

Automation of Soo Compensating Works Gates to Optimize Fish Spawning Habitat

Habitat Focus Area

Project Location: Soo Locks Facility, Sault Ste. Marie, MI

Project Description: The St. Marys Rapids was historically known for fish production as the Native Americans fished the rapids prior to construction of the locks. The 16 gates that make up the compensating works (8 on the Canadian side and 8 on the US side) discharge flows into the Rapids. This project would automate the manipulation of these gates to provide 80 acres of optimum habitat conditions for fish spawning and egg hatching based on wetted perimeter, depth and velocity over specific areas of the Rapids. This project is authorized under Operations and Maintenance.

Non-federal Partner: The project is currently being designed and coordination efforts are in progress. Consulting agencies will include the U.S. Environmental Protection Agency, The Great Lakes Fisheries Commission, St. Marys River Fisheries Task Group, U.S. Fish and Wildlife Service, Michigan Department of Natural Resources, Lake Superior Water Control Board, and the Ontario Ministry of Natural Resources and Fisheries.

Project Benefits: The St. Marys River rapids offer a rare combination of ideal spawning flow rates (averaging 3 fps) and an optimal spawning substrate of bedrock, fractured bedrock, cobble and gravel. However, abrupt fluctuations in flow rates and water levels have degraded fish habitat in the rapids. Automation of the Compensating Works gates will result in measured fluctuations in flow rates and water level elevations, thus preventing fish from being stranded when gates are lowered and protecting eggs and fry from being flushed out when gates are raised. Automation of the gates will provide improved spawning habitat for sturgeon, walleye, steelhead, Atlantic salmon, coho salmon, and king salmon.

This project will help restore 80 acres of riverine habitat, contributing to the overall improvement of fish populations

Project Status: Design of this project is in progress and will be complete in spring 2016. It is anticipated that a construction contract will be awarded by late summer 2016 and construction will be complete by late fall 2017.



Estimated Project Costs	
Federal	4,000,000
Non-Federal	0
Total	4,000,000
Total	4,00

Project Milestones		
Completion of Design RFP	Jul 2015	
Award of Design Contract	Sep 2015	
Award of Construction Contract	Sep 2016	

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