

NOMINATING THE ST. LOUIS RIVER CORRIDOR TO THE DULUTH NATURAL AREA PROGRAM



Governing Principles for Open Space Duluth's Comprehensive Plan – updated 2018

- Declare the necessity and secure the future of undeveloped places
- Reinforce the place-specific
- Take sustainable actions
- Develop a healthy community



Policies related to Open Space

- Improve resiliency to flooding and natural disasters
- Examine the value and need for publicly owned open space
- Review public lands and prioritize according to ecological importance vs other uses
- Encourage the use of the Duluth Natural Areas Program to more permanently protect ecosystems over human use



Ordinance - Duluth Natural Areas Program

Legislative Code, Chapter 2, Article XXIX, Sec. 2-152

The ability to nominate certain lands with environmental value as permanent open space.

In doing so, we are preserving our natural heritage for the public good by:

- Protecting landscapes of environmental significance and ensuring better management our forests, streams and wetlands
- Supporting diversification of our region's economy
- Promoting the well-being and happiness of our citizens and visitors
- Maximizing for resiliency in a changing climate through services these lands provide
- Magney-Snively (2003) Hartley (2018)

St. Louis River corridor initiative



**Western Waterfront Trail
Extension Plan**



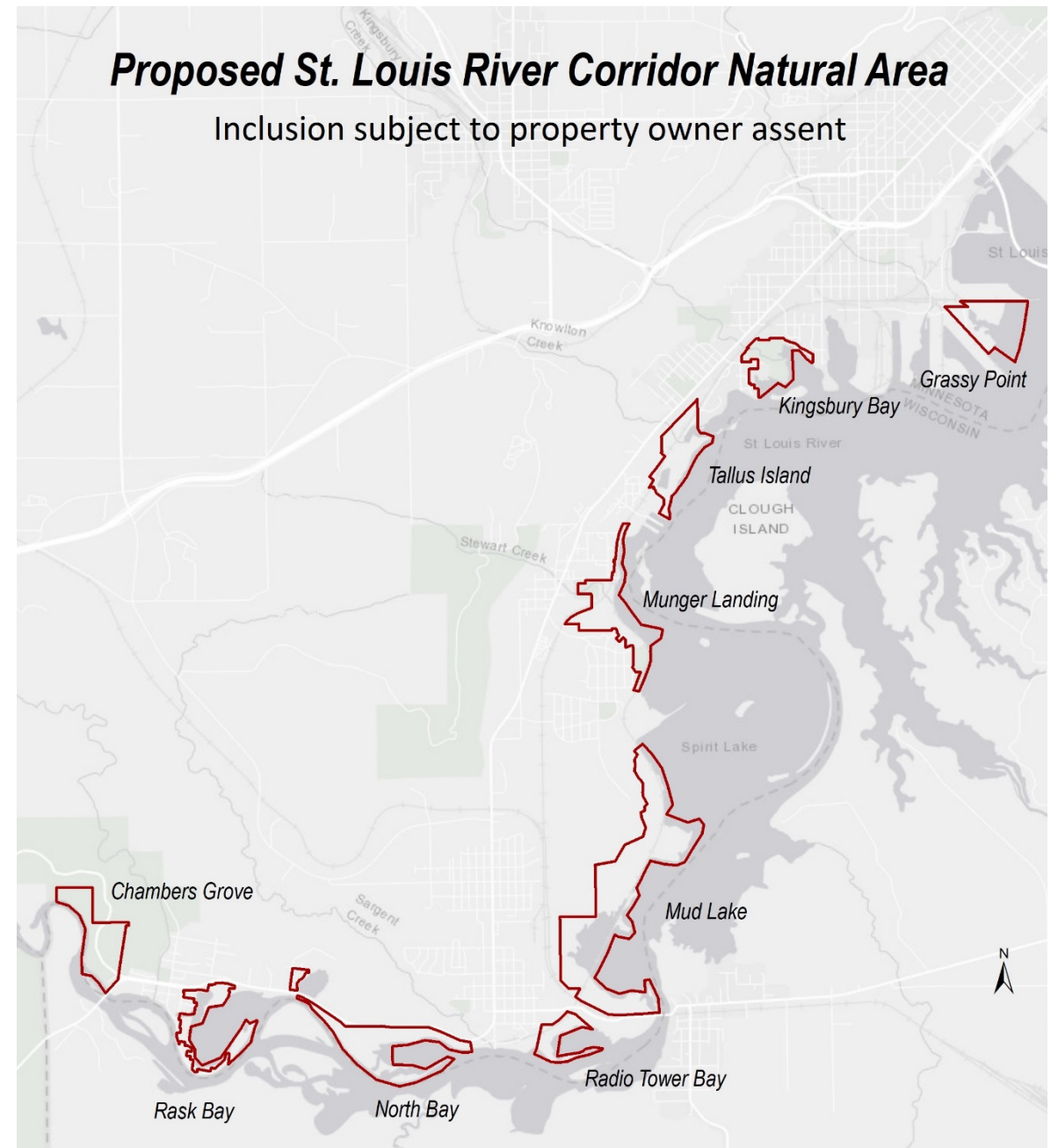
**St Louis River
National Water Trail
(designation pending)**



