



**Department of
Environmental
Conservation**

Connecting the Dots from Communication to Control: A Case Study in Croton

**Hydrilla Collaborative Webinar
March 5, 2019**

Background

- Hydrilla discovered in Croton River, Westchester County in October 2013



- Chemical treatment of Croton River which includes area above drinking water aquifer for Village of Croton begins July 2017



How did we get there?

- Enormous amounts of communication



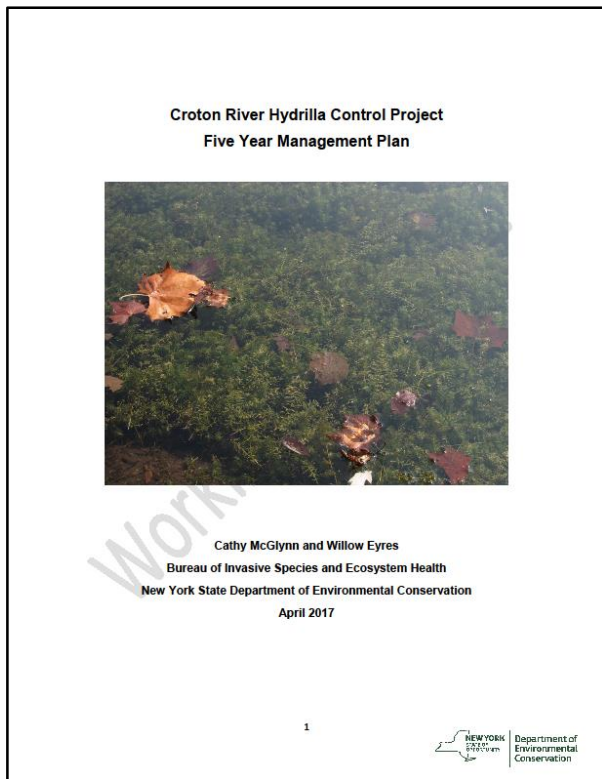
Key Goals

- Well-researched and informed project
- Transparency
- Successful control of hydrilla



New Croton Reservoir Dam

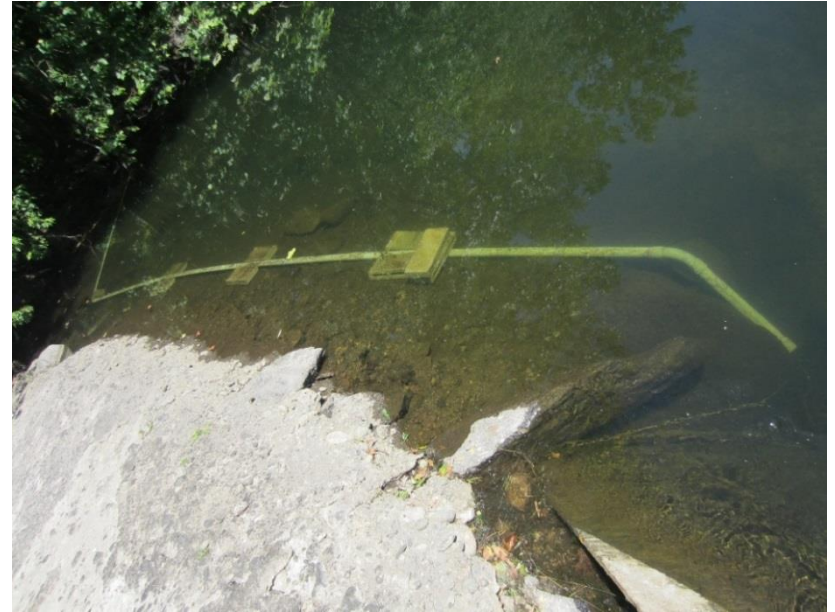
Five Year Management Plan



- Reviewed by NYCDEP, NYSDOH, and internal NYSDEC team
- Made available to public on webpage
- Starting in 2017 annual reports are added as appendices for the plan

Communication: The Players

- Public stakeholders
- Municipalities
- Hudson Valley environmental stakeholders
- Internal (DEC) experts
- NYS Department of Health (DOH)
- NYC Department of Environmental Protection (DEP)
- Researchers
- Contractors



