



**US Army Corps
of Engineers**

Tonawanda Creek, NY and Cayuga Lake Inlet, NY Monoecious Hydrilla Aquatic Plant Control Invasive Species Focus Area

Project Location: Cayuga Lake Inlet is located near the City of Ithaca in Tompkins County, New York. Cayuga Lake is connected to Lake Ontario by the New York State Barge Canal System.

Project Description: The monoecious biotype of hydrilla (*Hydrilla verticillata*) was recently discovered in the Cayuga Lake Inlet and Erie Canal, NY highlighting the concerns about the migration of this invasive plant species through these waterways. A hydrilla eradication program was implemented for Cayuga Lake in 2012 relying on the US EPA registered herbicides endothall and fluridone. However, there is little or no data available to guide the application of these herbicides effectively against this form of hydrilla. This project will develop information on the concentration and exposure time (CET) requirements for fluridone on monoecious hydrilla. Subsequent work will develop information on the timing and synchronization of tuber sprouting, rates of plant growth, physiological and growth responses to different environmental conditions and environmental factors that influence initiation of tuber production and survival.

Non-federal partner: Cayuga Lake Inlet Hydrilla Task Force (NYSDEC, Tompkins County, and others)

Project Benefits: Improved knowledge of CET requirements and the impact of intermittent exposure of hydrilla to fluridone could result in improved treatment strategies in Cayuga Lake Inlet and reduce the opportunity for spread of this invasive plant into other areas around the Great Lakes. The ability to reduce both herbicide volumes and the duration of application would result in cost-savings, reduced environmental loading, and an increased likelihood of a sustainable project on Cayuga Lake. Outcomes of this investigation will be of value to numerous public resource managers.

Project Status: This project was initiated in December 2012 using \$175,000 of Great Lakes Restoration Initiative funds.



Hydrilla infestation at Cayuga Lake Inlet, photo courtesy of Robert Johnson

Estimated Project Costs	
Federal	\$175,000
Non-federal	\$0
Total	\$175,000

Project Milestones	
Initiate study	Jan 2013
Complete growth study	Nov 2013
CET recommendations	Jan 2014
Journal publication	Mar 2014

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