# Community with a Vision: Sewage Lagoon into Economic Boon

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**Background/Objectives.** The Record of Decision (ROD) for the Portland Harbor Superfund site was issued in 2017, opening the door to the next steps of design and planning for cleanup of the Willamette River in Portland, Oregon. Disposal options for the estimated 2.8 million cubic yards of contaminated dredge sediments are limited; overland routes are long and constricted, barge routes are limited by transload facilities. Disposal demand extends beyond the superfund cleanups, including state led sediment and soil cleanups, as well as navigation channel deepening and maintenance work.

The City of St. Helens currently operates a 40-acre secondary treatment sewage lagoon on the Columbia River, approximately 25 river miles from downtown Portland. The lagoon is significantly oversized following the departure of pulp production from the adjacent paper mill. Two large City-owned properties surround the lagoon and are master-planned for commercial, residential, and industrial revitalization. The City is proposing to repurpose the lagoon as a landfill for contaminated sediment and soil that, after being filled, will connect the waterfront properties and provide useable space and opportunities for the public.

**Approach/Activities.** The option of a dedicated local disposal facility for the Portland Harbor cleanup was eliminated in the ROD due to a lack of suitable sites and low public tolerance, escalating the cost of disposal. The nearest disposal facilities with transload infrastructure for barge transportation are 100 to 150 miles from the Portland Harbor superfund site. The City of St. Helens identified an opportunity to restore public value within their waterfront, while funding a full replacement of their existing wastewater treatment plant and generating additional revenue. The City is currently working to procure funding through multiple sources to initiate the process of site investigation and facility design.

The facility is proposed to be permitted as a Subtitle D Landfill restricted to disposal of soil, sediment, and wastewater sludges. A transload facility is proposed for the site, potentially utilizing an existing dock and other in-water structures. The project would be a regionally significant asset for the Portland Harbor cleanup as well as other local sediment and soil remediation projects. A market study was prepared to verify the economic viability of the project shows an estimated net revenue for the City of $50-70 million (accounting for the full cost of the new wastewater treatment plant).

**Results/Lessons Learned.** The project has gained significant regional and statewide support, and provides numerous benefits to environmental cleanup projects in the Pacific Northwest. Transportation and disposal costs for the superfund cleanup could be greatly reduced compared to other disposal alternatives for Portland Harbor. The reduction in greenhouse gas generation that results from significantly shorter transportation routes provides a substantial environmental benefit. Furthermore, the community of St. Helens can achieve their long-term goals of waterfront revitalization and economic development through disposal revenues.