

Project Background and Goals:

Minnesota DNR and the Minnesota Land Trust are working together to restore fish and wildlife habitat at Perch Lake. This work is part of a greater effort to mitigate historic impacts to habitat in the St. Louis River under the Great Lakes Area of Concern Program. Perch Lake was once a bay of the St. Louis River estuary. The construction of the railroad and U.S. Hwy 23 embankments nearly eliminated this connection. Now, only a shallow 4-ft wide culvert provides connection, drastically reducing water circulation, sediment transport and fish access. As a result, Perch Lake has low oxygen levels, shallow depths, and limited access for fish and wildlife. To address these impairments, the project's goals include:

- Remove accumulated sediment
- Increase circulation between the estuary and Perch Lake
- Improve fish and wildlife passage
- Restore and enhance coastal marsh wetland habitat



Left Photo: An aerial photograph of Perch Lake. The Highway 23 causeway and City-owned trail causeway are adjacent to each other and in the foreground. **Right Photo:** The single four-foot culvert connection between Perch Lake and the river.

Project Description:

In consultation with the City of Duluth and Minnesota Department of Transportation, we developed a design to improve habitats within Perch Lake and increase the connection between Perch Lake and the main river channel. To improve habitat, we will excavate approximately 70,000 cubic yards of sediment creating the following habitats: deep water (8-10 ft), coastal marsh, hemi-marsh, and spawning areas. We will also install a new 16-foot culvert underneath Highway 23 and the Marten Trail, 400 ft east of the existing 4-foot culvert to increase the circulation of water flow and fish passage between Perch Lake and the River.

Anticipated Timeline:

2019-2020: Hydrologic and hydrodynamic modeling, baseline sampling

2021-22: Complete engineering design and construction specifications

2022: Project construction

For More Information:

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This project is estimated to cost \$7,000,000 and is includes the following partners:

