



United States Steel Corporation

Great Lakes Legacy Act (GLLA) Used to Focus Stakeholders on Developing Acceptable Remedial Alternative for Spirit Lake in the St. Louis River (Duluth) AOC

February 12, 2019

Tenth International Conference on the Remediation and Management of Contaminated Sediments, New Orleans, Louisiana

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Great Lakes Legacy Act

- *Administered by US EPA Great Lakes National Program Office (GLNPO)*
- *Enacted in November 2002; Reauthorized in 2008*
- *Goal: Accelerate the pace of sediment remediation at Areas of Concern (AOCs)*
- *Mechanism: Use partnerships as an innovative approach to conducting sediment remediation*



Categories of Projects

- **Remediation**
(up to \$50 M / yr authorized)
 - Requires 35% to 50% non-federal match for remedial activities
 - Requires 100% non-federal funding for operation and maintenance
- **Site Characterization**
(not more than 20% of the funds appropriated for remediation projects)
 - No non-federal match required
 - Only one site assessment per discrete site



Priorities for Use of GLLA Funding

- *Projects that will use an innovative approach, technology or technique that may provide greater environmental benefits, or equivalent environmental benefits at a reduced cost*
- *Projects that include remediation to be commenced not later than one year after the date of receipt of funds*
- *Projects that are ready to go (a/k/a, “shovel ready”)*



