

Program #10018C - Ross Island Lagoon Mixing Channel Project

FY 2025 Adopted

Department: Nondepartmental Program Contact: John Wasiutynski

Program Offer Type: Operating **Program Offer Stage:** Adopted

Related Programs:

Program Characteristics: New Request, One-Time-Only Request

Executive Summary

Multnomah County will develop an intergovernmental agreement with Oregon State University (OSU). The agreement will facilitate the transfer of funds to the university for the purposes of developing the initial designs for a mixing channel in the Ross Island Lagoon. The mixing channel will help to alleviate the increasingly common occurrence of harmful algal blooms in the lagoon which also impact the main stem of the river causing closures and harm wildlife.

Program Description

Ross Island is an island in the Willamette River located in Portland, Oregon. Before 1926, the island was two separate islands, with braided channels flowing freely between the islands. The Northern Island was home to Bundy's Bath House a destination in Portland's Early History for swimming and dances. In 1926 the US Army Corps of Engineers constructed an embankment connecting the two islands to facilitate gravel extraction. Pollution in the river eventually closed the bathhouse, but gravel mining continued through 2001. The embankment that connected the two islands and subsequent mining left a deep lagoon in the middle of the island.

Today the lagoon is effectively a lake in the middle of a river, with very little flow other than tidal pulsing at one downriver channel into the lagoon. The lagoon is very deep, over 120 feet deep in some sections, and the bottom is anoxic, or without dissolved oxygen, and can remain relatively cold throughout the year. The surface of the lagoon, on the other hand, warms up substantially. Surface warming, especially with increasingly warm conditions caused by climate change, combined with low flow and anoxic benthic conditions conspire to create an ideal breeding ground for cyanobacteria. Harmful Algal Blooms are now a common occurrence in the lagoon, and when the bloom becomes severe it will spread to the main stem of the river closing the river to recreation and causing harmful conditions for wildlife. These impacts will only get worse over time in the absence of a solution.

After extensive investigation, researchers have determined that the best long-term approach for mitigating harmful algal blooms in the Ross Island Lagoon is to once again separate the two islands with a mixing channel. This funding will support the initial design of a mixing channel or 30% design. The County will develop an intergovernmental agreement (IGA) with researchers at OSU who will complete the design.

Performance Measures								
Measure Type	Performance Measure	FY23 Actual	FY24 Budgeted	FY24 Estimate	FY25 Target			
Outcome	Percent completeness of Ross Island Lagoon mixing channel design	N/A	N/A	N/A	30%			
Output	Signed intergovernmental agreement with Oregon State University	N/A	N/A	N/A	1			

Performance Measures Descriptions

Legal / Contractual Obligation

The County will negotiate an intergovernmental agreement with Oregon State University.

Revenue/Expense Detail

	Adopted General Fund	Adopted Other Funds	Adopted General Fund	Adopted Other Funds	
Program Expenses	2024	2024	2025	2025	
Contractual Services	\$0	\$0	\$150,000	\$0	
Total GF/non-GF	\$0	\$0	\$150,000	\$0	
Program Total:	\$0		\$150,000		
Program FTE	0.00	0.00	0.00	0.00	

Program Revenues						
Total Revenue	\$0	\$0	\$0	\$0		

Explanation of Revenues

Significant Program Changes

Last Year this program was: