NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)
CROTON FACILITY MONITORING COMMITTEE MEETING MINUTES
MONDAY, APRIL 20, 2015 – 7:00 PM

The Croton Facility Monitoring Committee (CFMC) met on Monday, April 20, 2015 at the DEP Office, 3660 Jerome Avenue, Bronx, NY 10467.

Welcome
Chair Adaline Walker-Santiago called the meeting to order at 7:10 pm. Attending were Ms. Walker-Santiago, Representing Community Board #7; Father Richard Gorman, Representing Community Board #12; Lawrence Scoones, Bronx Borough Operations Director, Department of Parks and Recreation (DPR); Wilhelm Ronda, Representative of Borough President Ruben Diaz, Jr.; Andrew Sandler, Representative of Council Member Andrew Cohen; Daniel Padernacht, Chair, Community Board #8; Eric Landau and Shane Ojar, Representing the Department of Environmental Protection (DEP). Also attending were Assembly Member Jeffrey Dinowitz; members of the public; press; and city agencies. (Attendance list is *Attachment 1*)

Adoption of Agenda
The evening's agenda was adopted as prepared. (*Attachment 2*)

Adoption of Minutes
The CFMC adopted the minutes of the CFMC meeting of November 25, 2014 without change.

Van Cortlandt Park (VCP) Wetlands Monitoring – Arne Fareth, DEP, Erin Guire, AECOM
Mr. Fareth said that the wetlands monitoring program was initiated in 1999 to establish a baseline during planning for the construction of the Croton Filter Plant at Mosholu. The 2004 Croton Environmental Impact Statement assumed there could be impacts to the adjacent wetlands which are located north of the site. Ms. Guire showed the monitoring details in several slides (*Attachment 3*). The monitoring showed that the wetlands are kept healthy by natural conditions. Little city water is ever needed to supplement the natural conditions. Assembly Member Dinowitz asked about DEP's long term plans, if natural conditions can't keep the wetlands in good condition. Mr. Fareth said that city water can be added to the wetlands through an infiltration trench, if required, and that DPR will add the water as the agency deems necessary in the future. Karen Argenti, Ft. Independence Park Neighborhood Association, asked about the groundwater that is discharged into the sewer lines and whether water from the Croton Filter Plant is being or will be recirculated to the wetlands. Mr. Fareth said that recirculation was always part of the plant's design. He and Ms. Guire explained that all major civil engineering work at Croton was completed by 2010, but DEP continued to monitor the wetlands for three more years and finalized its last monitoring report in 2014. DEP continues to take groundwater level measurements during the growing season to determine if supplemental city water from the infiltration trench is necessary. Once the infiltration trench is 100% completed, DPR will operate it as necessary.

Ms. Argenti requested a copy of the wetlands monitoring report. Mr. Fareth agreed, and it was subsequently forwarded to CFMC representatives and to Ms. Argenti. Robert Press, Bronx News, said groundwater levels are predicted to rise, according to PlaNYC. Mr. Scoones said that DPR is committed to properly maintain the wetlands and that staff to conduct forest restoration is now part of the DPR baseline budget. DPR crews should therefore be adequate to manage the wetlands. Mr. Sandler added to Mr. Scoones' comments about forestry baseline budgeting. Sheila Sanchez, Friends of Williamsbridge Oval Park, urged the agencies to protect wetlands from invasive plants, and said that DPR should develop a wetlands plan. Mr. Scoones reiterated that DPR is committed to protect the wetlands and has staff to do so. Additional comments were made by Dr. Paul Mankiewicz, Bronx Council on Environmental Quality; Gary Axelbank, area resident; and Fr. Gorman.

Croton Funded Parks Presentation – Andrew Penzi, DPR

Mr. Penzi summarized that $150 million of construction has been completed. $23 million is in construction now and $11 million remains to be expended. He said that some of these remaining projects are being combined as, for example at the Crotona Pool House Mezzanine which is being combined with another contract on the same building, to produce a better bid pool. Mr. Penzi showed slides of additional projects, including the jogging path project. That project is completed and full time staff for its maintenance is assigned.

Mr. Axelbank raised several objections and complaints to improvements at Ft. Independence Park, and showed photos. *(Attachment 4)* He objected to the unfinished look of the unpainted handball court wall and the unnecessary fenced adjacent area which, he said, attracts rodents. While Messrs. Scoones and Penzi said a painted handball court wall was not in the project scope and the project had been vetted with the Community Board before construction, DPR agreed to paint it. At the request of Bob Bender, Community Board #8, Mr. Penzi agreed to provide the cost of adding a half basketball court at the fence; however, under city procedures, capital work for reconstruction or reconfiguration cannot proceed until five years after a capital project's completion. Mr. Penzi also said that new trees in the community would be planted under a current trees contract, and that the Memorandum of Agreement between DEP and DPR, along with the Uniform Land Use Review Procedure (ULURP) Resolution contain the parks that were funded as Croton amenities.

Mr. Axelbank raised concerns about additional trees which, he said, were removed without explanation at Jerome Park Reservoir (JPR). DEP and DPR agreed to investigate. Subsequent to the meeting, CFMC representatives received additional information from DEP about the ten trees removed from JPR for safety reasons. Ms. Sanchez and Dr. Mankiewicz spoke about wetlands preservation and natural drainage at JPR.

Croton Costs Report and Construction Schedule

There were no questions or comments about the costs report through March 2015 (*Attachment 5*).

Bernard Daly, DEP, gave the construction status (*Attachment 6*)
Disinfection of the Treated Water section of the New Croton Aqueduct is currently underway in preparation for water going into distribution in May 2015. At the VCP site, the above ground structures are now approximately 75% complete. At JPR, the noise wall will be taken down starting later in the week. A protective tent now covers the Microstrainer Building where demolition work is ongoing. At the Demonstration Filter Project slab, asbestos abatement on the foundation walls will commence shortly. Mr. Press said that construction of the Demonstration Filter Plant contained asbestos in its materials after, he said, the federal ban on using asbestos was enacted.

Mr. Daly said there is water in JPR's South Basin and the North Basin will be filled on as-needed basis by the Bureau of Water and Sewer Operations (BWSO), DEP's operating bureau.

Because Shaft 3 is over 100 years old, there have been delays in completing Shaft 3 work located partly beneath Goulden Ave and Sedgwick Ave. Some of the essential structural elements and equipment at Shaft 3 are in poor condition and must be replaced as they cannot be repaired. Replacement parts are not off-the-shelf and take time to be manufactured, shipped and installed. Nevertheless, the eastbound right lane closure along Sedgwick Ave will be restored to traffic in May 2015. DEP will restore the sidewalks and curbs at this location and will leave the area improved. DEP looked at the condition of the roadway on Goulden Ave and will repave the areas disturbed by the Croton project, as provided in the project scope. Anthony Rivieccio, Community Board #7, questioned the agency's decision not to repave the entire roadway. Mr. Ojar said that repaving of the entire roadway would be NYC Department of Transportation's (NYCDOT) responsibility and could be done if they were to mill/pave it or perform a capital project. Mr. Padernacht said he will submit photos and speak about the condition of Goulden Ave at the next CFMC meeting.

There was a discussion about the JPR eastern wall repairs which will be part of a new DEP contract. Mr. Landau said the wall repairs will be subject to public review at the Community Board and at the CFMC. Mr. Padernacht asked for documents that show the wall must be repaired. Mr. Daly and Mr. Fareth said the problem was identified by an engineering company hired under the CRO-312OS-G contract which performed field inspection work from 2009 to 2012. This inspection also involved sections of the Old and New Croton Aqueducts in the vicinity of JPR. DEP confirmed, using seismographic reports, that blasting for the Distribution Chamber did no damage at JPR. Comments about public access to JPR were made by Assembly Member Dinowitz, Fr Gorman, Mr. Padernacht, Mr. Axelbank, Mr. Press, and Mr. Ojar.

Mr. Axelbank said he wants an item on public access to JPR to appear on every CFMC meeting agenda. No one objected.

Christina Taylor, Friends of Van Cortlandt Park, requested that at VCP, DEP remove the snow fence at the north end of the project. She also praised Assembly Member Dinowitz for adding funds to the NYS Budget for the design and construction of a Pedestrian Bridge over the Major Deegan Expressway to connect the areas of VCP. Mr. Axelbank commended Fr Gorman for coming to the CFMC meeting despite having health issues.

Mr. Landau was asked to have Commissioner Emily Lloyd meet with the CFMC, and Mr. Landau said he would try to schedule it. Mr. Landau was asked to arrange a tour of the Croton Filter Plant, and he said he will look into it for CFMC members.

New York City Water Rates for FY 2016

Mr. Landau said the NYC Water Board is holding public hearings in all boroughs on a proposal for a small water rate increase, in fact it is proposed to be the smallest increase in 10 years. (Hearings are on *Attachment 7*) Mr. Padernacht had previously asked for a summary of water rate increases during the past 10 years, and DEP provided it (see *Attachment 8*). For a single family homeowner, the average water/sewer increase would mean a current average bill of $1025 would go to $1058 if this increase gets adopted. Mr. Landau said the Water Board has established a Water Assistance Program for qualified property owners seeking financial relief, and there is a small discount if an owner pays water charges on line.

In response to Mr. Padernacht's question about Croton's impact on proposed water rates, Mr. Landau and Mr. Ojar said that the Water Board estimates (based on a $3.2 billion Croton construction cost) 4% of a homeowner's average bill would be due to Croton. The Independent Budget Office estimated (based on a $3.7 billion Croton construction cost) 5% of a homeowner's average bill would be attributable to the Croton project. Mr. Landau said the Water Board expects to vote on an increase in May.

Next Meeting

Dates for a May 14 meeting (without DEP attending) and for an official meeting on June 11 were set. **Note**: the May 14 meeting was cancelled at the request of the Chair, and the June 11 meeting was rescheduled for June 22.

The meeting adjourned at 9:25pm.

4/20/2015 **NYC DEP - CROTON FMC** Attachment 1

Name	Organization / Company	Address	Phone	Fax	E-Mail
Lawrence Scoones	Department of Parks & Recreation	1 Bronx River Parkway Bronx NY	(718) 430 1812		lawrence.scoones@parks.nyc.gov
Hon. Jeffrey Dinowitz	Assembly Member	3107 Kingsbridge Avenue Bronx NY 10463	(718) 796-5345		dinowitj@assembly.state.ny.us
Bob Bender	Community Board #8	5676 Riverdale Avenue Bronx NY 10471	(718) 884-4740		bobbender@optonline.net
Daniel Padernacht	Community Board #8	5676 Riverdale Avenue Bronx NY 10471	(718) 884-4740		dpadernachtcb8@gmail.com
Andrew Penzi	Department of Parks & Recreation	Olmstead Center Flushing Meadows-Corona Park	(718) 760-6577		andrew.penzi@parks.nyc.gov
Anthony Rivieccio	Community Board #7	3015 Perry Avenue Bronx NY 10458	(347) 575 5045		a_rivieccio@yahoo.com
Gary Axelbank	Sedgwick Avenue Resident	N/A	(917)576-0341		gaxmail54@gmail.com
Bernard Daly PE	Department of Environmental Protection	3701 Jerome Avenue Bronx, NY 10467	(718) 696-2000		bdaly@dep.nyc.gov
Andrew Sandler	Office of Council Member Andrew Cohen	277 W. 231st Street Bronx NY 10463	(718) 549-7300		asandler@council.nyc.gov
Martha Holstein	Strategic Urban Solutions, Inc.	335 Adams Street Brooklyn, NY 11201	(718) 625-1005		mholstein@urbansol.com
Father Richard Gorman	Community Board #12	4101 White Plains Rd Bronx NY 10466	(718) 881-4455		rgorman@cb.nyc.gov
Moses S. Bustos	Norwood News	3400 Reservoir Oval East Bronx NY 10467			mosesbustos@yahoo.com
Wilhelm Ronda	Office of Bronx Borough President Diaz	198 East 161st Street Bronx, NY 10451	(718) 590-8087		wronda@bxbp.nyc.gov
Nic Cavell	Riverdale Press		(718) 543-6065 ext323		ncavell@riverdalepress.com
Ivan Nedds	Office of Assembly Member Dinowitz	3107 Kingsbridge Avenue Bronx NY 10463	(718) 796-5345		neddsi@assembly.state.ny.us
Stuart Harris	N/A	3975 Sedgwick Avenue Bronx NY	N/A		stuarthar@gmail.com
Paul Mankiewicz	BCEQ & The Gaia Institute	440 City Island Avenue Bronx NY 10464	(718) 885-1906		paul@thegaiainstitute.org

Name	Organization / Institution	Address	Phone	Fax	Email
Eric Landau	Department of Environmental Protection	59-17 Junction Blvd Flushing NY 11368	(718) 595-5489		elandau@dep.nyc.gov
Shane Ojar	Department of Environmental Protection	59-17 Junction Blvd Flushing NY 11368	(718) 595-4148		sojar@dep.nyc.gov
Adaline Walker-Santiago	Community Board #7	229/A E. 204th Street Bronx NY 10458	(718) 933-5650		awalkersantiago@cb7.nyc.gov
Loretta Ryan	N/A	92 Van Cortlandt Pk S Bronx NY 10463-2925	N/A		loretta.ryan@gmail.com
Rebecca Patt	Mutual Housing	3850 Sedgwick Ave Bronx NY 10463	(718) 884-1688		joreb18@earthlink.net
Mark & Faye Leffler	Mutual Housing	3850 Sedgwick Ave Bronx NY 10463	N/A		N/A
Erin Guire	AECOM	605 Third Avenue New York NY 10158	(732) 361-7809		erin.guire@aecom.com
Robert Press	Bronx News	3155 Rochambeau Bronx NY 10467	(718) 653-6992		100percentbronxnews@gmail.com
Thomas M. Farrell	Croton Construction Management	3701 Jerome Avenue Bronx NY 10467	(718) 696-2000		thomas.farrell@cbi.com
Ining Hsu	AECOM	605 Third Avenue New York NY 10158	(212) 867-3076		ining.hsu@aecom.com
Ed Neisch	Croton Construction Management	3701 Jerome Avenue Bronx NY 10467	(718) 696-2022		ed.neisch@arcadis-us.com
Laura Spalter	Community Board #8	5676 Riverdale Avenue Bronx NY 10471	(718) 884-4740		lsrca1@aol.com
Sheila Sanchez	Friends of Williamsbridge Oval Park	N/A	N/A		casiopeablues@gmx.com
Stephan Sipko	N/A	124 Gale Place Bronx NY 10463	N/A		N/A
Christina Taylor	Friends of Van Cortlandt Park	80 Van Cortlandt Park South Bronx NY	(718) 601-1460		christina@vancortlandt.org
Karen Argenti	Bronx Council on Environmental Quality	3400 Paul Avenue 12T Bronx NY 10468	(646) 529-1990		kabx101@gmail.com
Arne Fareth	Department of Environmental Protection	3701 Jerome Avenue Bronx NY 10467	(718) 696-2000		arnef@dep.nyc.gov

Agenda

Croton Facility Monitoring Committee Meeting

Monday, April 20, 2015 – 7:00 PM
DEP Office – 3660 Jerome Avenue, Bronx NY 10467 - (718) 231-8470

I Welcome and Call to Order	Adaline Walker-Santiago, Chair
II Consider, Adopt April CFMC Agenda	CFMC Representatives
III Consider, Adopt 11/25/14 Meeting Minutes	CFMC Representatives
IV Presentation on Wetlands Monitoring At Van Cortlandt Park Site	Arne Fareth, DEP
V Update on Croton-Funded Parks Projects	Andrew Penzi, DPR
VI Croton Costs Report & Construction Schedule	Bernard Daly, DEP
VII Discussion - *Old Business*	CFMC Representatives, Agencies & Public
VIII Discussion - *New Business*	
Proposed NYC Water Rates For FY 2016	Eric Landau, DEP
IX CFMC Discussion &.Set Date of Next CFMC Meeting	CFMC Representatives
X Adjourn	

NYC Environmental Protection

Croton Water Filtration Plant

Summary of Natural Resources Monitoring at the Mosholu Site

Presented by:

Arne Fareth and Erin Guire

NYC DEP

Attachment 3

Site Plan

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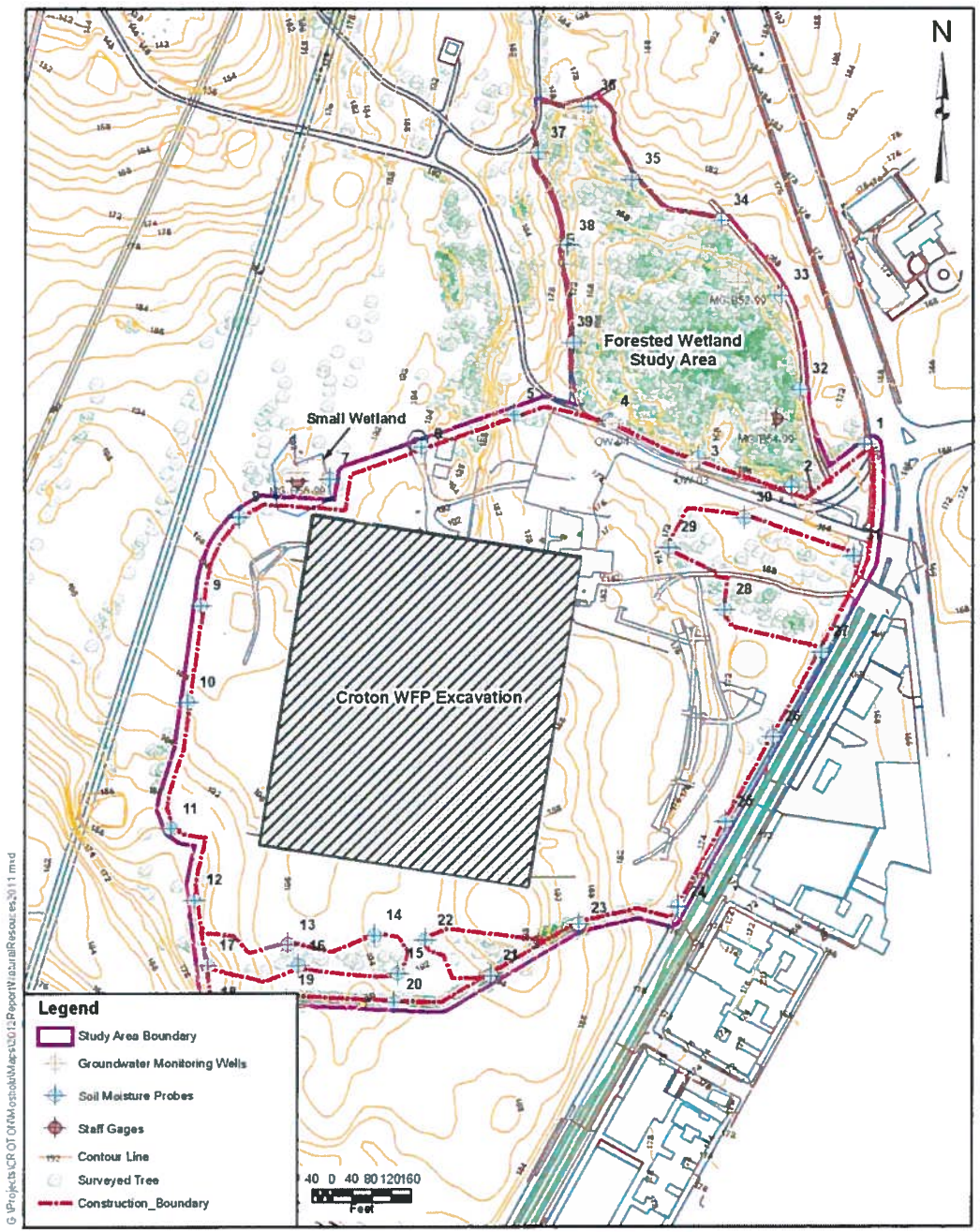

Introduction

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In order to assess the potential impact of long-term WFP foundation dewatering on the forested wetland, a Mitigation Plan was developed and initiated, including:

1. Development of a natural resources monitoring program in conjunction with the NYCDPR
2. Development of Groundwater and Wetland models
3. Long-term groundwater level measurements of forested wetland and bedrock monitoring wells
4. Construction of an infiltration structure to convey stormwater and supplemental city water towards the wetland
5. Long-term monitoring of study area tree growth rates and defects
6. Long-term monitoring of forested wetland and adjacent upland vegetation

NRMP Components

EIS Commitments: Monitoring includes the following for two years pre-construction, during construction, and three years post-construction:

- Monthly groundwater levels at five monitoring wells in and around the wetland;
- Annual monitoring of tree health and growth in and adjacent to the wetland and around the entire excavation site;
- Twice annual surveys for rare, threatened, and endangered species;
- Twice annual surveys of vegetation plots; and
- Spring, summer, and fall recording of soil moisture at 200 ft. intervals around the excavation.

Monitoring Program Chronology

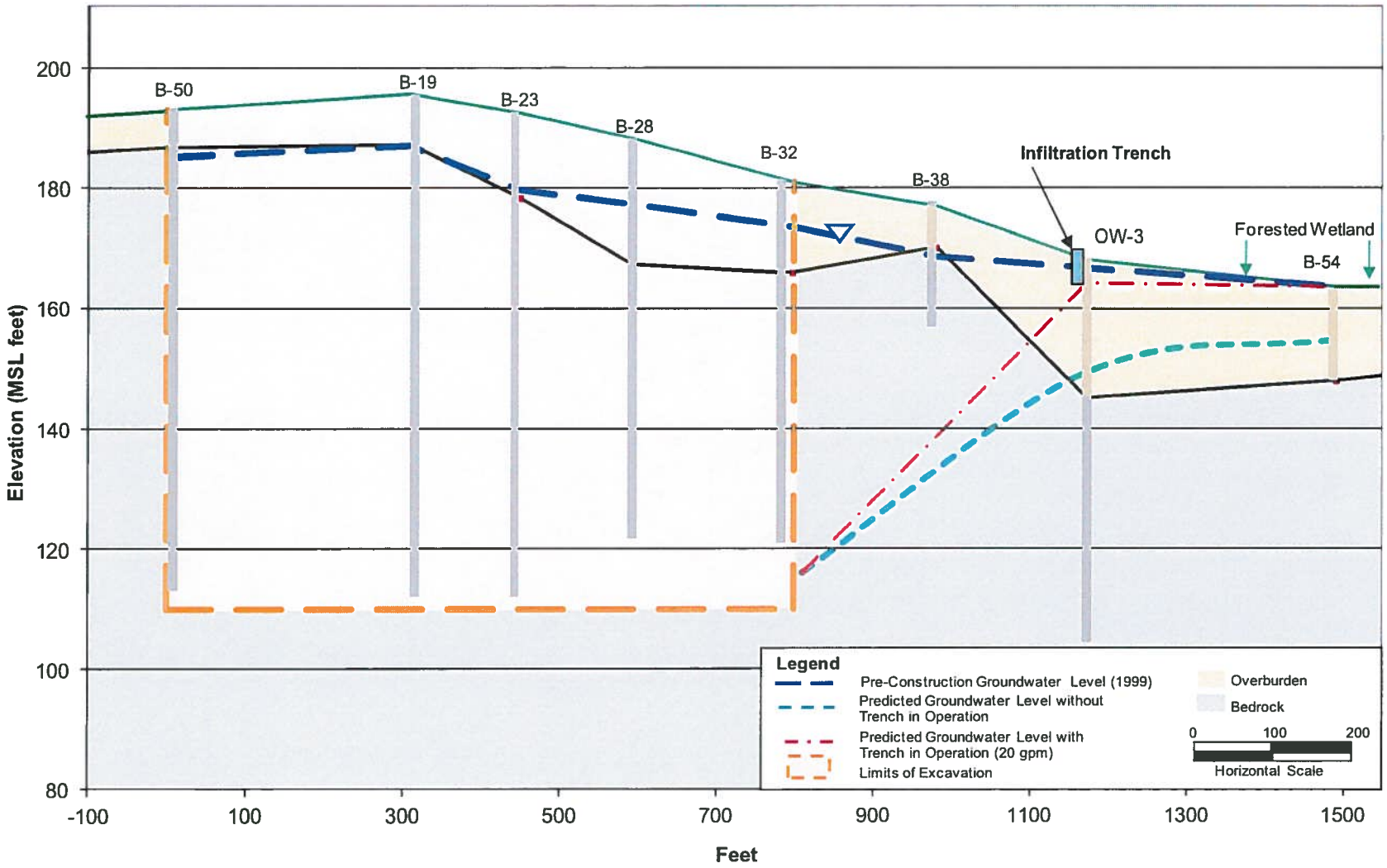
Pre-Construction Monitoring initiated	**March 1999**	
	March 1999 – Sept 2001:	2001 Monitoring Report presented results
Pre-Construction Monitoring discontinued:	**Fall 2001 – Fall 2003**	
	2003 – 2004:	No Monitoring Reports issued in
Monitoring resumed	**Oct 2003 – Dec 2013**	
	2005 – 2014:	Annual Monitoring Reports completed
	2014	: Monitoring Conditions of the MOA between DEP and DPR were satisfied

Site-Wide Groundwater Modeling

NYC Environmental Protection

- A three-dimensional groundwater flow model (MODFLOW) was developed to predict the effects of long-term dewatering on water levels throughout the site.
- Groundwater model assessed ways to address the effects of predicted groundwater drawdown on the forested wetland.
- Modeling results indicated that in order to counteract the permanent WFP dewatering, and maintain existing water levels beneath the forested wetland at pre-construction levels, groundwater should be recharged in the area between the WFP footprint and the forested wetland.
- Based on the MODFLOW results, recharging water at a rate of approximately 20 **gallons per minute (gpm)** was recommended.

Cross-Section of WFP Site



Forested Wetland Modeling

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- A spreadsheet-based model of water levels in the wetland was developed to predict the water level in the wetland in the absence of WFP dewatering.
- The wetland model was compared to actual water levels in the wetland to determine the impacts of WFP dewatering.
- The wetland model was calibrated based on several years of pre-construction data. Wetland water levels could then be predicted in the absence of Croton WFP dewatering operations.

Wetland Groundwater Monitoring Program

NYC Environmental Protection

The effects of dewatering were assessed by comparing regularly observed water level measurements to the water level predicted by the model.

Groundwater levels have been monitored weekly during the growing season since 2007.

Input of water to the wetland is determined from the weekly assessment of measured versus predicted wetland water levels.

Tree Survey

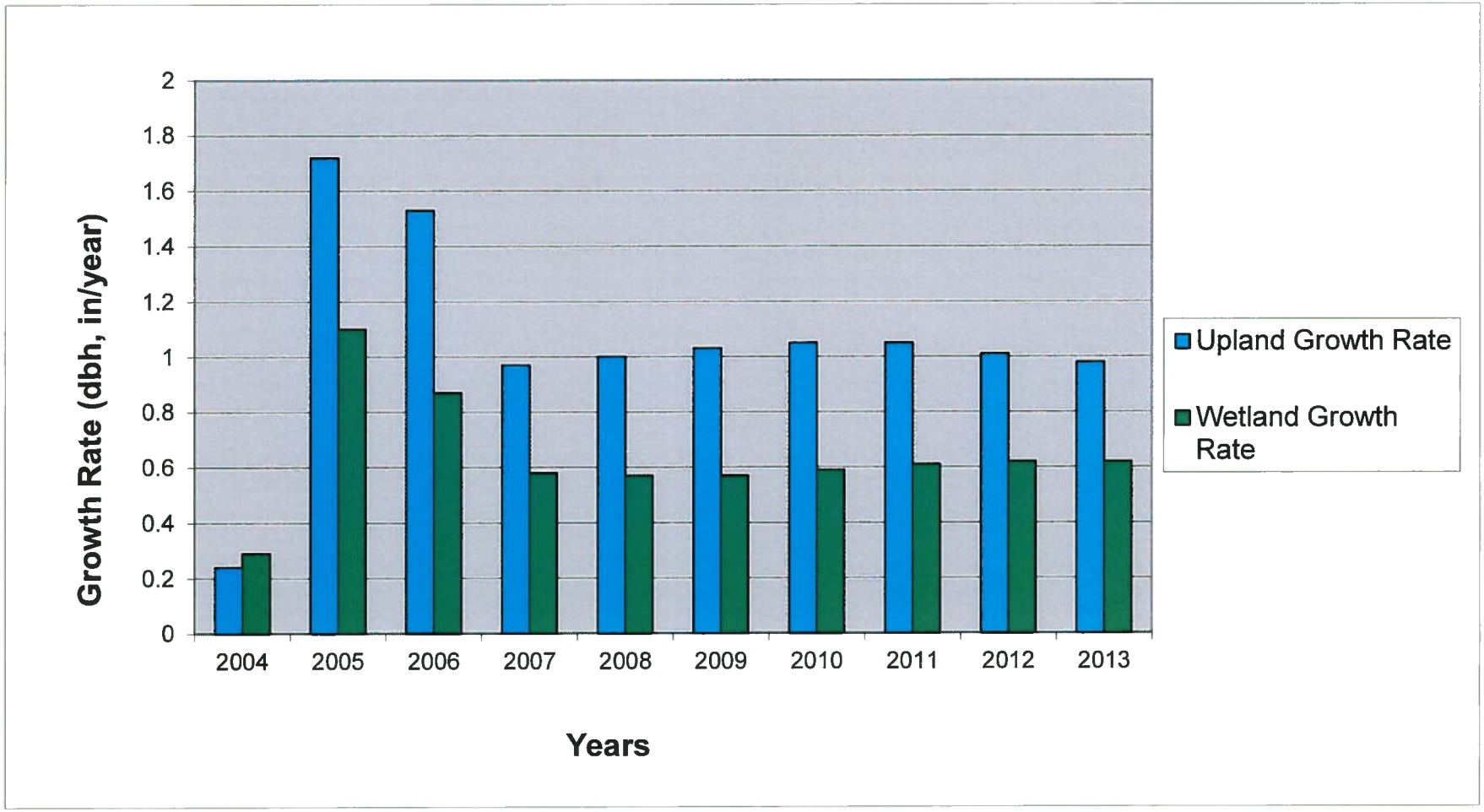
Tree health has been assessed by monitoring growth rates and tree defects since 1999.

Survey includes:

- trees with driplines within 20 feet of project fence, or
- trees within the forested wetland

Belt transect method was implemented in 2012 and 2013

Upland and Wetland Tree Growth Rates



Detailed Long-Term Vegetation Monitoring

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Cover Type Mapping

Wetland Size

Surface Hydrology

Long-Term Study Plots

Rare Plant Surveys

Cover Type Mapping

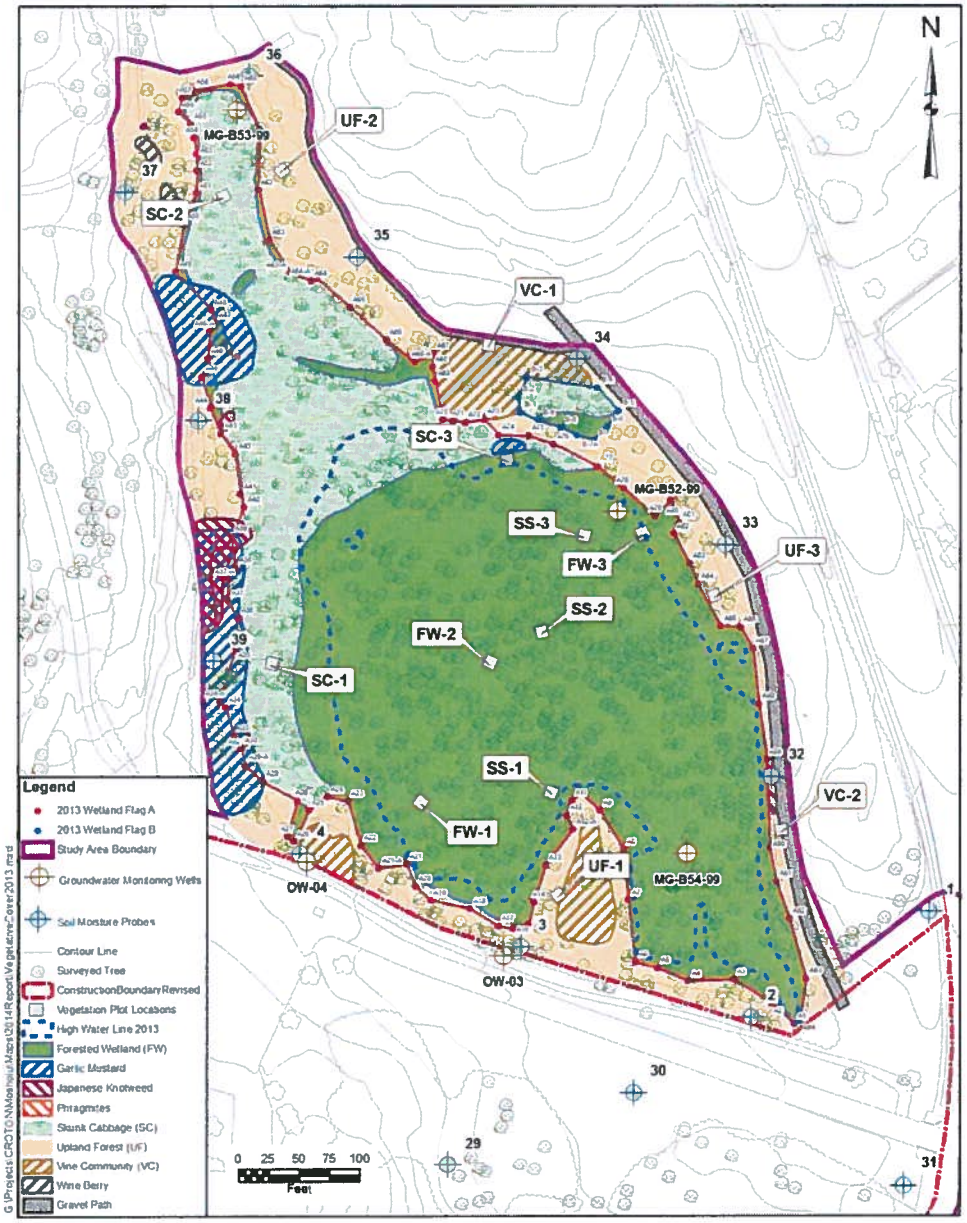
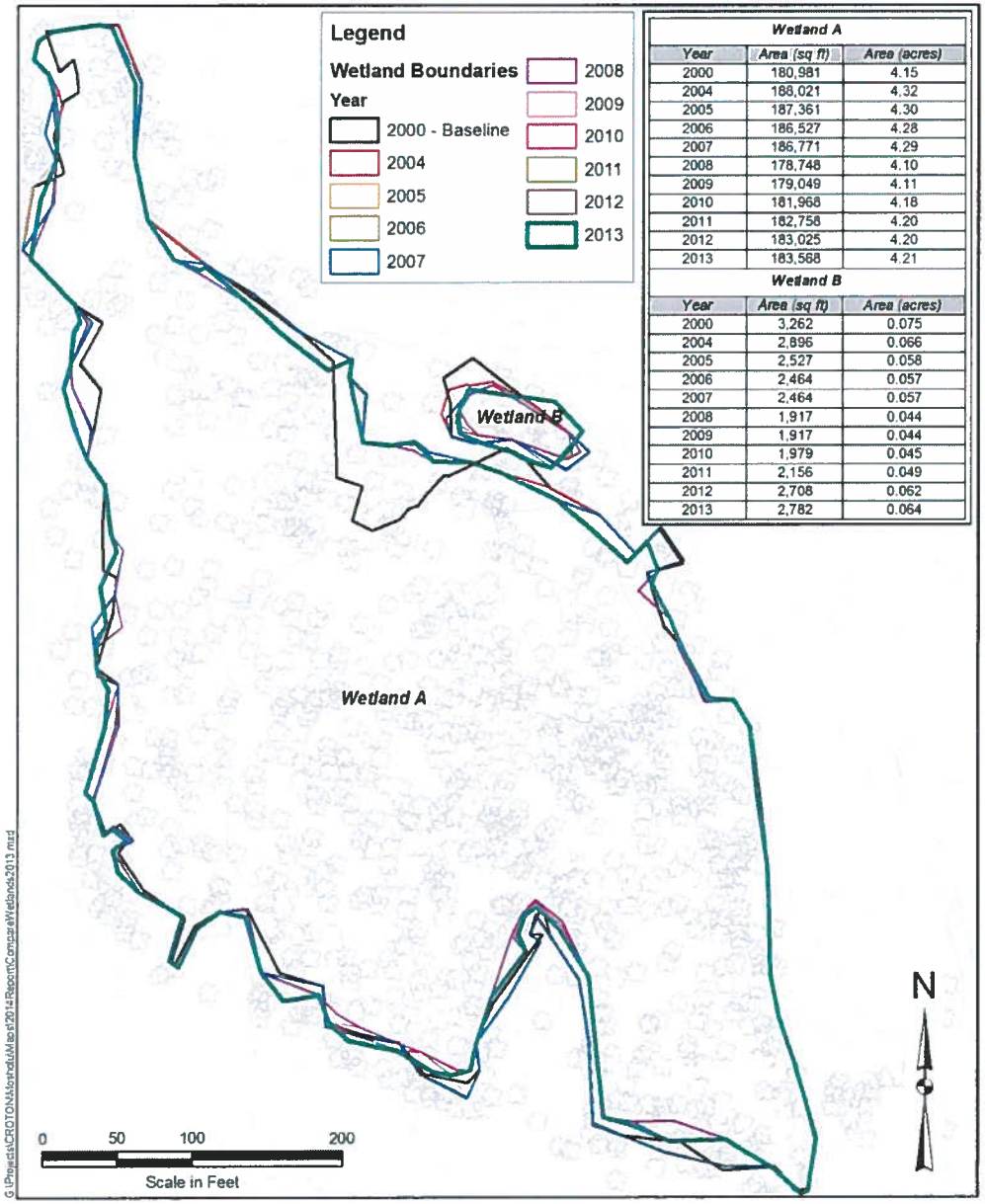


