

Beneficial Use Opportunities- Lessons Learned in Duluth/Superior

***Dan Breneman
Remediation Division
MPCA***

Lessons Learned

what worked.....

- Data- *clarified project purpose, streamlined environmental review*
- Pilot-scale approach- *introduced a manageable investment*

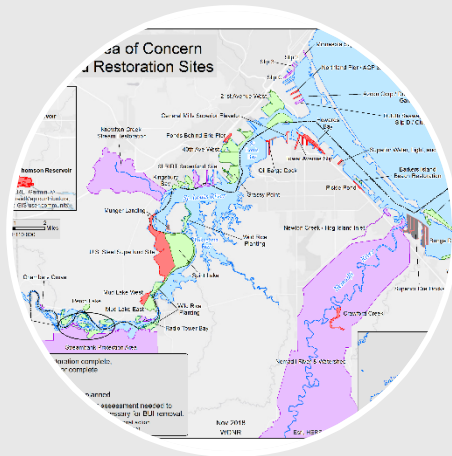
.....and what didn't....

-properly managing expectations

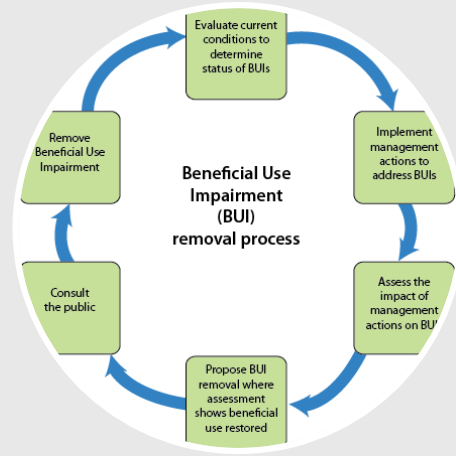
Outline

- ❑ Design approach- *prioritizing placement sites, measurable progress*
- ❑ Partnerships- *project outcomes*
- ❑ Dredge management- *future strategies*

Beneficial Use in the Duluth/Superior Harbor-Sequential Opportunities



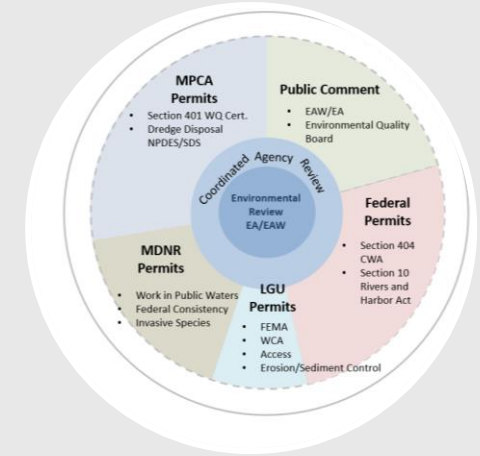
**St. Louis River
Area of Concern**



**Beneficial Use
Impairments**



**Federal and State Funds
*GLRI, GLLA and OHC, CWL***



**Harmonizing Federal and
State Regulations**

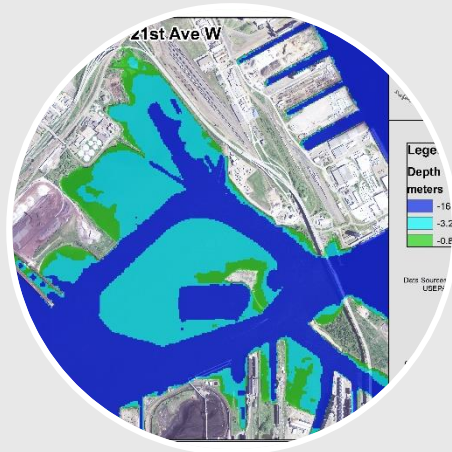
Shared goals, funding, and measurable outcomes made it possible



