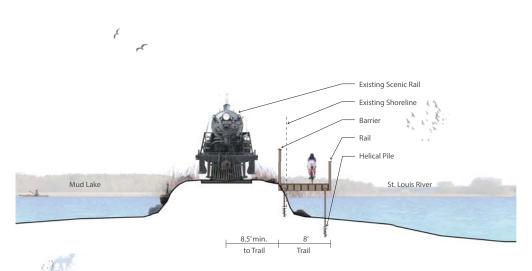




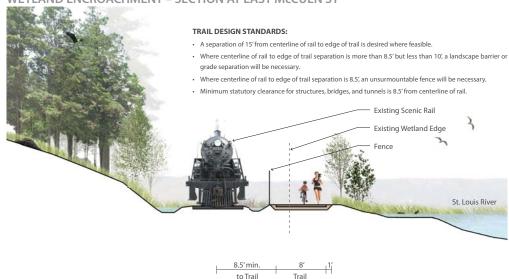
TIGHT TO SHORELINE EMBANKMENT – SECTION AT BLACKMERE PARK



TIGHT TO SHORELINE EMBANKMENT - SECTION AT MUD LAKE CAUSEWAY



WETLAND ENCROACHMENT – SECTION AT EAST McCUEN ST



WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

ST. LOUIS RIVER CORRIDOR June 13, 2017



WHAT HAVE WE BEEN UP TO?

Since the last public meeting on November 15th, 2016, the City of Duluth has completed the following tasks:

- 1. Voluntary online survey asking the public to provide input on the future development of the Western Waterfront Trail (live from Jan 9th-26th with a total of 988 responses)
- 2. A randomly sampled phone survey of District 5 residents, designed and implemented by Zenith Research to assure the representation of those most greatly affected by this plan
- 3. Gathering of natural resources management experts to provide information and input on the statues of the shoreline and adjacent aquatic health of the river
- 4. City of Duluth Administration and City staff site visit
- 5. Multiple meetings with the City and LSMR representatives to discuss and review the LSMR Business Plan - including long-term maintenance, growth and sustainability strategies
- 6. Further budget and financing studies on alignment options
- 7. City of Duluth, LSMR and the Federal Railroad Administration track condition assessment site visit
- 8. Federal Railroad Administration track evaluation site inspection







ANALYSIS OF COLLECTED DATA: VALUES & USES

Rail

- 46% of all respondents identified the LSMR being somewhat important to them.
- 61% of respondents believe the rail is important to the entire community.
- 11% of respondents use the rail at least four times per year.
- Rail runs weekends June through October







Trail

- 64% of respondents consider the Western Waterfront Trail important to them.
- 74% of respondents believe the trails important to the entire community.
- 48% of respondents use the trail at least four times per year.
- Trail is open year-round
- •83% of the respondents were supportive of extending the trail.





WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

ST. LOUIS RIVER CORRIDOR

June 13, 2017

ANALYSIS OF COLLECTED DATA: VALUES & USES

Prior to continuing with the survey, respondents were read the following:

"As one option, the City has been seeking to find a way to extend the trail without having to remove the Cityowned rail line between Smithville and Gary/New Duluth that is used by the Lake Superior & Mississippi Railroad for their seasonal passenger train trips. If, for any reason, extending the trail while keeping the railroad proves not to be feasible, the City may have to choose one of the other – rail or trail".

Q6: IN THAT EVENT, WHICH OPTION WOULD YOU LIKE THE CITY TO CHOOSE:

- 1. THE TRAIL OPTION, WHICH IS TO EXTEND THE WESTERN WATERFRONT TRAIL TO SMITHVILLE, MORGAN PARK, GARY/ NEW DULUTH AND FOND DU LAC AND REMOVE THE CITY-OWNED RAIL LINE OR,
- 2. THE RAIL OPTION, WHICH IS TO RETAIN THE RAIL LINE **USED SEASONALLY BY THE LAKE SUPERIOR & MISSISSIPPI** RAILROAD AND GIVE UP PLANS TO EXTEND THE WESTERN WATERFRONT TRAIL FROM RIVERSIDE TO SMITHVILLE, MORGAN PARK, GARY/NEW DULUTH AND FOND DU LAC, OR,

RESPONSE	TRAIL	RAIL	NO PREFERENCE
OVERALL PERCENT	54	32	14
55807	52	31	17
55808	59	31	10

*54% of all respondents favored the Trail Option, with greater levels of support coming for those living in zip code area 55808 than 55807.

3. YOU DON'T HAVE A PREFERENCE.



ANALYSIS OF COLLECTED DATA: GUIDING PRINCIPLES

5th DISTRICT PHONE SURVEY

When asked to prioritize the guiding principles, respondents were more likely to support options to develop a plan that is...

- **Environmentally sustainable**
- **Technically and Economically feasible**
- Creating an accessible riverfront for as many people as possible regardless of income and physical ability
- Develop a plan that preserves historically significant resources













ANALYSIS OF COLLECTED DATA: ACCESSIBILITY & EQUITY

Connecting Neighborhood

- Creating a new connection to St. Louis River neighborhoods
- Providing more opportunities for neighborhoods to experience the river







Socio-Economic Context

- Reducing financial barriers to accessing the river
- Creating more no-cost opportunities along the river







WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

ST. LOUIS RIVER CORRIDOR June 13, 2017



ANALYSIS OF COLLECTED DATA: UNIQUE DULUTH EXPERIENCE

Historic Preservation

- Spirit Island eligible for the national historic registry
- Railroad eligible for the national historic registry

AOC Clean-Up and Restoration

•Interpretation of the Clean-Up area

Stakeholder Focus Group

- Why is this area unique?
- What does heritage mean to you?
- What is your idea for renaming this trail?
- What amenities should be on the trail?
- · What should be interpreted on the trail?

Q7 What makes this area of Duluth unique?

Answered: 619 Skipped: 369

Undeveloped Minnesota Town Variety
Lake Superior Green Space Water Canal Park
Wild Life Birds Duluth Peaceful River
Ability History Tourist Beauty Hiking
Train Country Estuary Outdoor Activities
Waterfront Urban Land Nice Landscape



WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

une 13, 2017

ANALYSIS OF COLLECTED DATA: RIVER RESTORATION

Natural Resource Experts' Participation in Stakeholder Committee

- MN Dept. of Natural Resources (DNR)
- Fond du Lac Band of the Lake Superior Chippewa Natural Resource **Management Division**
- MN Pollution Control Agency
- Environmental Protection Agency (EPA)
- Minnesota Land Trust
- Izaak Walton League
- Western Lake Superior Saitary District (WLSSD)
- St. Louis River Alliance

Natural Resource Manager Meeting

• Convened to assess existing condition and health of river shoreline

AOC Restoration

• Study of the AOC priority areas and consult with the AOC Clean-Up leaders MN DNR and EPA







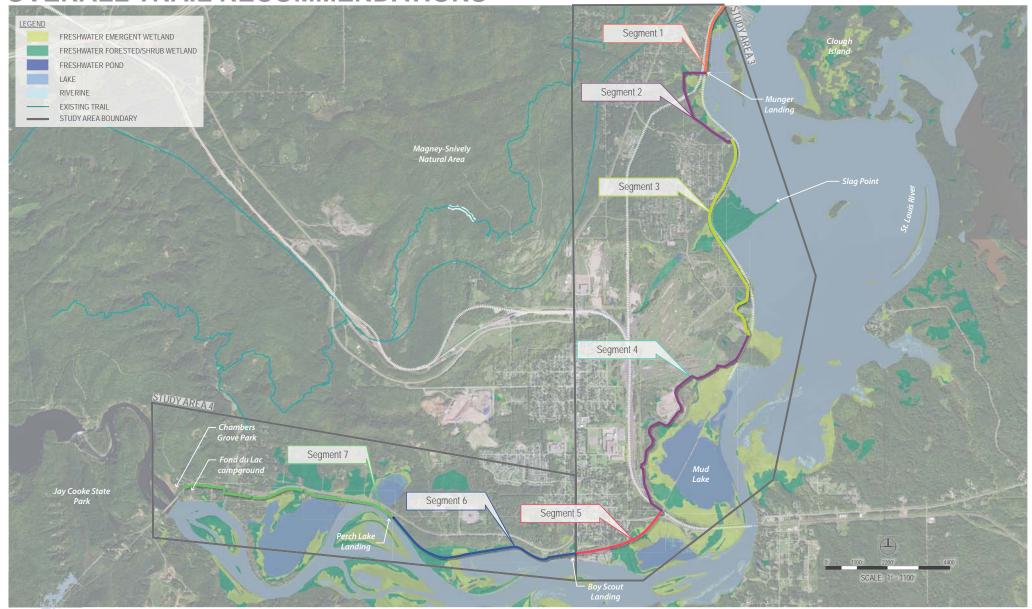
ST. LOUIS RIVER CORRIDOR







OVERALL TRAIL RECOMMENDATIONS



WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

June 13, 2017

TRAIL EXTENSION SEGMENT 1: RAILROAD RE-ALIGNMENT

Traditional Trail (recommended)(735 LF) -









Wetland Encroachment (required)(750 LF)