FIGURE 3. FORESTED WETLAND STUDY AREA, VEGETATIVE COVER TYPES - 2013 MOSHOLU SITE

Wetland Size



Wetland A		
Year	Area (sq ft)	Area (acres)
2000	180,981	4.15
2004	188,021	4.32
2005	187,361	4.30
2006	186,527	4.28
2007	186,771	4.29
2008	178,748	4.10
2009	179,049	4.11
2010	181,968	4.18
2011	182,758	4.20
2012	183,025	4.20
2013	183,568	4.21

Wetland B		
Year	Area (sq ft)	Area (acres)
2000	3,262	0.075
2004	2,896	0.066
2005	2,527	0.058
2006	2,464	0.057
2007	2,464	0.057
2008	1,917	0.044
2009	1,917	0.044
2010	1,979	0.045
2011	2,156	0.049
2012	2,708	0.062
2013	2,782	0.064

FIGURE 56. COMPARISON OF WETLAND BOUNDARIES 2000-2013

Wetland Size

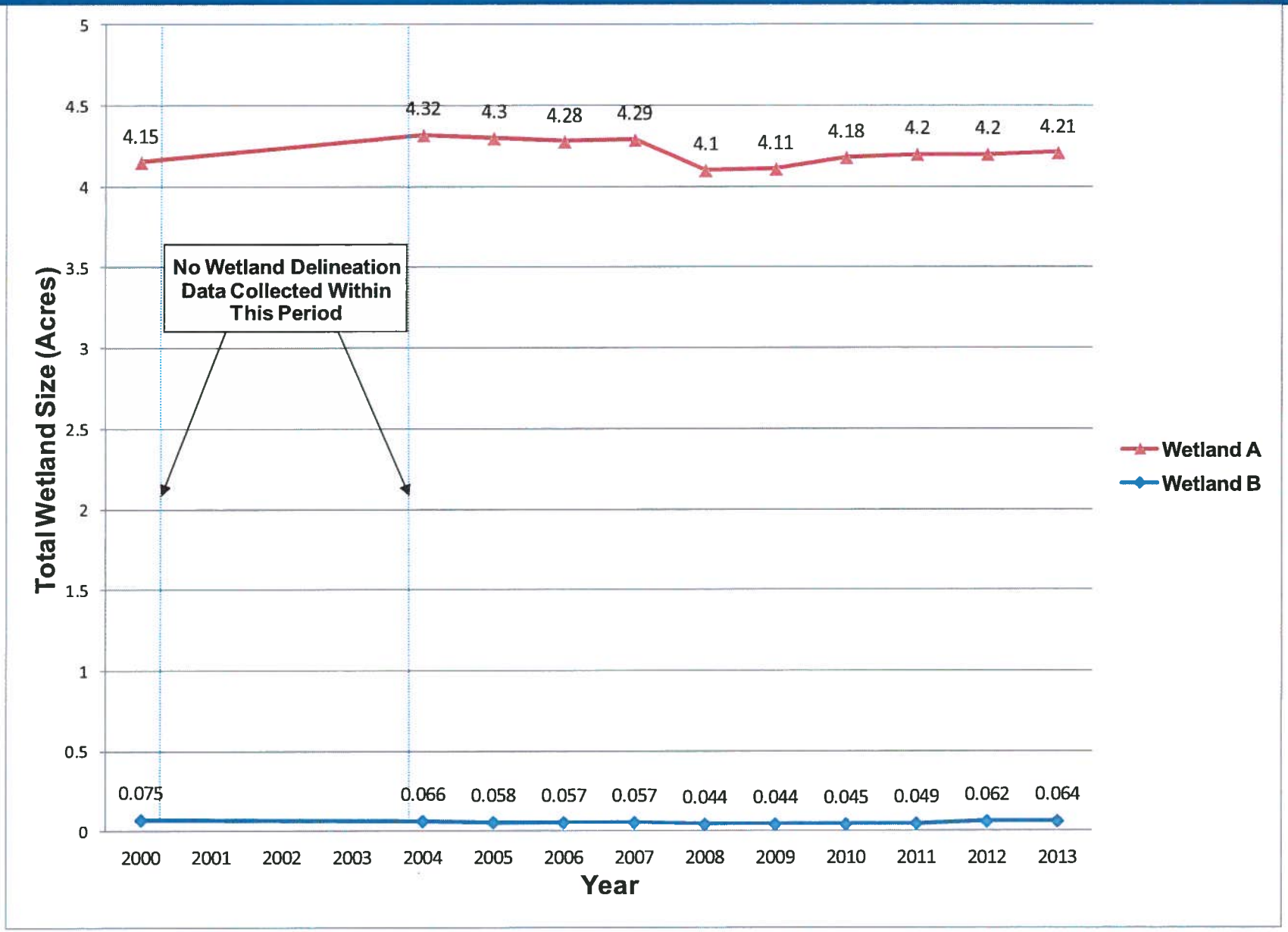


FIGURE 57. WETLAND ACREAGE CHANGE SINCE 2000 (BASELINE)

Surface Hydrology

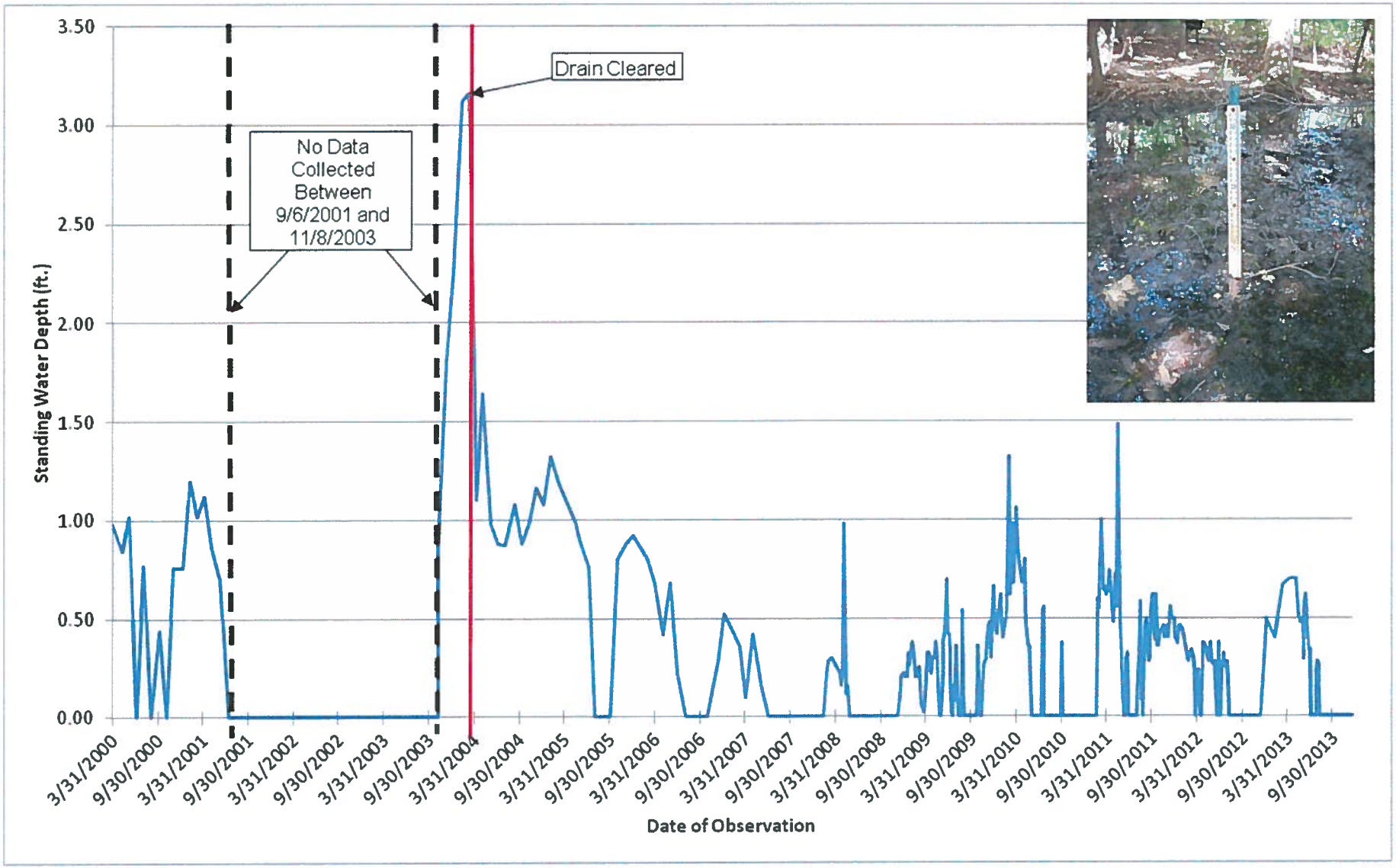


FIGURE 58. DEPTH OF STANDING WATER IN FORESTED WETLAND AS RECORDED ON WETLAND A STAFF GAUGE)

Long-Term Study Plots: Effects of Storm Damage

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Wetland Plot FW-3

June 2007

June 2010

June 2012

- **Storm Damage has affected vegetative communities in profound ways**

Long-Term Study Plots: Effects of Storm Damage (cont.)

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Wetland Plot SC-2

June 2009

June 2010

June 2011

June 2013

- **Storm Damage has affected vegetative communities in profound ways**

Long-Term Study Plots: Effects of Storm Damage (cont.)

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Upland Plot UF-2

August 2009

June 2010

August 2011

June 2013

- **Storm Damage has affected vegetative communities in profound ways**

Rare Plant Surveys

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Scientific Name	Common Name	State Rank	State Status
Agrimonia rostellata	Woodland agrimony	S2	Threatened
Carex glaucodea	Glaucous sedge	S2S3	Endangered
Carex hormathodes	Marsh straw sedge	S2S3	Threatened
Carex schweinitzii[6]	Schweinitz's sedge	S2S3	Threatened
Carex styloflexa	Bent sedge	S1	Endangered
Cyperus flavescens[4]	Yellow flatsedge	S1	Endangered
Desmodium ciliare	Little-leaf tick-trefoil	S2S3	Threatened
Paspalum laeve[5]	Field beadgrass	S1	Endangered
Pedicularis lanceolata	Swamp lousewort	S2	Threatened
Polygonum hydropiperoides var. opelousanum[2]	Opelousa smartweed	S2S3	Threatened
Scutellaria integrifolia	Hyssop-skullcap	S1	Endangered
Scutellaria serrata	Showy skullcap	SX	Unprotected
Sericocarpus linifolius[3]	Flax-leaf whitetop	S2	Threatened

- **No rare plants found in the study area during the entire survey**

Conclusions and Recommendations

NYC Environmental Protection

- Hydrology is one of the most important factors influencing vegetation
- The hydrology of the wetland has been successfully maintained during the monitoring program
- Natural disturbance (storm damage, etc.) also a major factor
- Hydrology needs to be maintained in the future to support the existing wetland
- Continued invasive species control needed

Attachment 4

Download Sign in

Ft. Independence Park

Download Sign in

trees

WM-11 Croton Water Treatment Plant
Cost Summary as of 3/31/2015

Croton WTP Construction Costs							
Contract	Contractor Name	Original Contract Price	Registered Change Orders	Current Contract Amount	Amount Invoiced to Date	% Contract Increase	% Complete based on Amount Invoiced to Date
CRO-311	Schiavone Construction Co.	$127,660,000	-$14,445,214	$113,214,786	$113,214,786	-11%	100%
CRO-312G	Skanska/Tully, JV	$1,327,700,000	$190,960,310	$1,518,660,310	$1,426,811,405	14%	94%
CRO-312E1	Schlesinger-Siemens, LLC	$134,680,000	$51,222,551	$185,902,551	$145,640,720	38%	78%
CRO-312E2	Schlesinger-Siemens, LLC	$37,678,000	$12,649,677	$50,327,677	$42,573,396	34%	85%
CRO-312H	Durr Mechanical Construction	$105,700,000	$30,876,122	$136,576,122	$126,566,076	29%	93%
CRO-312P	Picone/WDF, JV	$58,475,000	$16,696,839	$75,171,839	$71,606,737	29%	95%
CRO-312OS-G	Picone-Schiavone, JV	$96,842,500	$34,870,279	$131,712,779	$118,216,156	36%	90%
CRO-312OS-E	Eldor Electric	$15,762,500	$3,582,325	$19,344,825	$17,168,105	23%	89%
CRO-312OS-H	AWL Industries	$822,000	$56,971	$878,971	$637,594	7%	73%
CRO-312OS-P	JPP Plumbing	$872,000	$238,455	$1,110,455	$959,100	27%	86%
CRO-312FM (1)	Maspeth Supply Co. LLC	$18,626,745	-$15,138,445	$3,488,300	$2,432,351	-81%	70%
CRO-313	Schiavone/Picone, JV	$212,227,000	-$6,581,381	$205,645,619	$205,645,619	-3%	100%
CRO-315G	Angelakis Construction Corp.	$3,641,000	$2,282	$3,643,282	$3,643,282	0%	100%
CRO-315E	Interphase Electric	$807,317	$144,874	$952,191	$952,191	18%	100%
CRO-312CE	Con Edison	$4,074,526	$0	$4,074,526	$2,716,351	0%	67%
TOTAL		**$2,145,568,588**	**$305,135,644**	**$2,450,704,232**	**$2,278,783,870**	**14%**	**93%**
Croton WTP Design / Construction Management Costs							
HED-543 DES	Metcalf & Eddy / Hazen and Sawyer, JV	$44,226,000	$255,269,498	$299,495,498	$292,903,344	577%	98%
HED-545 CM	URS/Malcolm Pirnie, JV	$63,400,000	$96,252,791	$159,652,791	$157,991,895	152%	99%
TOTAL		**$107,626,000**	**$351,522,289**	**$459,148,289**	**$450,895,239**	**327%**	**98%**

Rehabilitation of the New Croton Aqueduct Construction Costs							
Contract	Contractor Name	Original Contract Price	Registered Change Orders	Current Contract Amount	Amount Invoiced to Date	% Contract Increase	% Complete based on Amount Invoiced to Date
CRO-334G	Frontier-Kemper/Schiavone/ Picone JV	$91,696,805	$24,007,733	$115,704,538	$114,862,383	26%	99%
CRO-334E	Community Electric	$1,119,000	$117,936	$1,236,936	$1,236,936	11%	100%
TOTAL		**$92,815,805**	**$24,125,669**	**$116,941,474**	**$116,099,319**	**26%**	**99%**
Rehabilitation of the New Croton Aqueduct Construction Management Costs (2)							
TCM-CRO-334	Washington/HAKS JV	$5,952,446	$3,190,001	$9,142,447	$9,086,264	54%	99%
TOTAL		**$5,952,446**	**$3,190,001**	**$9,142,447**	**$9,086,264**	**54%**	**99%**

Notes:
(1) Costs shown for CRO-312FM are for the original Force Main Route to Hunts Point WPCP.
(2) Design costs for CRO-334G and CRO-334E are included in Contract HED-543 DES.

