Creative Financing:
Implementing the St. Louis River Area of Concern Remedial Action Plan in MN

Great Lakes Dredging Team
2017 Annual Meeting
Pier B Resort
Dan Breneman/Nelson French
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Creative Financing – A Common Thread

Legacy Development Period
1850’s – 1960’s

Tycoons financing early development of the region included the likes of:

Andrew Carnegie - Pittsburgh
Jay Cooke – Philadelphia
Hugh McCollough – London, England
Andrew Mellon - Pittsburgh
J.P. Morgan – New York City
James J. Hill – St. Paul
John D. Rockefeller – New York City

Creative financing schemes developed the region.

Area of Concern Period
Financing 1987 – 2010
Various federal and state programs created to fund environmental improvement
No overall strategic plan

Financing 2011 – Present (Post GLRI)
GLRI Funded Remedial Action Plan
Strategic Business Plan Approach
$ GLRI Funds
$ MN Clean Water Land and Legacy Funds
$ General Obligation Bond Funds
$ Private Funds
$ Natural Resource Damage Assessment

BUI Removal Target Dates
Aggressive and bold timelines
Major actions complete by 2020
Delist by 2025
Legacy Contaminants

The result of many years of industrial and municipal pollution directly discharged to the St. Louis River. These discharges and their legacy are from the days prior to adoption of our current environmental protection laws and rules.

Legacy Habitat Loss

The result of many years of dredging and filling the estuary to create the Duluth-Superior Port. An estimate 7,000 acres of aquatic habitat was dredged and/or filled. These habitat alterations took place prior to the adoption of our current environmental protection laws and rules.
Ishpeming – Dredged Duluth Canal
One of the first acts of the City of Duluth when it was first established in March of 1870 was to dust off an old idea from 1856: dig a ship canal through Minnesota Point to allow vessels to pass through to safe harbor. They chose Portage Street as the path of that canal. It’s the stuff of legend. And the rest is history...
Duluth Harbor - 1887
Grain – Consolidated Row
Marshall Wells Co. Main Building
Zenith Blast Furnace and US Steel Mill Site on Spirit Lake
Clarkston Coal Docks
McDougall Shipbuilding - Whaleback Columbus
"You'll never see another town like Duluth. It's not a tourist destination, but it probably should be. Depends what season you're in there, though. There are only two seasons: damp and cold. I like the way the hills tumble to the waterfront and the way the wind blows around the grain elevators. The train yards go on forever too. It's old-age industrial, that's what it is. You'll see it from the top of the hill for miles and miles before you get there. You won't believe your eyes. I'll give you a medal if you get out alive."

Bob Dylan

From a Rolling Stone interview with Douglas Brinkley, May 14, 2009
Prior to GLRI an estimated $320 million was spent on water infrastructure in the MN portion of the St. Louis River Area of Concern.
Prior to GLRI an estimated $85 million was spent cleaning up contaminated sediments at Hog Island-Newton Creek (GLLA) and the St. Louis River Interlake Duluth Tar Site (Superfund)
St. Louis River Interlake Duluth Tar Site
Red River Breaks, Pokegama Bay SNA/Superior Memorial Forest, Pokegama-Carnegie Wetlands and Wisconsin Point comprise 16,697 acres of protected uplands and submerged lands; riparian and riverine habitat; riverine islands; emergent freshwater marshes, interdunal wetlands and scrub swamp; aspen, dry and hardwood forests; and open sand beach and dunes totaling.
Prior to GLRI an estimated $15 million was spent acquiring and restoring habitat in the St. Louis River Area of Concern.
St. Louis River Area of Concern
Investment Estimates 1978 – 2010

- Water Infrastructure: $320,000,000.00
- Contaminated Sediment Cleanup: $85,000,000.00
- Habitat Protection/Restoration: $15,000,000.00

~$420 million
The Great Lakes Restoration Initiative was launched in 2010 to accelerate efforts to protect and restore the largest system of fresh surface water in the world — the Great Lakes. During FY15-19, federal agencies will continue to use Great Lakes Restoration Initiative resources to strategically target the biggest threats to the Great Lakes ecosystem and to accelerate progress toward long term goals for this important ecosystem.

Cleaning up Great Lakes Areas of Concern
Preventing and controlling invasive species
Reducing nutrient runoff that contributes to harmful/nuisance algal blooms
Restoring habitat to protect native species

In 2008, Minnesota's voters passed the Clean Water, Land and Legacy Amendment to the Minnesota Constitution
• Remedial Action Plan
• The “business plan”
• 70 actions with deadlines and budget estimates
• BUI Removal focused with target BUI removal dates
Management and Use of Navigational Dredge Material
BUI Based Design Approach

St. Louis River Area of Concern
Quality Assurance Program Plan for Minnesota Based Projects

January 2015

Appendix 1
Managing In-Water Placement of Dredge Material for Habitat Restoration Sites in the St. Louis River Area of Concern

Minnesota Pollution Control Agency

Appendix 2:
A Biological, Chemical and Physical Approach to Aquatic Habitat Restoration Decisions in the St. Louis River Area of Concern

Defining Aquatic Ecosystem Restoration Targets by Evaluating Site Conditions

Minnesota Pollution Control Agency
96% of the Remedial Action Plan Actions are either completed or in progress.

Major Restoration Actions:
- 5 completed
- 4 funded and in progress
- 1 in design

Major MN Contaminated Sediment Actions:
- 2 completed
- 11 in feasibility study/design phase

2016

- Complete 29%
- In Progress 67%
- Not Started 4%

Remedial Action Plan Progress – Actions Underway
21st and 40th Avenues West

Implementation

Remedial Action Plan Partnership Agreement

US Army Corps of Engineers®
Design – Environmental Review - Permitting
21st Avenue West – Precision Construction
Financing 21st Ave W and 40th Ave W Habitat Restoration

More than 1 million cubic yards navigational dredge material
Slip 2 – Contaminated Sediment Cleanup
Slip 2 – Contaminated Sediment Cleanup
Slip 2 – Contaminated Sediment Cleanup
Current MN Expenditures Through 2017/Estimated Through 2020

FINANCING 2011 - 2017
- USEPA GLRI: $8,667,000
- USACE HMTF/WRDA/EWN: $5,445,000
- MN CLEAN WATER FUND: $7,250,000
- MN OUTDOOR HERITAGE FUND: $0
- MN BOND FUNDS: $2,100,000
- PRIVATE FUNDS: $0

EST. FINANCING 2011-2020
- USEPA GLRI: $41,100,000
- USACE HMTF/WRDA/EWN: $25,400,000
- MN CLEAN WATER FUND: $12,000,000
- MN OUTDOOR HERITAGE FUND: $7,000,000
- MN BOND FUNDS: $11,900,000
- PRIVATE FUNDS: $0
Future Opportunities for Beneficial Use ..........think outside the box

Another R2R2R........ Reuse, Restoration, and.......
Reclamation ........................think inside the pit
Bob Dylan on Duluth

“I was born in Duluth – industrial town, ship yards, ore docks, grain elevators, mainline train yards, switching yards. It’s on the banks of Lake Superior, built on granite rock. Lot of fog horns, sailors, loggers, storms, blizzards. My mom says there were food shortages, food rationing, hardly any gas, electricity cutting off – everything metal in your house you gave to the war effort. It was a dark place, even in the light of day – curfews, gloomy, lonely, all that sort of stuff – we lived there till I was about five, till the end of the war.”

Bob Dylan