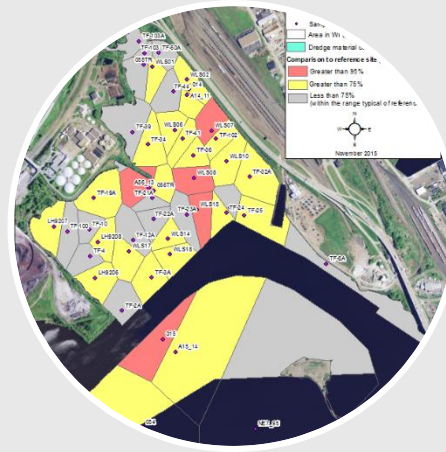
Beneficial Use
MN State Guidance
Testing Material
– Approving Locations

- Sediment characterization
- Acceptable Risk
- Ecological improvement
- Public benefit

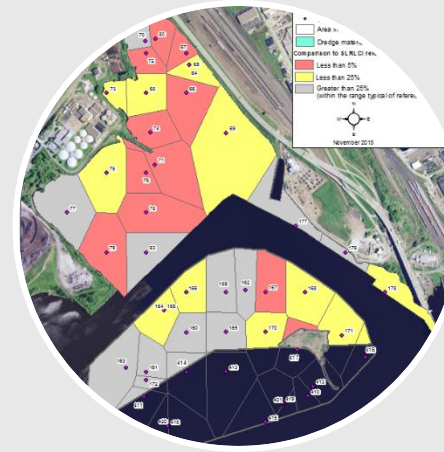
Approving Locations Design-basis approach



Physical



Chemical

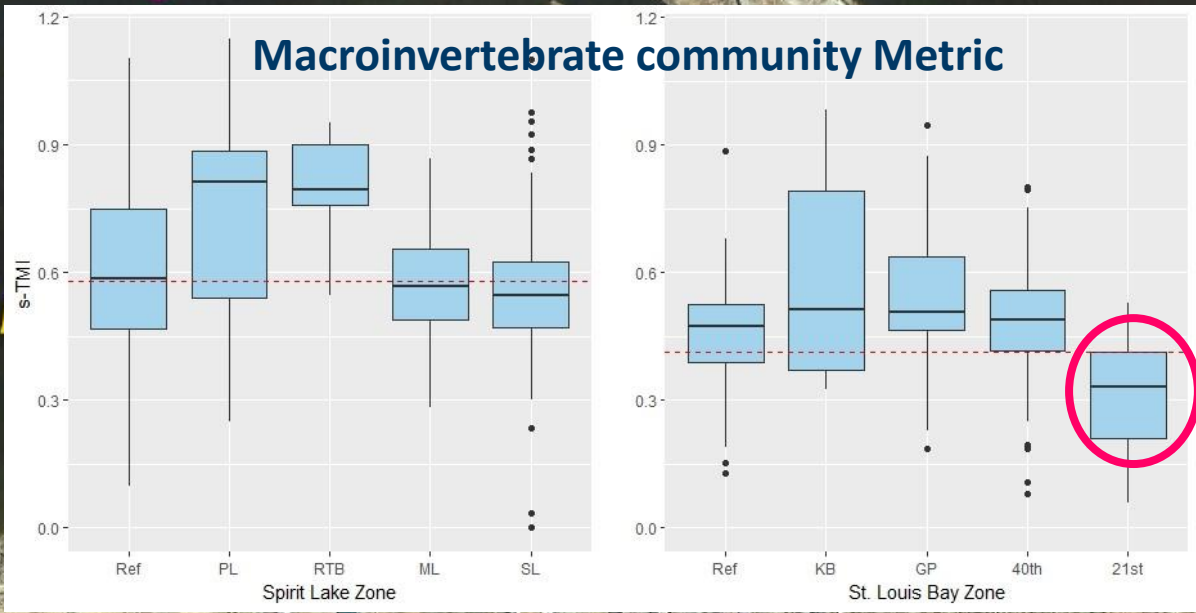
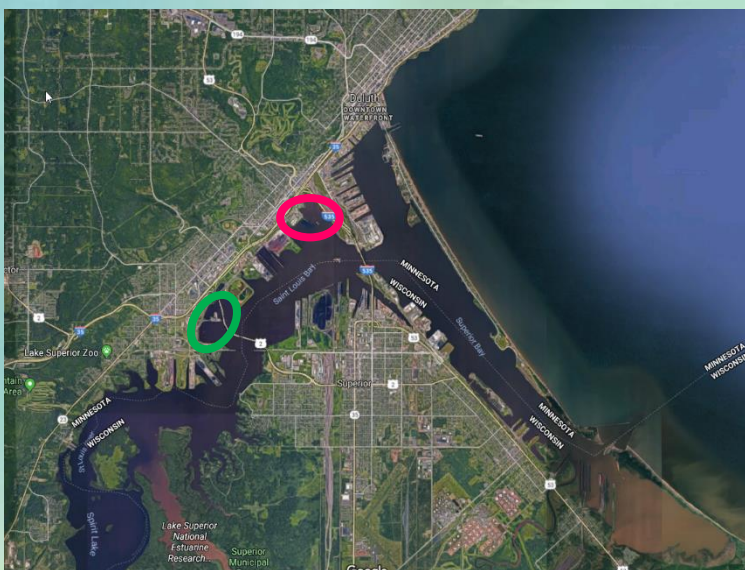