Injection line at Black Rock Dam

Public Stakeholders

- 1st public stakeholder meeting held December 2015
- Meetings were held twice a year and televised by Village
- In 2019 opting for once a year meeting
- Combination of presentations from DEC and contractors
- Public Q&A session
- Presentations posted on webpage
- Encouraged direct contact via email and phone



Municipalities

Village of Croton-on-Hudson

- Extensive coordination with Village manager and engineer
- Meetings with Water Control Commission and Waterfront Advisory Committee
- Briefings at numerous board meetings and received Village Wetland Activity Permit



Municipalities

Town of Cortlandt

- Multiple conference calls with Town Engineer
- In-person meeting with Town Board



Northernmost injection site near base of New Croton Reservoir Dam

Environmental Stakeholders

Riverkeeper, Scenic Hudson, Saw Mill River Audubon, NYSDEC Region 3, NYCDEP, Hudson River Sloop Clearwater

- Reviewed draft of five year management plan
- Provided feedback at in-person meeting
- Sought buy-in and support before moving forward
- Attended public meetings



Internal NYSDEC Team

- Division of Water: Director, Bureau of Flood Protection and Dam Safety
- Division of Materials Management: Bureau of Pest Management
- Division of Lands and Forests
- Region 3 Fish & Wildlife staff
- Office of Communications
- General Counsel



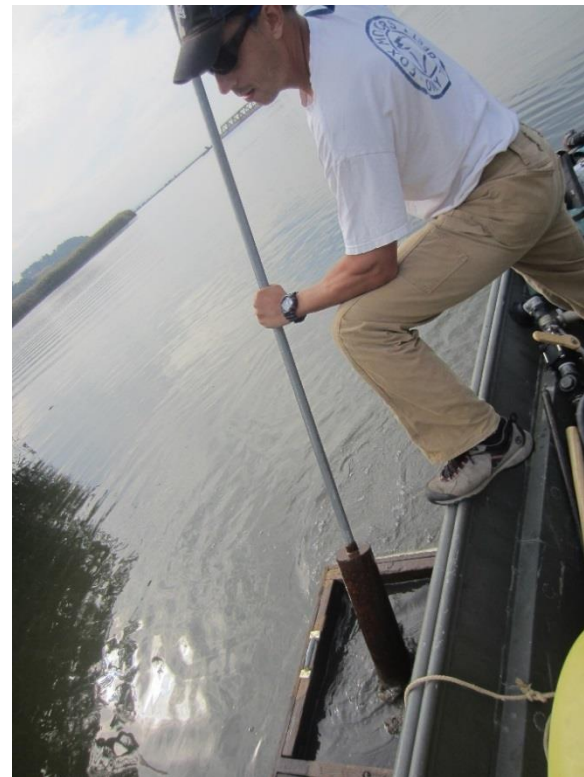
NYS DOH

- Review of project methodology
- Development of water sampling protocol using EPA approved analysis methods
- Development of public messaging about various possible water sampling results



NYC DEP

- Public messaging regarding water sample results
- Control of water flow from the dam to accommodate herbicide treatment
- Review of five year management plan



Researchers

- SUNY Oneonta-
macroinvertebrates
- University of MD/UMCES-
water celery
- University of Georgia-
Aethokthonos hydrillicola