St. Louis River Natural Area

9 Project Areas of Ecological Significance

Ownership	Number of Parcels	Area (%)
City of Duluth	88	32
Private	45	36
St. Louis County Tax-Forfeit	139	27
State Public Property	2	5
Total	274	100



The Case for a St. Louis River Natural Area

Duluth Natural Area Criteria	Survey and Data Findings
Significant native plant communities	17 distinct (e.g., Lake Superior estuary marsh)
Special species	3 plants; 52 birds
Important bird congregation areas	Thousands of birds migrating and nesting
Natural water features	4 state designated trout streams and the estuary
Geologic landforms	Backwater bays indicative of ancient drowned river mouths that once flowed into Glacial Lake Duluth.



Habitat containing *Carex pallescens* – forested with mixed native and nonnative ground layer and sunny openings
Photo Credit: Erin Budrow

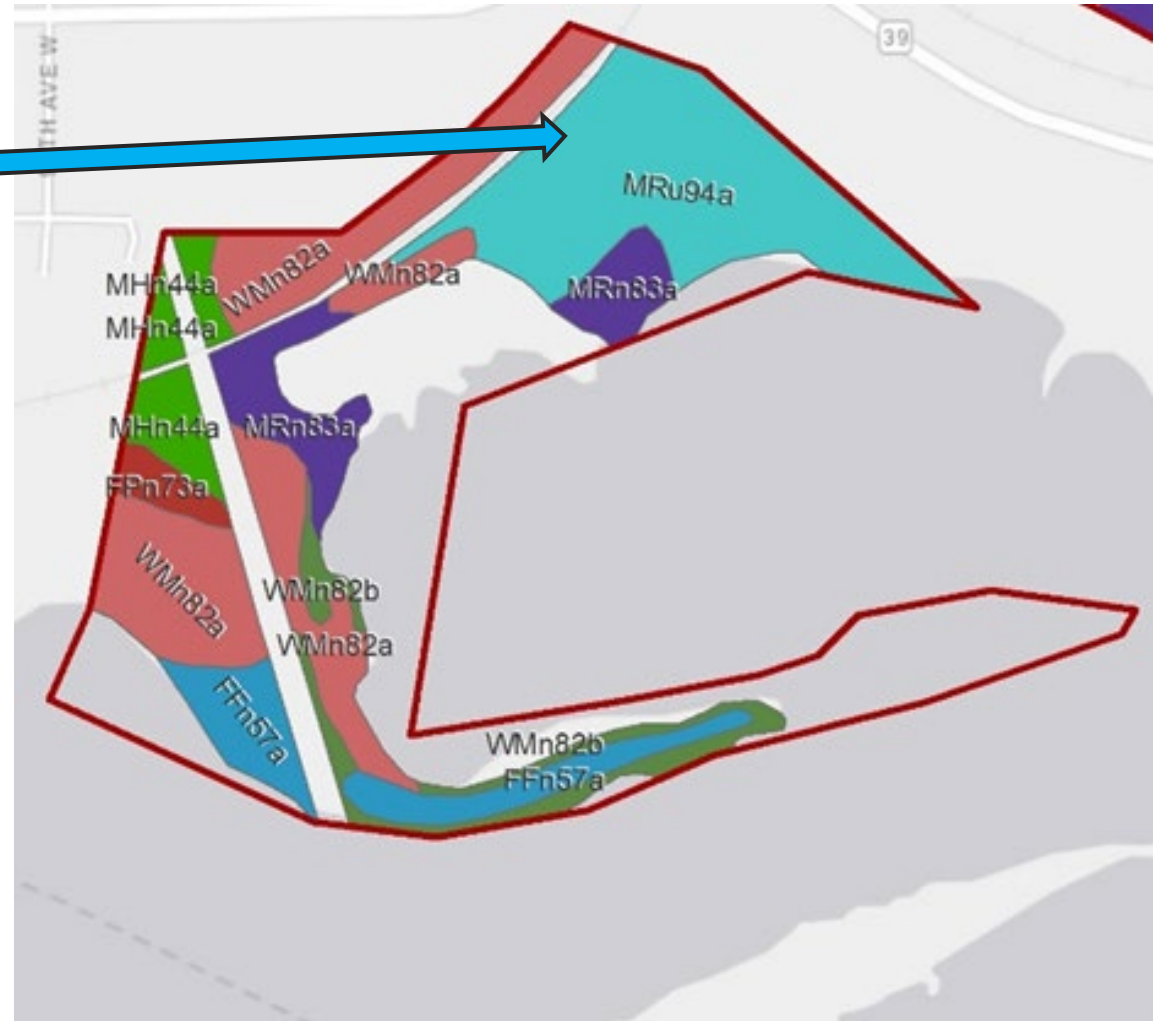


Summary of Plant Communities

Community Grouping	Percent of Project Areas	Description
Forested Upland	30.4%	Dominated by aspen, basswood, birch, white cedar, and oak
Forested Wetland	11.7%	Shallow water table, dominated by ash, balsam poplar, and white cedar
Shrub and Open Wetland	42%	Shallow water table to inundation with surface water, water-loving shrubs / herbaceous plants
Sparse-Vegetated Upland	0.7%	Cliffs and talus slopes and rocky shorelines, patchy trees and shrubs

Native Plant Communities

- Identified 17 distinct native plant communities
- Noted for Estuary Marsh (Lake Superior) - MRu94a
 - more species-diversity than similar native marsh communities in inland settings
 - Estuary below the dam contains the largest area of this community in the state
 - 120 acres within proposed natural area



