PROJECT STATUS UPDATE: 2018 CROTON HYDRILLA CONTROL PROJECT

REPORT DATE: 07/16/2018-07/27/2018

Prepared by: Nicole White, NYSDEC Invasive Species Coordination Section

Project Description: Hydrilla (monoecious) discovered 10/19/13 in Croton River. Surveys were conducted in 2014, 2015 and 2016 to delineate the hydrilla infestation in the Croton River as well as several high-risk sites within a 10 miles radius including the Hudson River and its tributaries. To-date, no hydrilla has been found in proximity outside the Croton River and the New Croton Reservoir. A five-year management plan was created to control Hydrilla in the Croton River. After a successful first year treatment in 2017, the treatment for 2018 again involves the injection of the aquatic herbicide Sonar Genesis, also known as fluridone, into the river just below the New Croton Dam and at Black Rock Park with a target concentration of 2.0-4.0 parts per billion (ppb) for 60-120 days.

Tasks Completed (2018 Treatment)

- Attended Aquatic Plant Management Society Conference (7/15-7/18)
- Fluridone Treatment SHUT DOWN 7/23-7/27 due to sustained rain events and high rate of discharge (300-500cfs) in Croton River.
 - No impact on control expected when fluridone shut down is less than 6 days at a time*
 - Treatment was turned back on 7/27.
- Drinking water (DW) & Finished water (FW) samples were collected on 7/11, 7/13, 7/16, 7/18, 7/20, 7/23, 7/25, 7/27.
 - RESULTS: 7/11, 7/13, 7/16, 7/23: Fluridone levels all below 1ppb and listed as "Normal"
 - o RESULTS: 7/18, 7/20 Well #3 reached 1.1 ppb. As long as samples range between 1ppb and 4ppb they will be labelled "additional monitoring necessary". If samples exceed 4ppb the treatment will be modified or terminated.
 - o RESULTS: 7/25, 7/27 (Still at Lab) All reports posted here: https://www.dec.ny.gov/animals/110624.html
- Water samples were collected by Village-hired consultant from four Village Aquifers on 7/17
 - o Fluridone was not detected in Upper Well 2, Well 2A, or Well 5. Fluridone was detected in Well 5A below 1ppb: listed as Normal
- Injection Unit tanks filled by SOLitude licensed applicator 7/05, 7/12, 7/26

Upcoming Tasks 07/30/2018-08/10/2018		
Task#	Description	Lead
1	Continue fluridone treatment (2-4 ppb for 90-120 days) of entire Croton River	ISCS/SOLitude/SePRO
2	Monitor & Log injection unit levels at least 3 times per week	ISCS – White
3	Collect drinking/finished water samples 3 times per week	SOLitude/Village of Croton
4	Post water quality sampling results to webpage	ISCS-Eyres/McGlynn
5	Upload thermograph data via DEC Reg 3 Fisheries @ Croton River	ISCS – White/NYSDEC Reg 3 Fisheries
6	Restore River & Estuary Observatory Network station @ Black Rock Park	Clarkson University

Internal Group Members: Kathy Moser, Willow Eyres, Catherine McGlynn, Anthony Lamanno, Cathy Ahlers, Bill Rudge, Justin Perry

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Support Resources: Lloyd Wilson (NYS DOH), Brenan Tarrier (DOW), Dan Kendall (DOW), James Leach (DOH), Jim Hyde (DOH), Wendy Rosenbach (R3 CPS)

Croton Hydrilla Control Project Page: https://www.dec.ny.gov/animals/106386.html

^{*}Netherland, Michael., J. 2015. Laboratory and greenhouse response of monoecious hydrilla to fluridone J. Aquat. Plant Manage. 53: 178–184