Virginia Institute of Marine Sciences



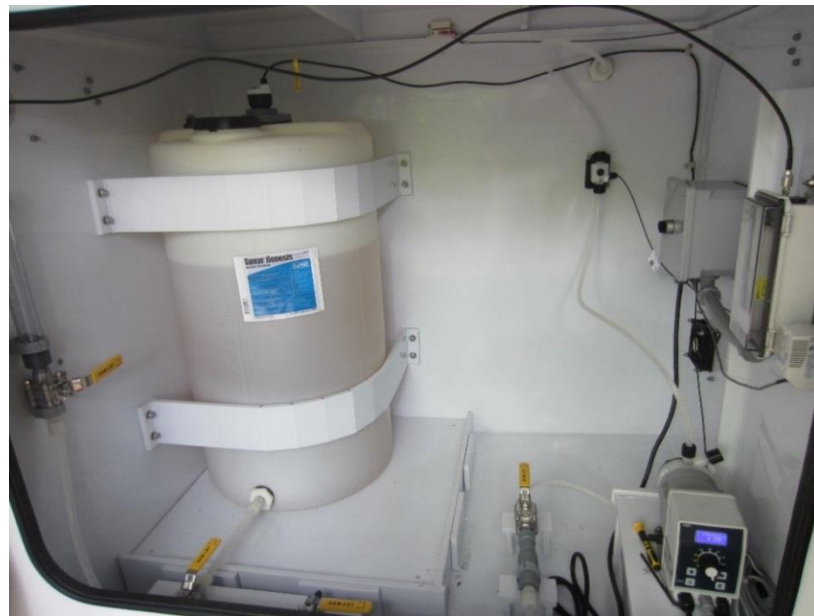
Contractors



- Biweekly conference calls during field season
- Often daily email and phone conversations about project details and sampling
- Post-season debriefing
- New in 2019- pre-season meeting

Drinking Water Sampling Protocol

- Messaging for results developed by DEP, DOH, and the Village
- Action thresholds established and included in five year plan



Webpage

- Results of drinking water sampling analysis posted on regular basis
- Resources for the public: presentations, project updates, management plan, publications, meeting announcements

The screenshot shows a web browser displaying the "Croton River Hydrilla Control Project" page on the New York State Department of Environmental Conservation website. The page includes a navigation menu with options like Services, News, Government, and Local. The main content area features the project title, a brief description of the hydrilla problem, and an update about herbicide treatment. A list of presentations from May 2017 and December 2016 is provided, each with a PDF link and file size. A sidebar on the right contains a PDF help section, contact information for the Invasive Species Section, and a map of the Hudson Valley region.

Department of Environmental Conservation

Home » [Animals, Plants, Aquatic Life](#) » [Nuisance & Invasive Species](#) » [Aquatic Invasive Species in New York State](#) » Croton River Hydrilla Control Project

Croton River Hydrilla Control Project

DEC and partners have developed a plan to control *Hydrilla verticillata* (hydrilla) in the Croton River. Hydrilla grows and spreads rapidly and is one of the most difficult aquatic invasive plants to control and eradicate in the United States. Infestations can have negative impacts on recreation and tourism, as well as severe consequences for aquatic ecosystems.

UPDATE: Croton River Herbicide Treatment is underway as of July 6th, 2017. Visit the [Water Sample Analysis Results page](#) for drinking water information.

Herbicide treatment will end on October 31, 2017. Drinking water sampling will continue for a minimum of two months after the end date.

Background

Hydrilla was discovered in the Croton River in October 2013 and later found in Croton Bay during a site survey in 2014 (Towns of Cortlandt and Ossining, Westchester County, NY). This survey also revealed that hydrilla is well-established in the Croton River and the New Croton Reservoir. While Hydrilla remains in the Croton River and Bay, it threatens habitats in the Hudson River and its tributaries. Fortunately, the results of the survey conducted in 2015 and 2016 indicate that hydrilla has not yet spread outside of the Croton River and New Croton Reservoir. Public meetings have been held biannually, the most recent of which was held May 24, 2017 to inform the public of the infestation and address concerns about management plans.

Presentations from May 24, 2017 Meeting

- [Brief History of Hydrilla Management Effects in the Croton River: Cathy McGlynn, NYSDEC \(PDF, 1.38 MB\)](#)
- [Project Monitoring: Chris Doyle, SOLitude Lake Management \(PDF, 2.26 MB\)](#)
- [Project Management: Herbicide Treatment Mark Heilman, SePRO \(PDF, 4.77 MB\)](#)
- [Drinking Water Sampling Protocol and Additional Research: Cathy McGlynn, NYSDEC \(PDF, 2.0 MB\)](#)

Presentations from December 7, 2016 Meeting

- [2016 Hydrilla/ Aquatic Vegetation Monitoring Results for the Croton River and the Reservoir, Chris Doyle \(PDF, 3.07 MB\)](#)
- [Croton River Hydrilla Control Project: Recap and Proposed Plan; Willow Eyres and Cathy McGlynn \(PDF, 1.5 MB\)](#)
- [Successful Management of Menopausal Hydrilla in the Croton River; Mark Heilman \(PDF, 4.41 MB\)](#)

PDF Help
For help with PDFs on this page, please call 518-402-9405.