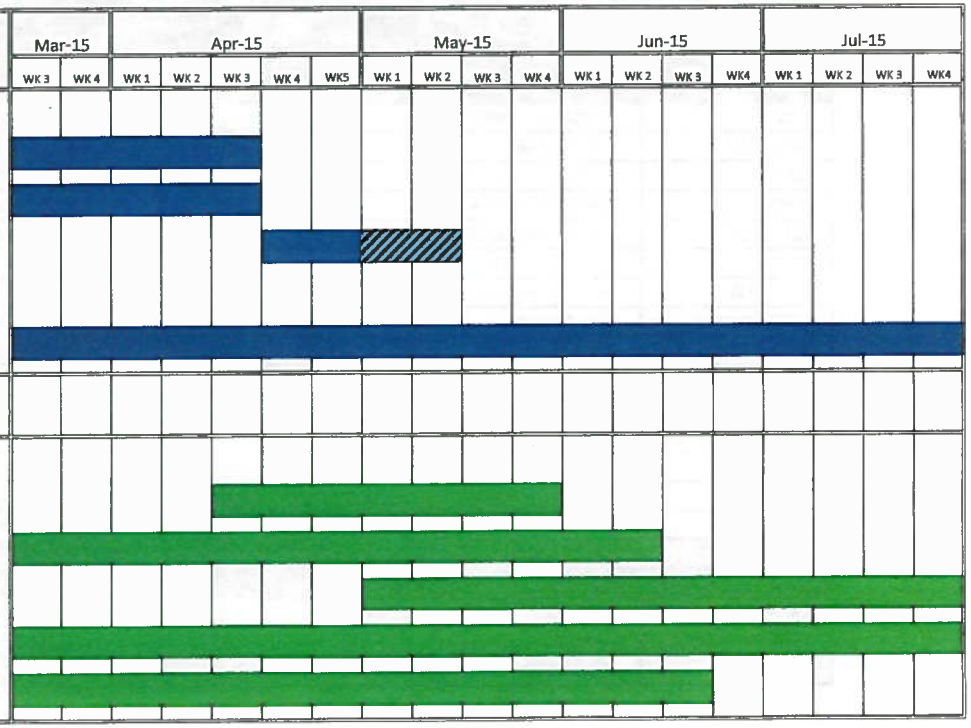
Attachment 5

WM-11 Croton Water Filtration Plant
Facility Monitoring Committee

Look-Ahead Schedule

April 20, 2015

Task	Current Forecasted Completion
CRO-312 - Water Filtration Plant Construction at Mosholu Site	
Fill, Flush and Disinfect New Croton Aqueduct	4/14/2015
Electrical Equipment Shutdowns to Complete Electrical Punch List and Change Order Work.	4/18/2015
Test Operate Plants A and B	TBD
Deliver Filtered and Disinfected Water into Distribution System	TBD
Remaining Auxilliary Systems and Above Grade Work	12/31/2015
Golf Course Clubhouse, Driving Range, Etc.	TBD
CRO-312OS - Off-Site Facilities at Jerome Park Reservoir and Gate House No. 1	
Complete Restoration of Shaft and Meter Chamber Area	6/1/2015
Demolition of Microstrainer Building and Restoration of Area	6/12/2015
Demolition of Demonstration Building and Restoration of Area	9/15/2015
Shaft 3 Work and Restoration Work	9/15/2015
3-phase Power to Gate House No. 1	6/19/2015



Attachment 6

Borough Rate Hearing Schedule

NYC Environmental Protection

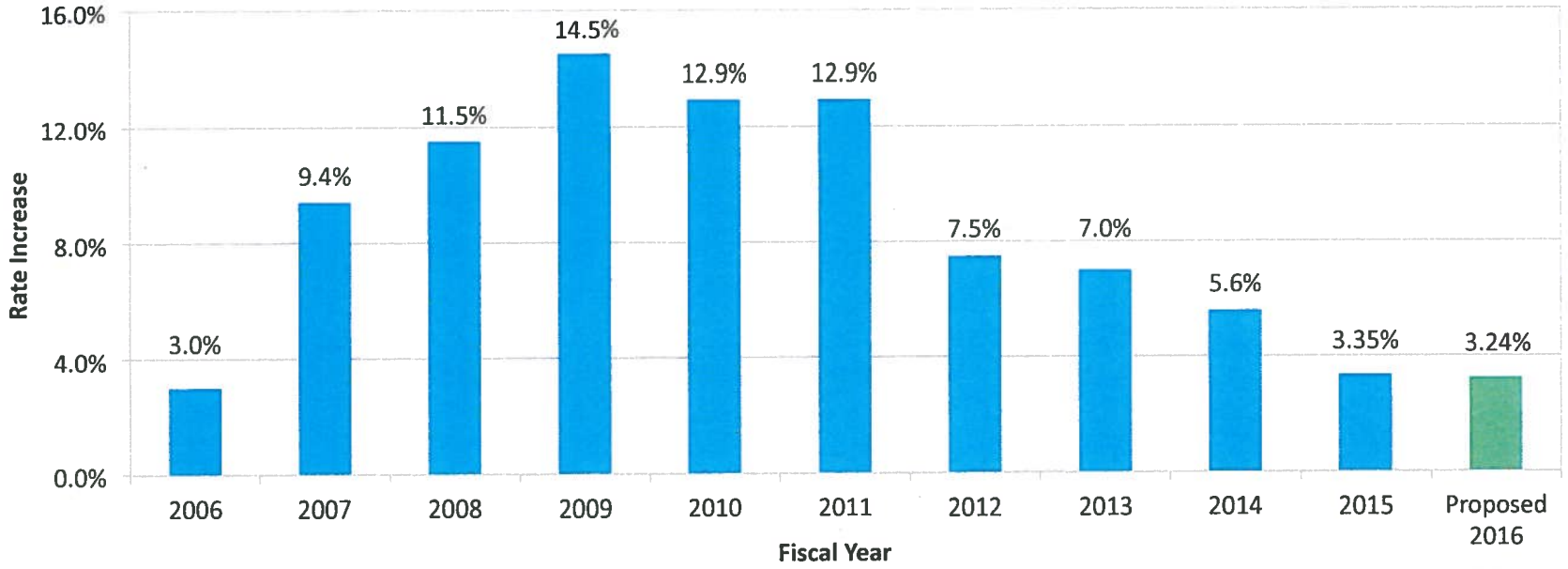
Borough	Date	Location	Time
Staten Island	April 27	Joan and Alan Bernikow JCC 1466 Manor Road	7:30 pm
Brooklyn	April 28	St. Francis College 180 Remsen Street, Founders Hall	7:00 pm
Bronx	April 29	Hostos Community College Savoy Building, 2nd Floor 120 East 149th Street	7:00 pm
Queens	April 30	LaGuardia Community College 45-50 Van Dam Street Conference Room E-242	7:00 pm
Manhattan	May 1	NYC Department of City Planning 22 Reade Street, Spector Hall	1:30 pm

Attachment 7

FY 2016 Rate Proposal Summary

NYC Environmental Protection

- Proposing **3.24%** rate increase
- Lowest rate increase since FY 2006, 10 years ago



Water and Sewer Charges	FY 2015	FY 2016 (3.24% Increase)
Combined Water & Sewer Rate per hundred cubic feet (748 gallons)	$9.58	$9.89 (31¢)
Average Annual Single Family Charge (80,000 gal)	$1,025	$1,058 ($33)
Average Annual Multi-family Metered Charge (52,000 gal)	$666	$688 ($22)
Multi-family Conservation Program – Residential Unit	$976	$1,007 ($31)

Attachment 8