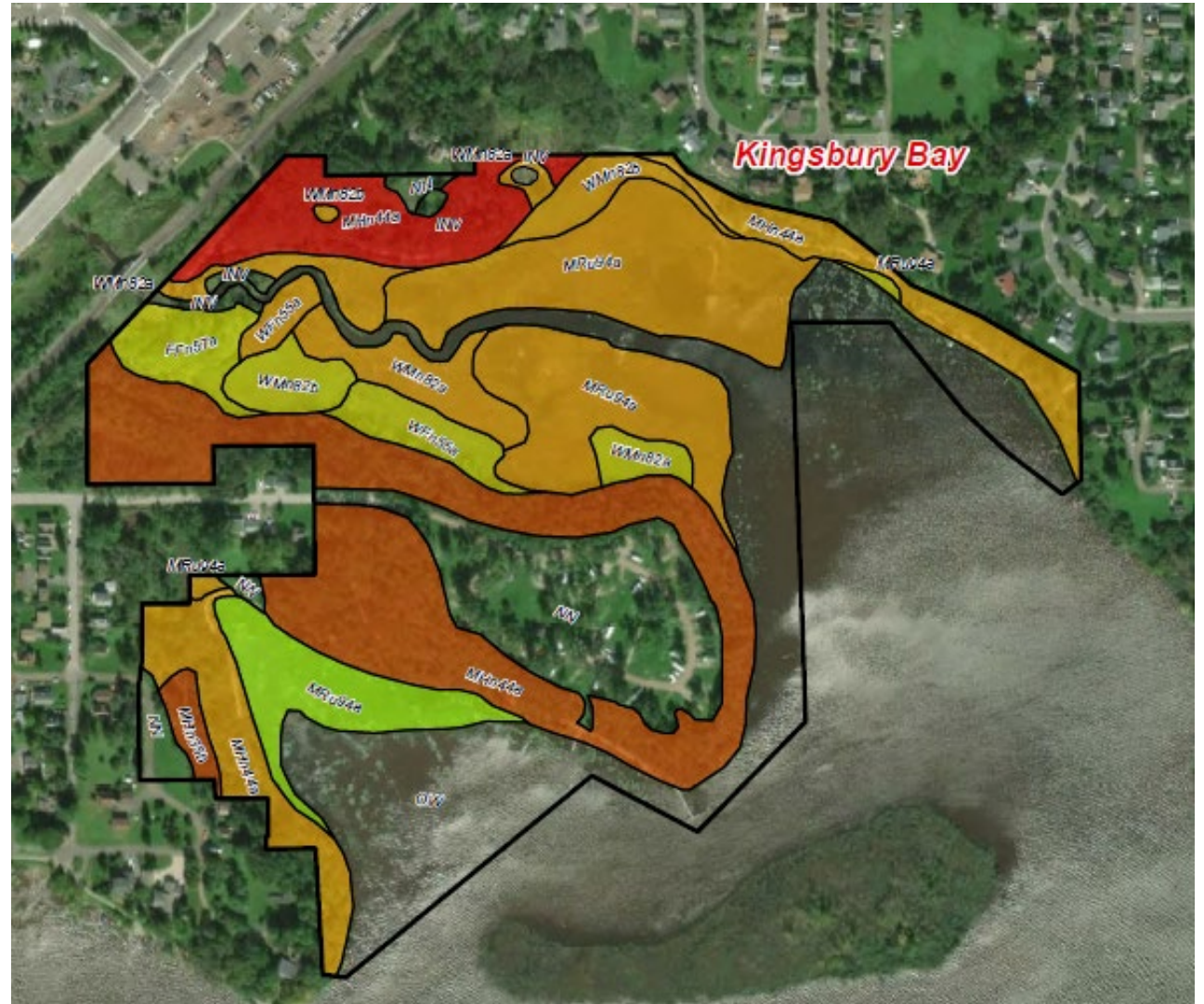
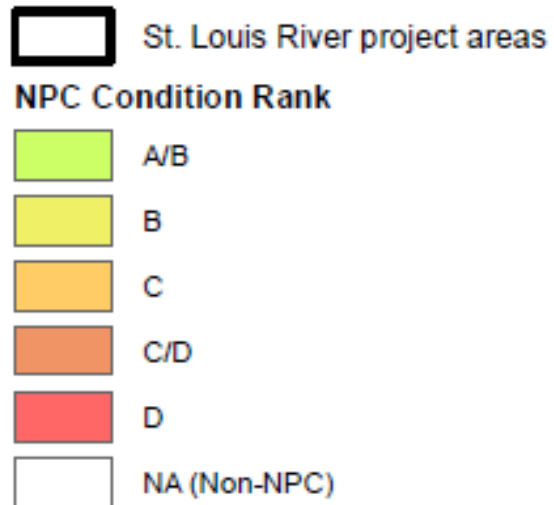
Native Plant Community Condition Ranks

Condition Rank	Description	Area (%)
A	Excellent ecological integrity. Little disturbed by recent human activity or invasive species.	7
A/B		2
B	Good ecological integrity. Lightly disturbed or recovered from past disturbance. Can return to A-rank with protection or management.	54
B/C		1
C	Fair ecological integrity. Strong evidence of human disturbance, but retain some characteristic species.	33
C/D		2
D	Poor ecological integrity. Severely altered by human disturbance or invasive species.	1

Kingsbury Bay Condition Rank

- Identifies restoration opportunities
- Native plant communities are the restoration targets

Legend



Special Plant Species

- Two state species of concern
 - Chambers Grove
 - Munger Landing
 - Grassy Point
 - Rask Bay
- One state endangered species
 - Grassy Point



Flowering *Bidens discoidea*, August 2
Photo Credit: Natalie White



Carex pallescens
Photo Credit: Erin Budrow



Close-up of *Shepherdia Canadensis*
Photo Credit: Natalie White

Bird Surveys

- Spring migration
 - Breeding season
 - Fall migration
-
- 14 surveys conducted in each of the nine project areas
 - **Total of 169 species and 13,953 individuals documented**



American Bittern photo credit: Steve Kolbe



Bonaparte's Gull: photo credit: Steve Kolbe



Spotted Sandpiper photo credit: Steve Kolbe

Birds of Note

52 species of state, regional, or federal concern were observed, including state threatened

Common Tern, Horned Grebe, Trumpeter Swan,
Peregrine Falcon



Rust Blackbird photo credit: Cornell Ornithology

- **Rusty Blackbird**, observed in spring and fall migration surveys, has undergone one of the sharpest and most mystifying recent declines of any North American songbird
- **Red-shouldered Hawk** has been observed at Hawk Ridge less than eight times in the last 21 years.
- **Peregrine Falcon and Bald Eagle** are regularly observed breeding in the estuary

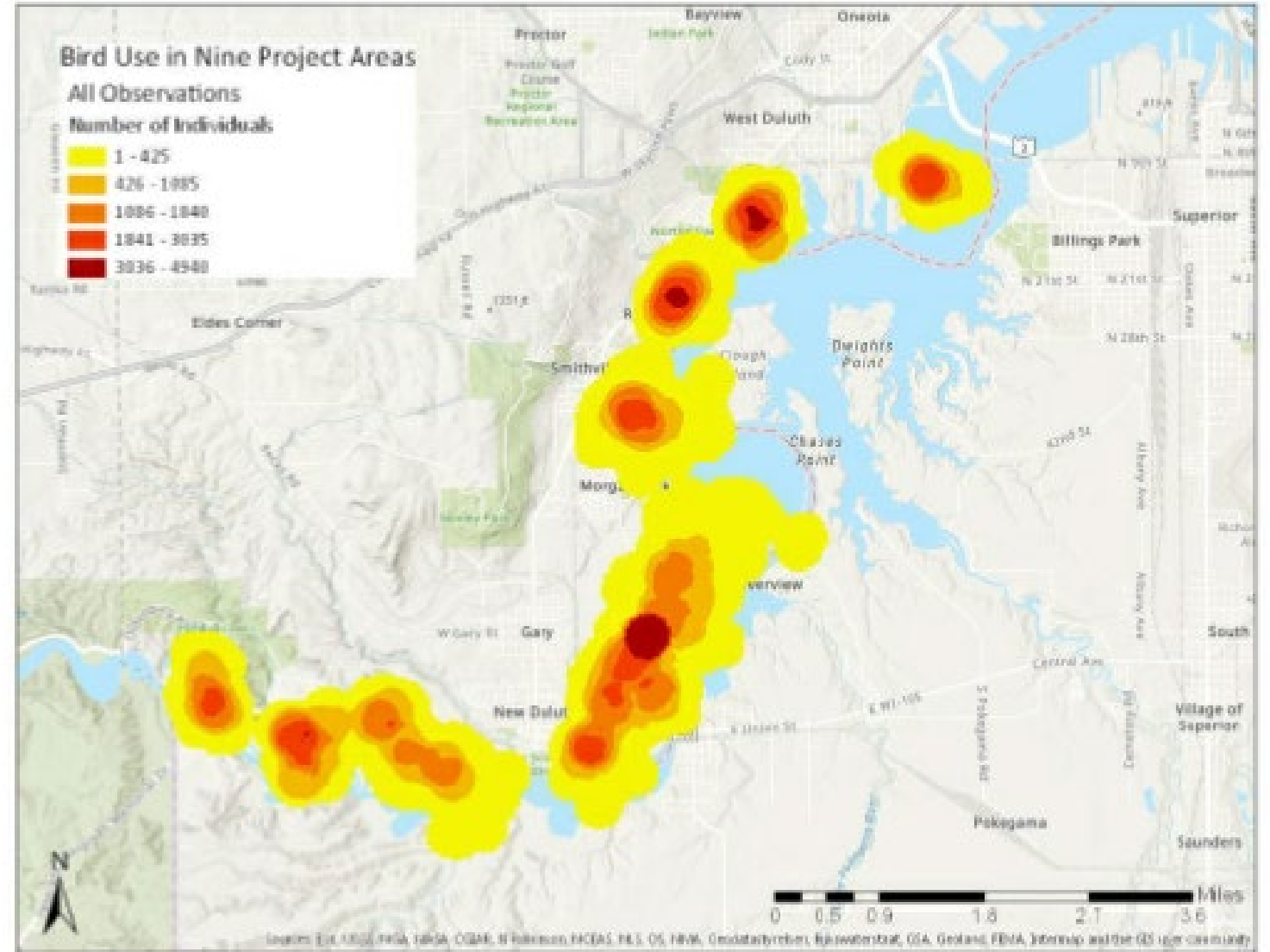
Bird Survey Results

Guild	Description	DNAP Criteria Met
Waterfowl	Highly adapted to living on the surface of the water.	✓
Shorebirds	Wet or coastal environments; most species commonly found wading along shorelines while foraging for food in mud or sand.	✓
