

Erie Pier Management Plan Rewrite

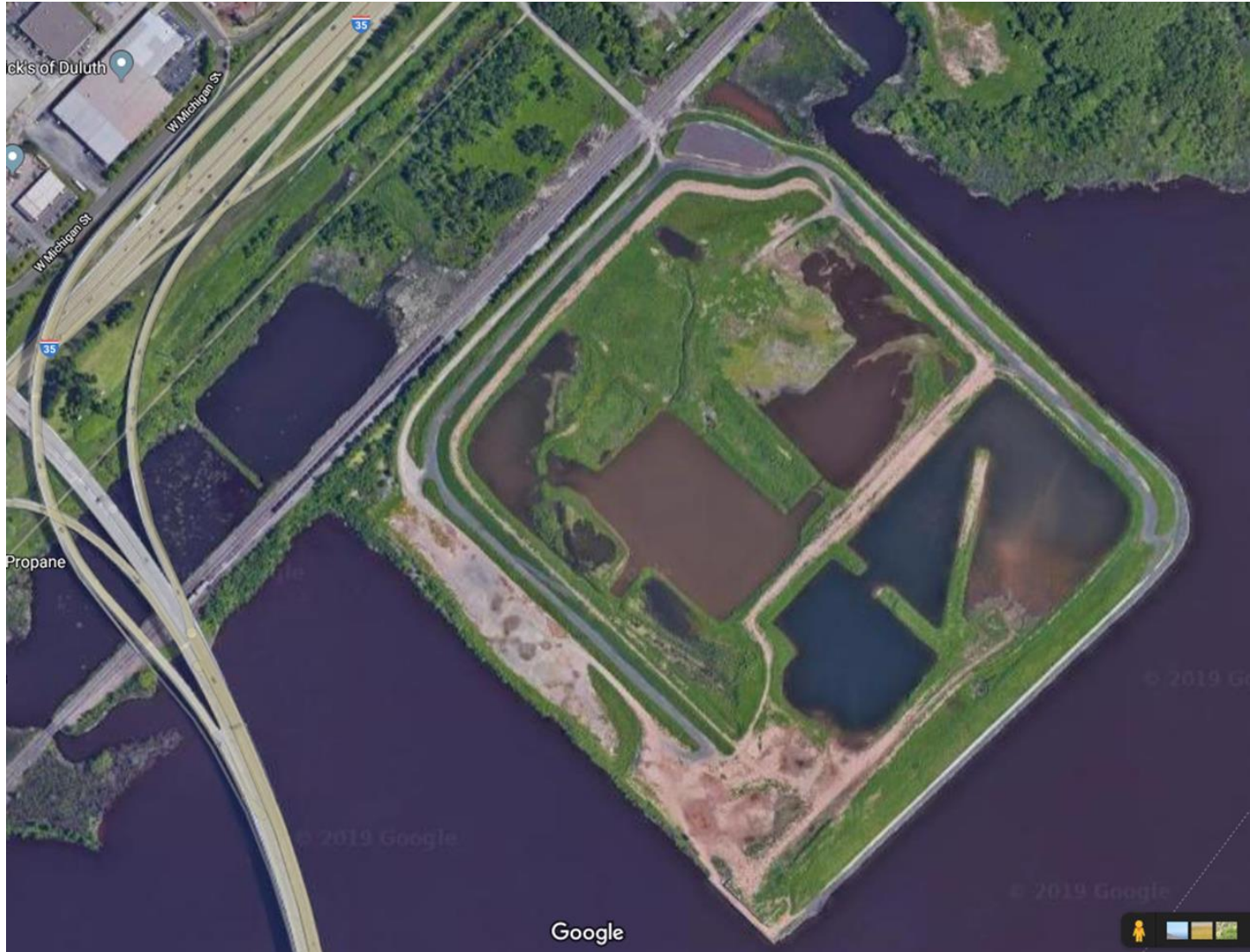
Update

Presentation to the TAC & MIC Policy Board

Mike Wenholz

October 20 & 21, 2020

Erie Pier Management Plan Rewrite – An Update



EPMP Basics

- Last written in 2007
- EPMP Committee formed - two meetings held in 2020
 - Determined a full rewrite rather than an update was appropriate
- Jeff Stollenwerk (DSPA) – primary author
- Mike Wenholtz (MIC) – organizes, facilitator, author
- 4 chapters drafted to date

Draft Chapters

Background

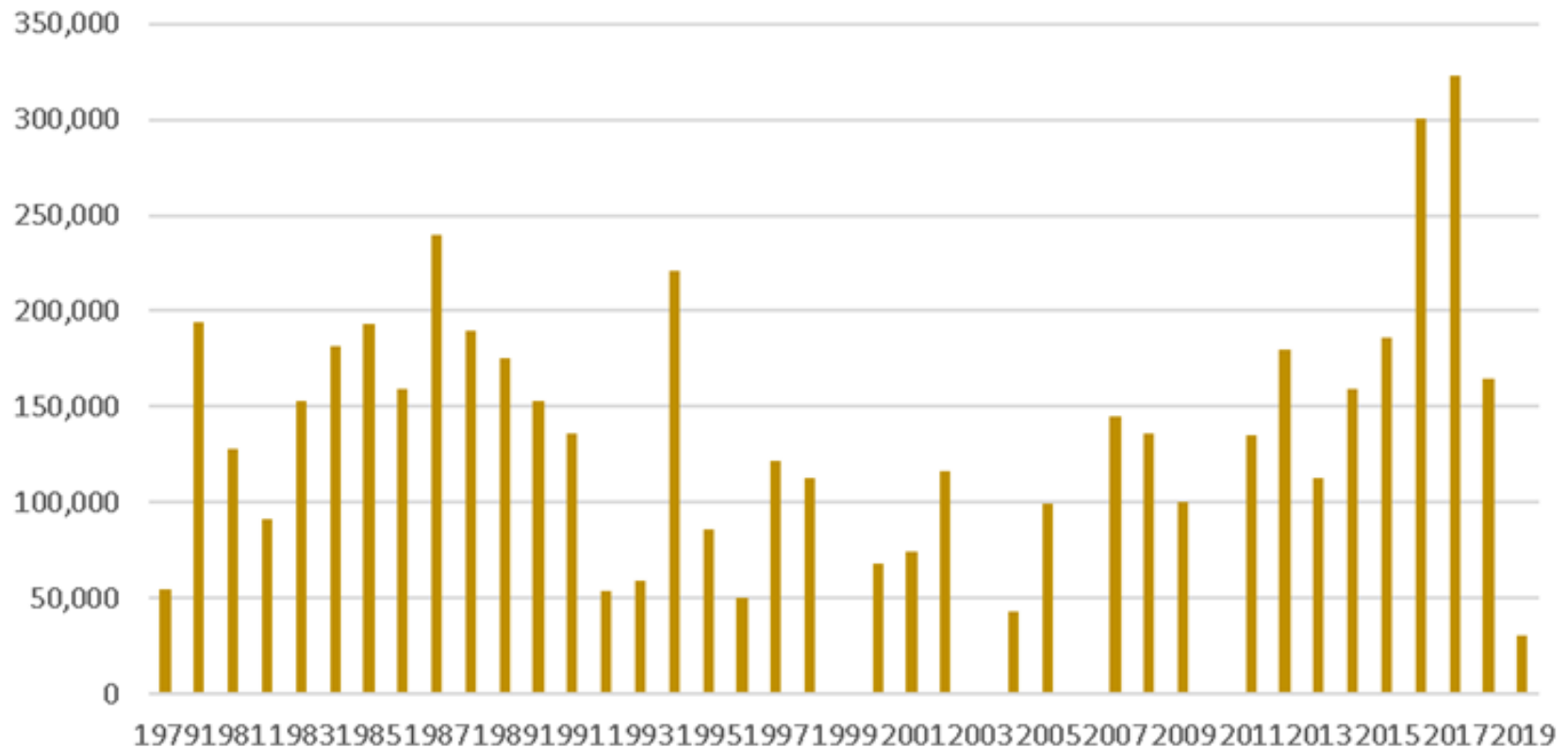
Beneficial Reuse Evaluation & Strategy Update

Water Level Management

Regulatory Controls

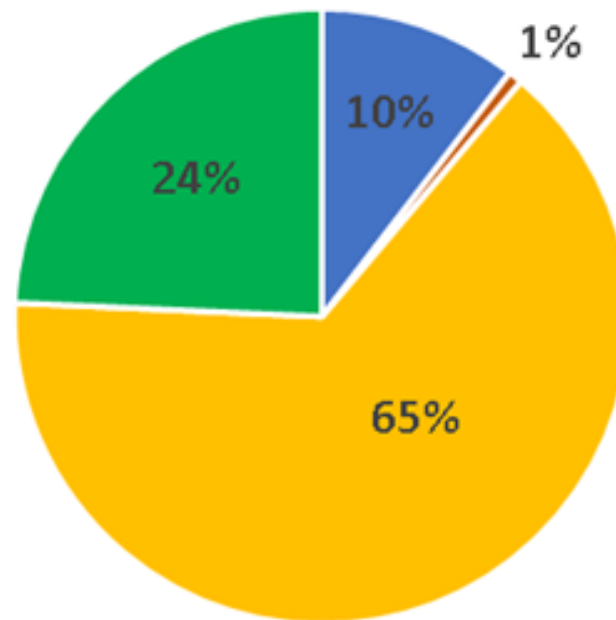
Background Chapter Highlights

Volume of Duluth-Superior Harbor Dredged Material per Year
(Cubic Yards)



Background Chapter Highlights

Volume of Dredged Material per Placement Location 1979 - 2019



Total Amount =
5,131,041 cubic yards

■ Beach Nourishment ■ Construction Fill ■ Erie Pier ■ Habitat Restoration

Background Chapter Highlights

Table 2: Average Annual Dredge Volume and Cost (1979-2005 vs 2006-2019)

		Avg Annual Volume	Avg Annual Cost
1979-2005	(CDF)	116,968	\$857,118
2006-2019	(PRF)	140,922 + 20.5 %	\$2,139,067 + 150 %

Volume is in cubic yards. Cost is in US Dollars.

Background Chapter Highlights

1979 – 2005 (26 years) (CDF)

Placement	Volume	Total Volume	%	Cost	Total Cost	%
Beach Nourishment	369,368	3,158,136	11.7	\$2,427,383	\$22,285,063	10.9
Construction Fill	37,913	3,158,136	1.2	0	\$22,285,063	0
Erie Pier	2,750,855	3,158,136	87.1	\$19,857,680	\$22,285,063	89.1
Habitat Restoration	0	3,158,136	0	0	\$22,285,063	0

2006 – 2019 (14 years) (PRF)

Placement	Volume	Total Volume	%	Cost	Total Cost	%
Beach Nourishment	166,172	1,972,905	8.4	\$2,461,577	\$29,946,939	8.2
Construction Fill	0	1,972,905	0	\$0	\$29,946,939	0
Erie Pier	560,645	1,972,905	28.4	\$12,205,574	\$29,946,939	40.8
Habitat Restoration	1,246,088	1,972,905	63.2	\$15,279,788	\$29,946,939	51.0

Volume is in cubic yards. Cost is in US Dollars.

Beneficial Reuse Chapter Highlights

- Beneficial use of dredged material has been tremendously successful since the 2007 EPMP update
- Estimate a beneficial use rate over 90% since 2007
- In 2008, and every year between 2013 and 2019, 100% of dredged material was direct-hauled to habitat restoration and beach nourishment projects

Beneficial Reuse Chapter Highlights

- The goal of this plan is to sell approved dredged materials to recover costs involved in processing and to extend the operational life of Erie Pier.
- Success depends on the ability to make quality coarse and fine materials available at competitive rates – transportation costs are a barrier
- Large scale projects are preferable in reusing dredged materials to realize economy of scale benefits
 - Mineland reclamation*
 - Road construction*
 - Top soil creation enhancement*
 - Construction sites*
 - Daily landfill cover & capping*
 - Habitat restoration & creation*
- Minnesota & Wisconsin agencies support & encourage beneficial reuse of dredged materials

Beneficial Reuse Chapter Highlights

Recommendations

1. Re-evaluate potential markets for fine material to confirm earlier findings and select 2-3 viable projects for detail transportation analysis.
2. Complete a transportation cost analysis for 2-3 specific projects. Include trucking and railroad representatives to provide local logistical considerations and cost estimates.
3. Evaluate Erie Pier access and handling improvements needed to remove 50,000 cu yards of fine material annually.
4. Construct improved access to fine material.

EPMP Rewrite Next Steps

- Committee review latest draft chapters
- Continue to draft chapters
- Format & finalize new document (EPMP)
- Final Subcommittee review
- Request MIC Policy Board approval

Questions???

Contact:

Mike Wenholz

Duluth-Superior Metropolitan Interstate Council

218-529-7573

mwenholz@ardc.org