



US Army Corps
of Engineers®

Automation of Soo Compensating Works Gates to Optimize Fish Spawning Habitat

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 will automate the manipulation of 4 of these gates to provide up to 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: Consulting agencies 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, International, Lake Superior Board of Control, 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 optimize 80 acres of riverine habitat, contributing to the overall improvement of fish populations.

Project Status: Design of this project was completed in spring 2016 and a construction contract was awarded in September 2016. Construction contract to automate 4 gates was completed in December 2017.



Estimated Project Costs	
Federal	8,700,000
Non-Federal	0
Total	8,700,000

Project Milestones	
Completion of Design RFP	Jul 2015
Award of Design Contract (pending funds)	Sep 2015
Award of Construction Contract (pending)	Sep 2016
Construction Completion	Dec 2017

Point of Contact
Josh Hachey, 313-226-4549, Joshua.J.Hachey@usace.army.mil