Biological



Economical/Social

Multiple lines of evidence, established targets, SWAc, timely environmental review



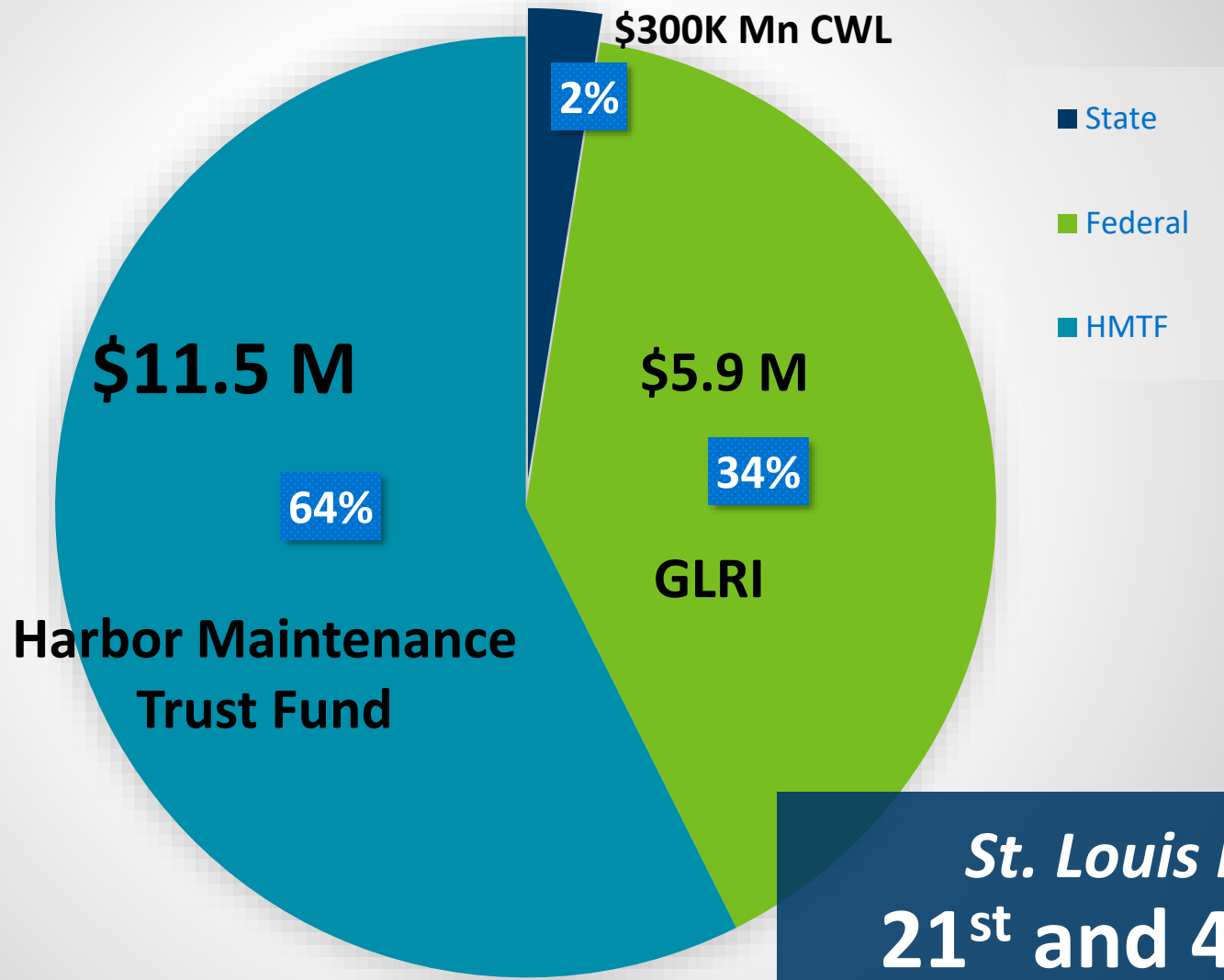


St. Louis River AOC Program-
21st and 40th Avenues West
surpassed 1.1 million CY



ST. LOUIS RIVER
AOC PROGRAM
SHEET
DEFINITION
01/15/10
01/15/10

Combined Construction Costs



St. Louis River AOC Program-
21st and 40th Avenues West
partnership funding

Beneficial Use Contract Furnished and Strategic Navigation Dredging Projects



Slip 2



Minnesota Slip



Slip 3 and C



Shorebird Habitat

**Remediation projects utilized >75,000 CY
Wisconsin Point avian habitat >77,000 CY**



projects currently approved

Placement Site Idea	Location	Priority (High 3 / Medium 2 / Low 1)
Increase resiliency for Habitat & Infrastructure	TBD	3
MN Point Lake Side Beach Nourishment	Entire Point (up to Duluth Entry)	3 ✓
WI Point Lake Side Beach Nourishment	Schafer Beach, others?	3
Nourishment of Interstate Island and/or other Tern Island Creation	Interstate Island, other areas?	2.67
Remediation of Brownfield Sites	TBD	2.67
U.S. Steel Restoration	U.S. Steel property	2.67
Construction Projects (filling basements/abandoned property/etc.)	TBD	2.33
Continue processing and reuse through Erie Pier; take more sand to Erie Pier since it is desirable	Erie Pier	2.33
Develop ways to make smaller scale removal of material out of Erie Pier more feasible	Erie Pier	2.33

Duluth/Superior Harbor Working Group

