

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

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Background/Objectives. The Great Lakes Legacy Act (GLLA), administered by the U.S. Environmental Protection Agency (USEPA) Great Lakes National Program Office (GLNPO), has been used successfully to facilitate stakeholder engagement, aid alternatives evaluation and development of a sediment remediation and restoration design for the Spirit Lake Sediment Site at the former United States Steel Corporation (USS) Duluth Works located within Great Lakes Area of Concern (AOC) #1, the estuary of the lower Saint Louis River. The Spirit Lake Site is within the St. Louis River estuary. Remediation and restoration of the Spirit Lake Site is an important step in eliminating Beneficial Use Impairments (BUIs) with the goal of de-listing this AOC.

USS and the Minnesota Pollution Control Agency had been in informal discussions for a number of years regarding possible supplemental remediation of sediments at the Spirit Lake Site adjacent to the former Duluth Works property. In 2010 USS decided to explore the possibility of participating in a GLLA project. This culminated in an initial Project Agreement to supplement the existing site data in 2011. USS and EPA then embarked on a collaborative remedial investigation and feasibility study which resulted in stakeholder consensus on the appropriate remedy for the Site in 2015.

This presentation will discuss how the GLLA public-private partnership was successful at focusing disparate stakeholders on finding an acceptable remediation and restoration solution for the site, which accelerated the timeline to remedial design by getting stakeholder feedback on potential alternatives in near-real-time.

GLNPO organized an early meeting with estuary stakeholders, including regulators, natural resource managers, Tribal Nations, USS staff and consultants, and GLNPO staff and consultants, to discuss stakeholder goals and objectives for the remediation and restoration of the site. Conceptual Site Models (CSMs) for three different areas of Spirit Lake, developed early in the process and updated as new data were obtained, were used to keep the stakeholders (USS team, GLNPO, regulators, natural resource managers, Tribal Nations) on the same page with respect to what was technically feasible as potential alternatives were evaluated. This resulted in an expedited process because the stakeholders were engaged through the alternatives evaluation process and, therefore, already had buy-in for the alternatives selected for detailed evaluation. The high degree of stakeholder engagement facilitated by GLNPO also allowed modifications to be made to the selected alternative during the pre-design phase as new data were obtained and included in the CSMs, advising the technical feasibility of various aspects of the complex site.

The overall project has now progressed into the design and permitting phase. A recently executed Project Agreement Amendment will take the site to the finish line, covering a comprehensive remedy with restoration components.

Approach/Activities. This presentation will describe how GLNPO and USS accelerated the timeline to a remedial design at an important AOC site by facilitating focused stakeholder engagement.

Results/Lessons Learned. The presentation will show how the GLLA program was successful in engaging diverse stakeholders to provide near-real-time input into development of the selected remedial alternative, a key component to eliminating BUIs in the Lake Superior freshwater estuary (AOC #1).