Rail to Trail Conversion (recommended) (1,215 LF)





Drainage Crossings (2 Total) *





Total Waterfront Distance Segment 1: 2,700 LF (.50mile)

WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

ST. LOUIS RIVER CORRIDOR



TRAIL EXTENSION SEGMENT 2: MUNGER LANDING TO EPA/US STEEL CLEAN-UP

Traditional Trail (recommended)(450 LF) -





Wetland Encroachment (not recommended) -







Tight to Shoreline Embankment (not recommended)









Inland Trail (recommended) (3,350 LF) -







Total Inland Route Distance Segment 2: 3,800 LF (.72 miles)



TRAIL EXTENSION SEGMENT 3: EPA/US STEEL CLEAN UP TO BOATHOUSE POINT

Tight to Shoreline Embankment (not recommended) -





Trail on EPA Access Road (recommended)(6,730 LF)





Inland Trail around Wire Mill Pond (recommended) (2,520 LF)







Total Waterfront Distance, Segment 3: 9,250 LF (1.67 miles)

WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

Start of Segment 3 Bridge/culvert FRESHWATER EMERGENT WETLAND FRESHWATER FORESTED/SHRUB WETLAND FRESHWATER POND End of Segment 3 LAKE RIVERINE CITY OF DULUTH PROPERTY PARCEL LINE NEIGHBORHOOD CONNECTION

FUTURE TRAIL EXTENSION SEGMENT 4: BOATHOUSE POINT TO E MCCUEN ST

Inland Trail (recommended)(7,932 LF) =









Tight to Shoreline Causeway (not recommended)







Wetland Encroachment (not recommended)





Pedestrian Bridge Crossings (4 Total - 230 LF) *



Precedent for a pre-fabricated bridge at a drainage crossing

Inland Route Distance, Segment 4: 7,932 LF (1.5 miles)

*Note: Segment 4 inland trail will not be completed until clean-up has occurred on the U.S. Steel site, easements are in place, and Mud Lake has been restored



BOATHOUSE POINT SITE PLAN



DULUTH PARKS

TRAIL EXTENSION SEGMENT 5: EAST MCCUEN STREET TO BOY SCOUT LANDING

Inland Trail (not recommended) -







Traditional (not recommended)







Rail to Trail Conversion (recommended) (3,590 LF)-





Total Waterfront Distance, Segment 5: 3,590 LF (.68 miles)



TRAIL EXTENSION SEGMENT 6: BOY SCOUT LANDING TO PERCH LAKE ACCESS

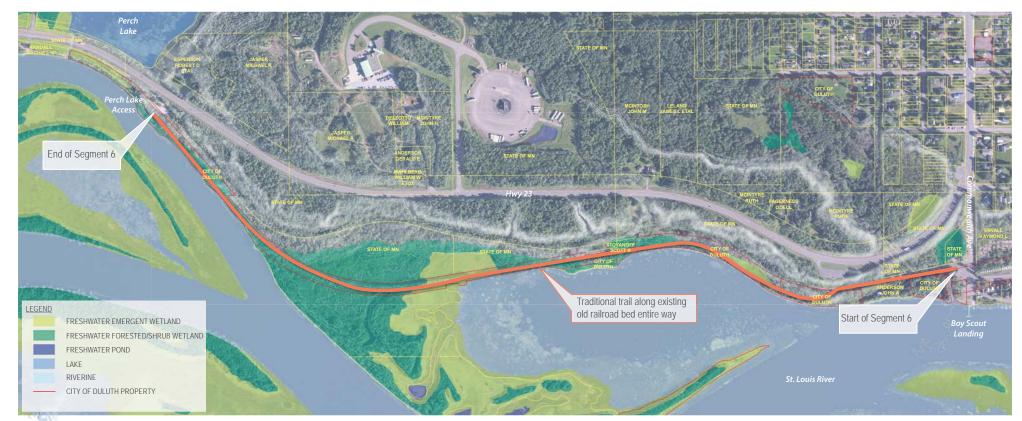
Traditional Trail (recommended)(7,200 LF)







Total Waterfront Distance, Segment 6: 7,200 LF (1.36 miles)



WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

ST. LOUIS RIVER CORRIDOR

June 13, 2017

June 13, 2017

TRAIL EXTENSION SEGMENT 7: PERCH LAKE TO CHAMBERS GROVE

Traditional Trail (recommended) (4,130 LF) —

Wetland Encroachment Trail (required)(1,290 LF)







Total Inland Route Distance, Segment 7: 5,420 LF (1.03 miles)