Prioritized beneficial use projects

(top 10 of 38)

Lessons Learned

- ❑ Agreed upon State guidance- *a consistent/transparent approach*
- ❑ Funds for DATA- *quantify conditions, achievable goals, and measure progress*
- ❑ Pilot scale- *comfortable level with time and money*
- ❑ Permit application- *compelling and concise*
- ❑ Federal standard- *cost effective contracts*
- ❑ timeline conflicts- *decision points not aligned with deadlines*
- ❑ management challenges- *material or people?*
- ❑ partnerships- *it takes partners willing to generate solutions*
- ❑ relying on in-water habitat restoration- *caused complacency*

Beneficial Use in a Sustainable Dredge Management Plan



Open-Lake disposal



**In-water restoration
habitat maintenance**



**Facility for stockpiling
or processing for land
and/or water-based
construction**



Mine land reclamation
State incentives



Investing in placement alternatives

Concepts making beneficial use successful



- ❑ **Early Coordination**
- ❑ **Partnerships- *define roles and responsibilities***
- ❑ **Pilot-scale approach- *manageable investments***
- ❑ **Participation- *involved and innovative; 'no' is not an answer***

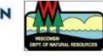


Great Lakes RESTORATION



mn MINNESOTA POLLUTION CONTROL AGENCY

mn DEPARTMENT OF NATURAL RESOURCES



mn MINNESOTA POLLUTION CONTROL AGENCY

Thank you!

Dan Breneman

dan.breneman@state.mn.us

218.302.6624