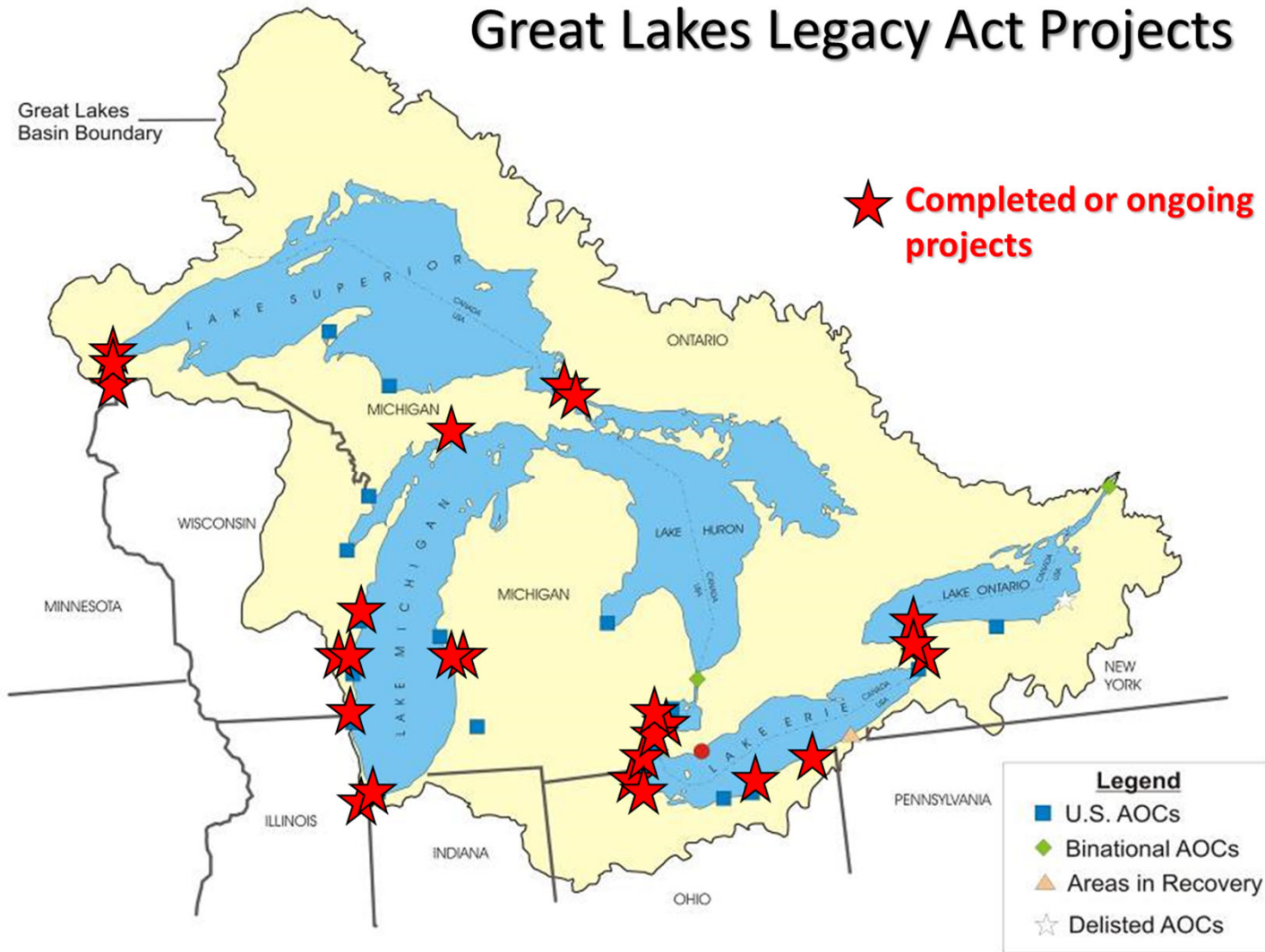
Advantages

- ***GLNPO is an active problem-solver and can assist with challenging stakeholder issues***
- ***Common goal is to complete risk–reduction projects while funding is available***
 - All parties motivated
 - GLNPO has a “stake in the game”
 - No stipulated penalties
- ***Can include habitat restoration elements in project***
- ***Industry has embraced the Great Lakes Legacy Act Program and has participated as a non-federal partner at many sites in AOCs***



Spirit Lake Sediment Site – GLLA Project

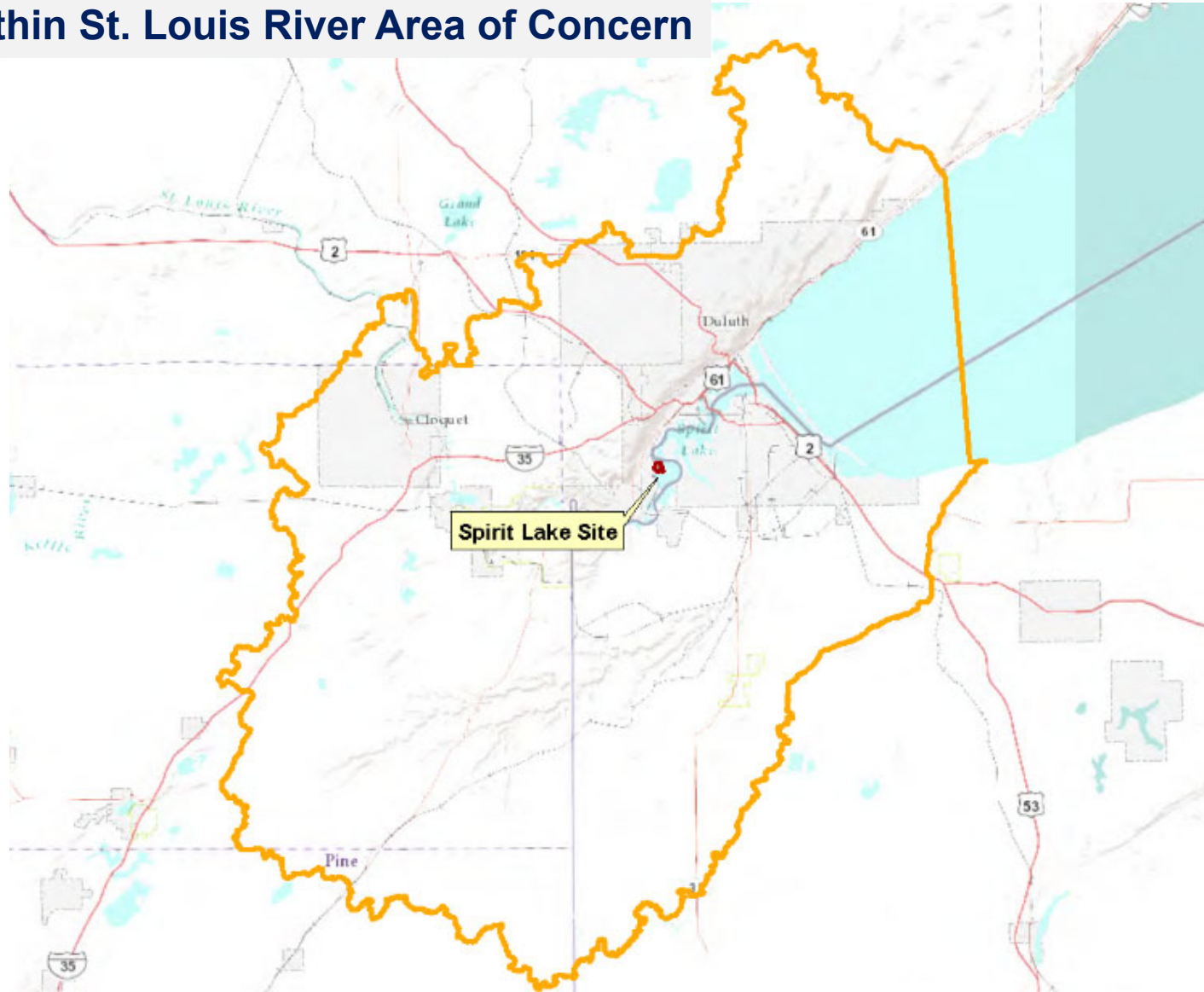
Great Lakes Legacy Act Projects





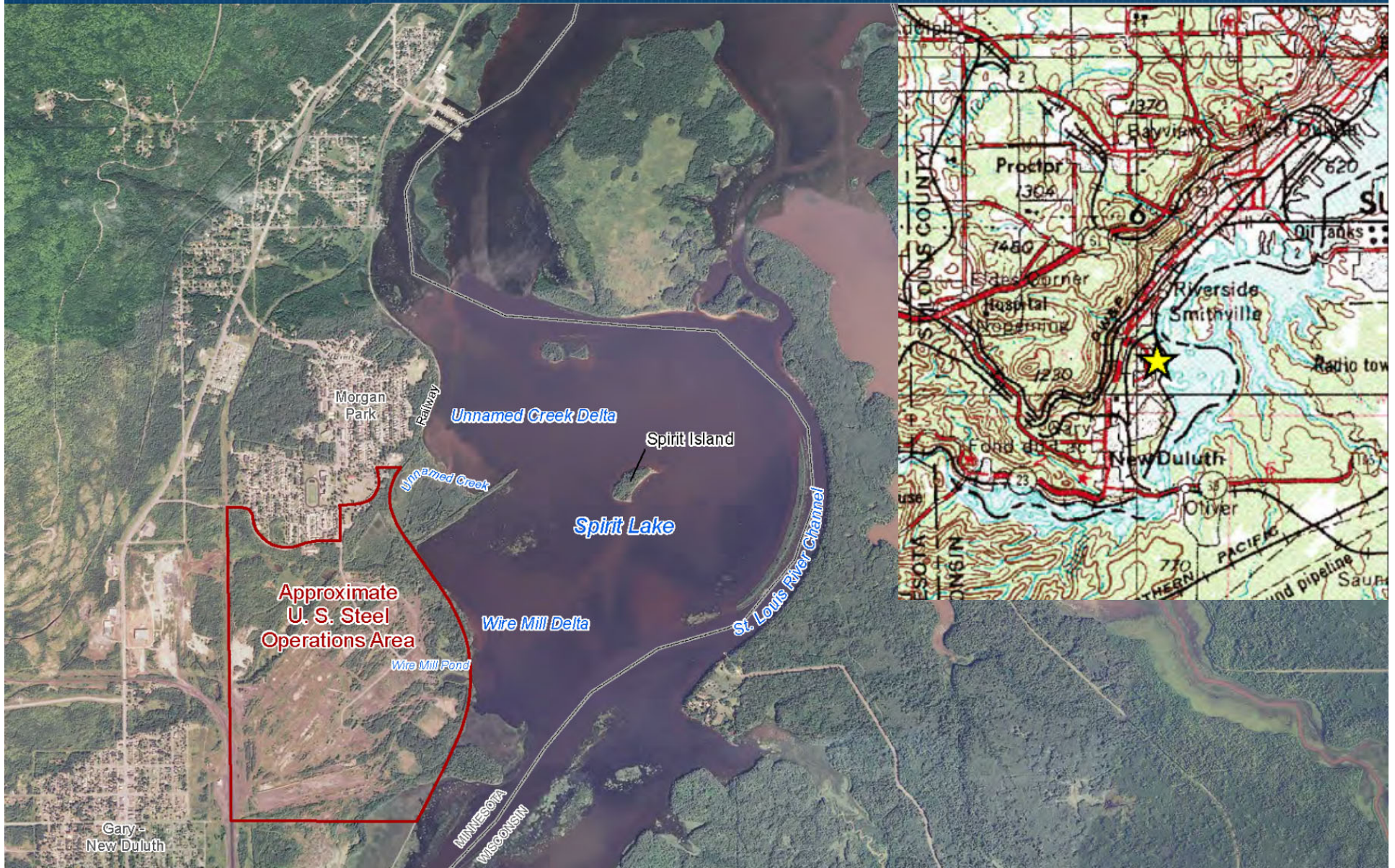
Spirit Lake Sediment Site – GLLA Project

Site location within St. Louis River Area of Concern





Spirit Lake Sediment Site – GLLA Project





Spirit Lake Sediment Site – GLLA Project

Duluth Works Plant Site circa 1960s





Spirit Lake Sediment Site – GLLA Project

1907:
Development of
facility begins

1915:
Steel-making
operations
commence

Early 1960s:
Plant settling
basin and weir
construction

1979:
Plant shuts down

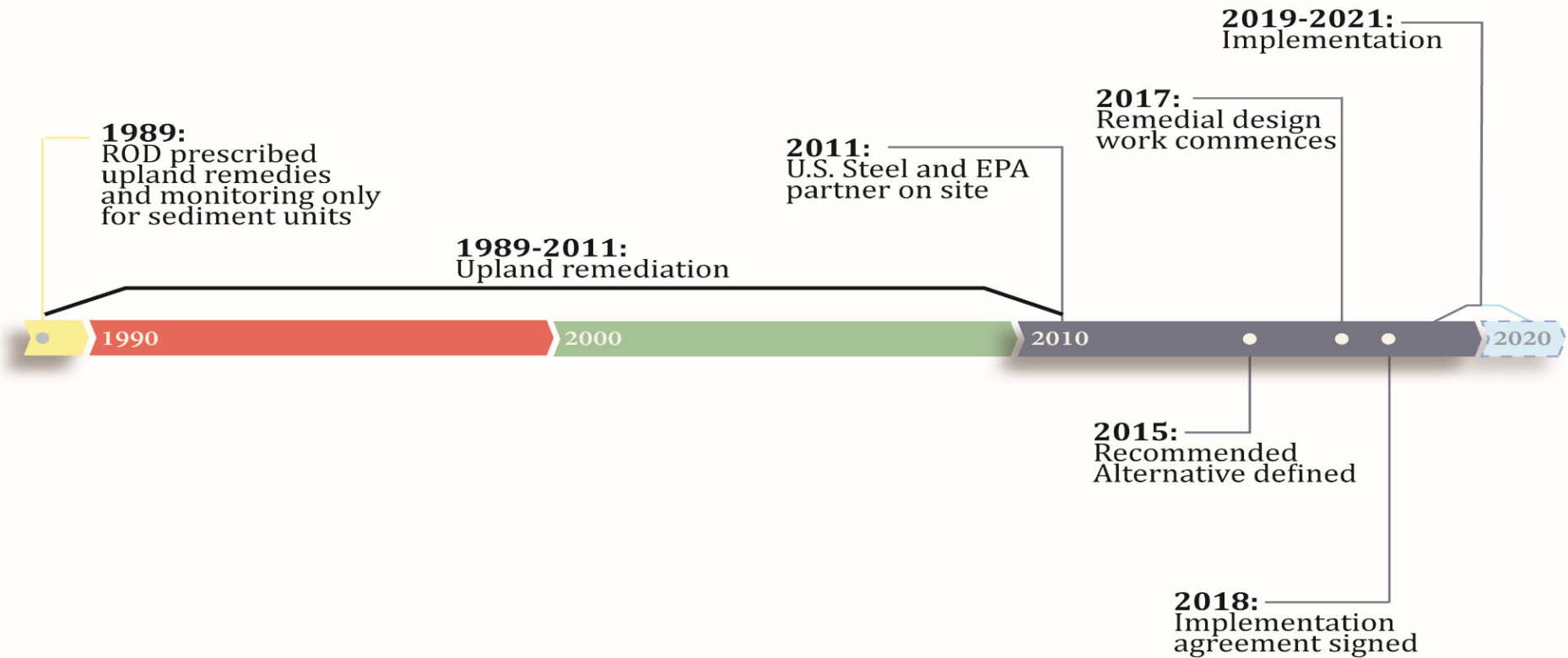
1988:
Most structures
demolished by
this time