WESTERN WATERFRONT TRAIL & PARK MASTER PLAN Duluth, Minnesota

June 13, 2017

COSTS ASSOCIATED FOR TRAIL RECOMMENDATIONS

WESTERN WATERFRONT TRAIL EXTENSION COST SUMMARY

TRAIL SEGMENT		Opinion of Cost
Segment 1: Spirit Lake Marina to Munger Landing (Rail + Trail)	0.50 Miles	\$773,340
Segment 2: Munger Landing to EPA/US Steel Clean-up (Rail + Trail)	0.72 Miles	\$1,031,280
Segment 3: EPA/US Steel Clean-up to Boat Club (Rail + Trail)	1.75 Miles	By Others
Segment 4: Boat Club to East McCuen Street (Trail only)	1.50 Miles	\$2,336,976
Segment 5: East McCuen Street to Boy Scout Landing (Trail only)	0.68 Miles	\$509,280
Segment 6: Boy Scout Landing to Perch Lake Access (Trail only)	1.36 Miles	\$864,000
Segment 7: Perch Lake Access to Chambers Grove (Trail only)	1.03 Miles	\$921,300
CONSTRUCTION TOTAL	(7.54 miles)	\$6,436,176

NOTES:

- 1. LIN FT prices account for mobilization, clearing and grubbing, erosion and sediment control, landscaping and minor drainage modifications.
- 2. Contingencies are included as provisions to cover unforeseen circumstances that would affect the overall construction costs.
- 3. Estimates do not include costs for survey, engineering design, environmental analysis, permitting, or construction administration/site observation.
- 4. Topographic survey and geotechnical information were not available at the time of this estimate.
- 5. Track removal includes removal and appropriate disposal of metal rail, wood ties, and preparation of remaining ballast as trail sub-base.
- 6. Trail install costs include fencing to provide the necessary safety barrier between the trail and the rail as well as between the trail and steep embankments.
- 7. Sensitive area impacts refers to impacts to wetlands or river bank. These areas will require exhaustive permitting and may require mitigation, special plantings,
- 8. Significant drainage crossings refer to culverts or pedestrian bridges to provide crossing of drainage ways. Minor drainage modifications are included in LIN FT

TRAIL TYPES	COSTS (PER LIN FT)
Traditional on-existing rail bed (with gravel surface)	\$100
Traditional next to existing rail (with gravel surface)	\$180
Inland route on cleared alignment (with gravel surface)	\$225
Inland route on forested alignment (with gravel surface)	\$270
Inland route on forested alignment (US Steel site, segment 4 only)	\$240
Wetland encroachment	\$275
Tight to shoreline fill slope (not used in final recommendations)	\$375
Tight to shoreline elevated structure (not used in final recommendations)	\$2,000
Causeway widening (not used in final recommendations)	\$2,000

June 13, 2017

COSTS ASSOCIATED FOR ST. LOUIS RIVER + WATERFRONT IMPROVEMENTS

WESTERN WATERFRONT TRAIL EXTENSION **COST SUMMARY**

River Access Sites	Opinion of Cost
Lower Spirit Riverfront	\$427,560
Munger Landing	\$255,675
Slag Point	\$1,420,680
Boathouse Point	\$226,920
Boy Scout Landing	\$471,115
Perch Lake	\$349,704
CONSTRUCTION TOTAL	\$3,151,654

NOTES:

- 1. Preliminary opinion of costs are based on schematic designs only and could vary extensively depending on details that will be considered as part of the final design process.
- 2. Costs listed above should be used to assist with planning and decision-making regarding future development for St. Louis River access.



SUMMARY

The recommendations and concept designs presented within, mirror the balance and compromise needed to accomplish and comply with the Guiding Principles set forth at the start of the planning process.

Benefits

- Able to retain 3/4 of existing historic railroad for excursion use
- Increases public access to the riverfront
- Offers a diverse user experience
- Increases year-round user experience
- Connects neighborhoods who otherwise are only connected by Highway 23/Grand Avenue
- •7.51 miles of trail extension near river's edge
- Ecological health of river is enhanced with removal of causeway
- Project is economically feasible for City to achieve over time

Trade-Offs

- The trail experience will be a mix of higher inland ground and shoreline
- Wire Mill Pond will not be restored to open water
- 1/4 of the railroad track will be removed to accommodate the restoration of Mud Lake
- Trail is not continuously at water's edge for entire duration of corridor
- Segment 4 of trail will not be realized in short-term period
- LSMR + city will need to re-program excursion route to fit modified plan



THANK YOU

- Please fill out a comment card before you leave!
- Please check out the City Parks website at http://www.duluthmn.gov/parks