Waterbirds	On or around water; special adaptations such as webbed feet, bills and legs adapted to feed in water; ability to dive from the surface or the air to catch prey in water.	✓
Raptors	"Birds of Prey"; primarily hunt and feed on vertebrates.	Not well assessed by survey methods
Wading Birds	Wading birds while foraging.	
Migratory Landbirds	Refers largely to passerines or perching birds.	✓

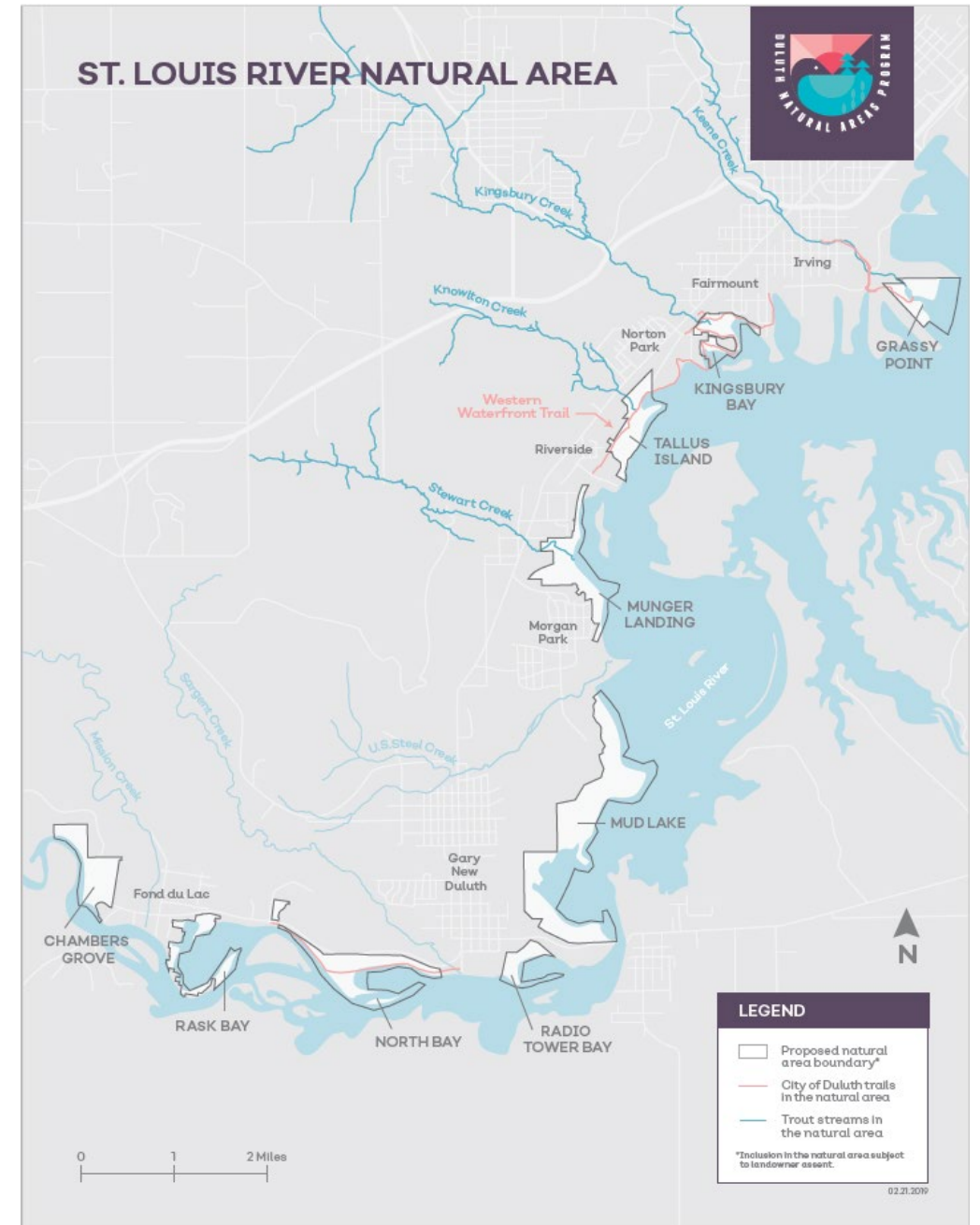
Important Bird Congregation Areas



Figure 1. Red polygons represent project area boundaries located within the SLRE, and the black points represent the survey locations associated with that project area for 2018.