WWI and II - 1950s:
Steel production
peaks



Spirit Lake Sediment Site – GLLA Project





Project Partners

- ***United States Environmental Protection Agency, Great Lakes National Program Office (GLNPO)***
- ***United States Steel Corporation***
- ***Advice and Assistance from***
 - Minnesota Pollution Control Agency
 - Region V US EPA Superfund Program



Great Lakes Legacy Act Project Agreement

- ***Initial partnering agreement early 2011 – Sediment sampling through the ice***
 - Embarked on a series of supplemental site investigations (2011 – 2013)
- ***Agreement amended as steady progress continued and new phases evolved***
 - Feasibility Study work (2013 – 2015)
 - Recommended Alternative defined 2015
 - Pre-Design investigations (2014 – 2018)
 - Remedial Design work (2017)
- ***“Project Remedy” Implementation agreement signed 2018***



Numerous Project Stakeholders

- ***Tribal entities***

- Fond du Lac Band of Lake Superior Chippewa
- 1854 Authority, representing Bois Forte and Grand Portage Bands of Lake Superior Chippewa
- Spirit Lake has significant spiritual and cultural importance to the Tribes of this region

- ***Minnesota Department of Natural Resources***

- ***State, Federal and Tribal fisheries managers***

- ***City of Duluth***

- ***U.S. Army Corps of Engineers***

- ***Neighbors/Morgan Park Community Group***

- ***Saint Louis River Alliance – river resource stewardship non-profit***

- ***Historical interests***

- Lake Superior and Mississippi Rail Road
- State & Tribal Historic Preservation Offices



Stakeholder Engagement

- ***GLNPO and USS met with St. Louis River estuary stakeholders at the start of the GLLA project to discuss goals and objectives for the remediation and restoration of Spirit Lake;***
 - Natural resource managers
 - Tribal Nations
 - GLNPO staff and consultants
 - Federal and State Regulators
 - U. S. Steel staff and consultants
- ***Shared goals to remove beneficial use impairments (BUIs) and reach AOC delisting***
- ***Stakeholder development of Spirit Lake Conceptual Restoration Plan (2012) to guide discussions on remedy selection and restoration***



Stakeholder Engagement

- ***Conceptual site model (CSM) developed early to help stakeholders visualize Site***
 - updated and reviewed regularly
- ***CSM used to keep everyone on same page as to what was technically feasible***
 - referenced heavily in alternatives development and evaluation
- ***Regular meetings and sharing of findings helped build confidence and a detailed understanding of the Site with the stakeholders and thus expedited the process***
- ***High degree of stakeholder engagement continues to allow modifications to design as new information is obtained***



Great Lakes Legacy Act process

- ***Engage stakeholders to understand their goals and objectives***
 - Key project contributing to removal of BUIs and AOC delisting
 - Stakeholders sought inclusion of habitat enhancements with remediation
- ***Define the problem and discuss limitations/constraints on remedial and restoration alternatives***
- ***Project agreements between GLNPO and USS defined the terms of the public-private partnership***
 - MPCA agreed to move forward with the project within the GLLA process
- ***GLLA process resulted in significant progress toward implementing a remedy that assists with removal of BUIs and AOC delisting, as well as restoration components important to the diverse group of stakeholders***



Conclusions

- *Stakeholder engagement throughout the process has generated trust in GLNPO and USS among the stakeholders*
- *The GLLA approach has allowed the project to progress at a faster rate than the typical Superfund process*



Spirit Lake Sediment Site – GLLA Project

Thank You

Questions?