Contact for this Page
Invasive Species Section
Division of Lands & Forests
625 Broadway
Albany NY 12233
518-402-9405
Send us an email

This Page Covers
Region 3
Lower Hudson Valley
Serving the following Counties:
Dutchess
Orange
Putnam
Rockland
Sullivan
Ulster
Westchester

Monday, October 23, 2017 3:21 PM 10/23/2017



Local Participation: Cell Reception



- Croton River area is notorious for a lack of cell service
- Local resident Earl DePass was hired by contractor to set up a hotspot
- Used to communicate with injection unit remotely

Local Participation: Research

- Local high school student Celine Brad worked with the contractor and DEC to monitor impacts of herbicide on hydrilla plants on a biweekly basis



Local Participation: Village of Croton

- Staff at water treatment facility collected drinking water samples
- Received copies of all reports about drinking water and river water sampling



NYS Hydrilla Task Force



New Croton Reservoir

- Results of Croton River project were reported on the monthly statewide Hydrilla Task Force Conference Call
- Used as a model for other projects

Permit Notifications

- As per Article 15 Pesticides, two notification letters per season to all riparian owners
- As per Article 24 Wetlands, permission to inspect letters



Line from injection unit to release point near Black Rock Dam

Signage



Article 15 notification sign

STOPPING AN INVADER IN YOUR WATERS



This river is being treated to reduce the spread of hydrilla. Herbicide applications will occur during the summer and fall. Read all posted warnings on water use for this water body.

Recreational water activities will be limited at herbicide release locations.

Hydrilla is a weed that grows uncontrollably in the water. It crowds out other plants and ruins swimming, boating, and fishing opportunities. The Department of Environmental Conservation will be using a low dose of herbicide in the summer and early fall until 2021 to prevent hydrilla from reaching the Hudson River, where it will be impossible to control.



STOP THE INVASION
PROTECT NEW YORK FROM INVASIVE SPECIES

PARANDO A UN INVASOR EN SUS AGUAS



Este río está siendo tratado para reducir la propagación de hydrilla. Aplicaciones de herbicida ocurrirán durante el verano y el otoño. Lea todas las advertencias publicadas sobre el uso del agua en estas aguas.

Las actividades acuáticas serán restringidas en las localidades donde se aplique herbicida.

Hydrilla es una mala hierba que crece sin control en el agua. Desplaza a otras plantas y arruina la natación, navegación, y oportunidades para la pesca. El Departamento de Conservación Ambiental usará una dosis de herbicida baja durante el verano y comienzos del otoño hasta 2021 para prevenir que hydrilla llegue hasta el Río Hudson, donde sería imposible de controlar.

www.dec.ny.gov/animals/106386.html



Department of Environmental Conservation

Educational signs for river access points

Aquatic Plant Monitoring

- LH PRISM AIS Program Manager
- Partners: NYS Parks, USMA, Scenic Hudson
- DEC contracts: lower and upper Hudson River in addition to Croton River



C. Doyle, Allied Biological

Boat Stewards: Lower Hudson PRISM



Sam Epstein, Clearwater



- Boats stewards at Echo Boat Launch, Senasqua Launch, and Ossining Launch

Control Project Manager: The Local Connection

Nicole White

- Local face/local resource for the project
- Direct field project oversight
- Education and outreach



The Local Connection

- Surveys aquatic plants
- Attends local events
- Provides classroom education
- Develops education and outreach materials
- Gives conference presentations



Nicole White, NYSDEC

Local Outreach: Clearwater Revival



N. White, NYSDEC



N. White, NYSDEC

The Location Connection: Education and Outreach

Outreach Event Name	Event Date(s)	# Attendees
Clearwater Revival – Croton Point Park	June 2018	5,000
Hudson River Day – Croton Yacht Club	Sept 2018	100
Day in the Life of the Hudson River - Yorktown	Oct 2018	200
Teatown Hudson River Eagle Fest - Croton	02/09/19	2,500
World Fishing & Outdoor Expo (Suffern Show)	02/28/19-03/03/19	19,000
Croton CSD Invasive Species Week	Feb 2019	150
Haverstraw Bay Classic (Striped Bass Tournament)	April 2019	500
Boat Steward Trainings @ Marinas & Yacht Clubs	June-Aug	250
Croton Summerfest	June	200
Total		27,900





Thank you!

Cathy McGlynn
NYSDEC
Bureau of Invasive Species and
Ecosystem Health
Invasive Species Coordination Section
catherine.mcglynn@ny.dec.gov



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