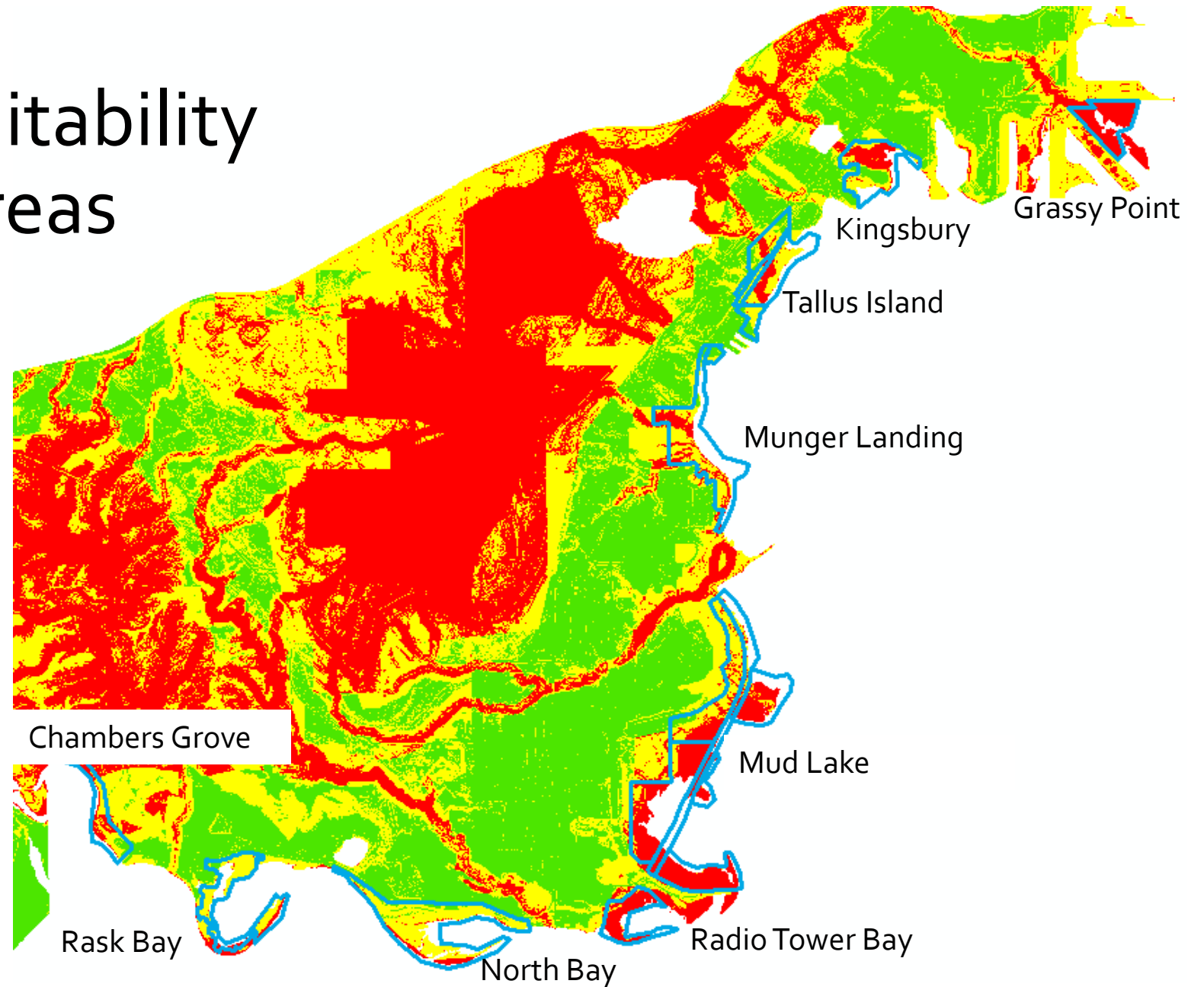
Natural Water Features



Geologic Features



Development Suitability at Project Areas



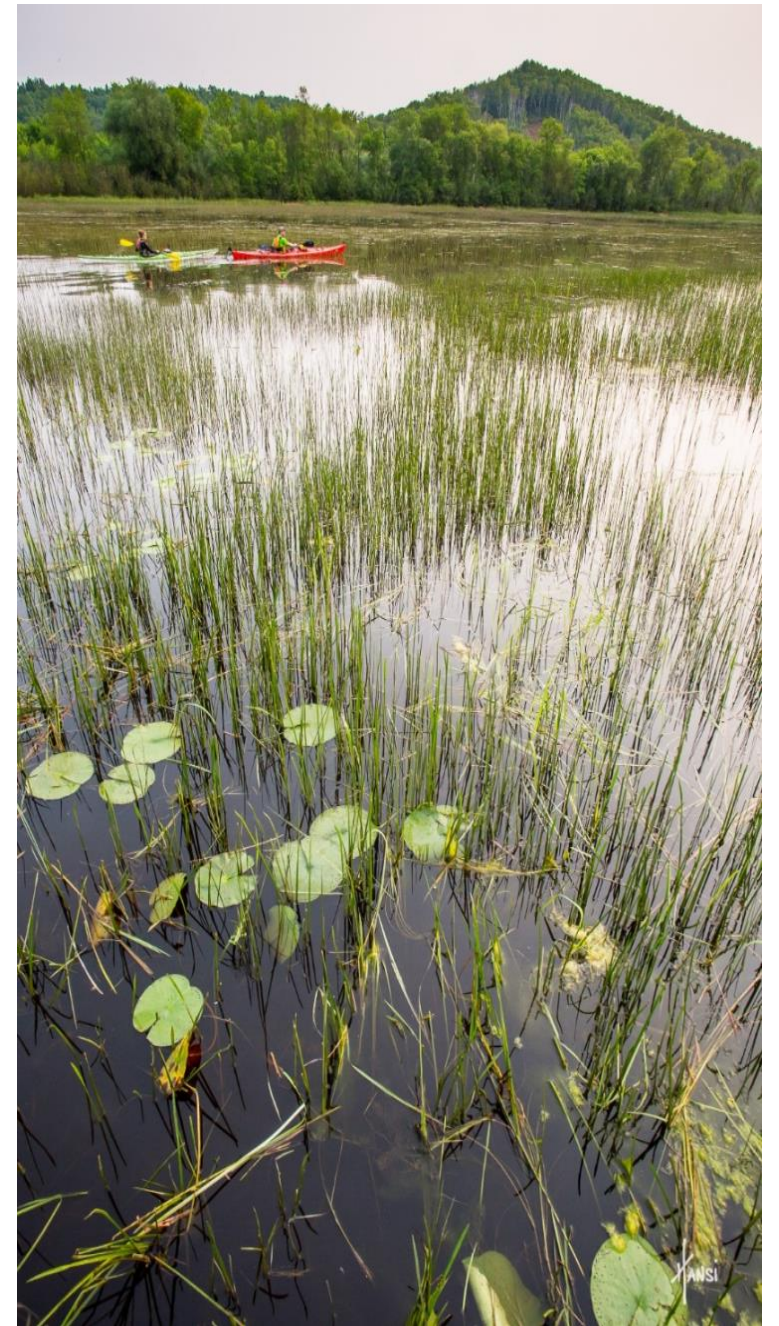
St. Louis River Natural Area would not:

- Restrict the freedom of motorized and non-motorized boats to travel and fish throughout the estuary
- Place additional limits on private development
- Require any property owner to sell



St. Louis River Natural Area would:

- Lead to development and implementation of a restoration, protection, and management plan for the natural area.
- Improve access to grant dollars
- Assure that park and trail plans are consistent with environmental conservation goals



Nomination of the Proposed St. Louis River Natural Area

Public Process	Date
Stakeholder meeting	February 27
Park and Recreation (Informational)	March 13
Planning Commission	May 14
City Council	May 28

