



EAST OF HUDSON WATERSHED CORPORATION

2017 ANNUAL REPORT



Existing Outfall on Schoolhouse Rd, Lewisboro, New York

Date: March 2018



EAST OF HUDSON WATERSHED CORPORATION

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1. INTRODUCTION

This Annual Report has been prepared to provide a summary of the completed, current, and upcoming activities; and financial status; of the East of Hudson Watershed Corporation (EOHWC). This Annual Report also includes limited information about the stormwater retrofit projects (SRPs) completed by the members prior to the formation of EOHWC. It is submitted in fulfillment of the requirements of Part IX.A.5.b of the May 1, 2010, SPDES General Permit for Stormwater Discharges from MS4's (MS4 Permit).

The EOHWC was formed on October 19, 2011 under Section 1411 of the New York State Not-For-Profit Corporation Law. The EOHWC is operated for charitable purposes, has received federal tax exemption as a 501(c)(3), and was established to administer, coordinate, and implement the East of Hudson (EOH) regional stormwater retrofit plans. The regional stormwater retrofit plans were developed as a response to the heightened phosphorus removal requirements of the New York State Department of Environmental Conservation (NYSDEC) General Permit GP-0-08-002 Municipal Separate Storm Sewer Systems Permit (MS4 General Permit).

The MS4 General Permit became effective on May 1, 2008; and was replaced by GP-0-10-002 which became effective on May 1, 2010 and expired on April 30, 2015. The GP-0-15-003 permit was issued in April 2015 and became effective on May 1, 2015. GP-0-15-003 is a two (2) year interim permit intended to cover discharges of stormwater to surface waters of the State from small MS4s.

As issued, GP-0-15-003 contains only conforming changes, such as a new general permit identification number, a two (2) year term, and updated references to the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) and Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (GP-0-12-001). Throughout this Annual Report, reference is made to Year 1

(2010), Year 2 (2011), Year 3 (2012), Year 4 (2013), Year 5 (2014-2016), and Year 6(2017).

The EOHWC is a Regional Stormwater Entity (RSE) with 19 members (18 municipalities and one County), operating in 18 municipalities and three Counties in the EOH watershed. The EOHWC is governed by a Board of Directors, composed of the chief elected official of each member. The chief elected official may delegate authority to another municipal employee. Each member has passed resolutions to join the EOHWC and authorize implementation of the regional stormwater retrofit plans by the EOHWC on behalf of each member.

2. ORGANIZATION

Daily operations of the EOHWC are completed by the supporting staff.

The staff employees for the calendar year 2017 were:

1. Director of Engineering: Kevin Fitzpatrick, P.E. (Start Date: March 4, 2013)
2. Comptroller: Joanne Tavino (Start date: August 12, 2014)
3. Sr. Project Manager: John Belyea, P.E., M.S. EnvE., (End Date: June 16, 2017)
4. Records Management Coordinator: Linda Matera (Start Date: September 29, 2014)
5. Accounts Payable Coordinator: Yvette Rivera (Start Date: September 29, 2014)

The Board Members which served through 2017 are:

1. Town of Bedford: Chris Burdick
2. Village of Brewster: James Schoenig
3. Town of Carmel: Kenneth Schmitt
4. Town of Cortlandt: Linda Puglisi
5. Town of Kent: Maureen Fleming
6. Town of Lewisboro: Peter Parsons (President)
7. Village of Mount Kisco: J. Michael Cindrich
8. Town of New Castle: Robert Greenstein
9. Town of North Castle: Michael Schiliro
10. Town of North Salem: Warren Lucas (Treasurer)
11. Town of Patterson: Richard Williams (Vice President)
12. Town of Pawling: David Kelly (Secretary)
13. Village of Pawling: Robert Liffland
14. Putnam County: Mary Ellen O'Dell
15. Town of Putnam Valley: Samuel Oliverio
16. Town of Pound Ridge: Richard Lyman
17. Town of Somers: Rick Morrissey
18. Town of Southeast: Tony Hay
19. Town of Yorktown: Michael Grace

3. PURPOSE

The EOHWC was established as a regional stormwater entity under Part IV.B of the MS4 Permit to administer, coordinate and implement the East of Hudson regional stormwater retrofit projects (SRPs) with funding made available by the NYCDEP, Westchester County, and Putnam County. Through the EOHWC, the member municipalities are collectively achieving compliance with their SRP requirements (a.k.a. “bubble compliance”), regardless of the physical location of each retrofit.

The Year 6 SRPs for each member municipality were identified by the EOHWC staff and a 5-Year Work Plan prepared for and provided by the East of Hudson Watershed Coalition.



Wetland System- L-CR-30



Wet ED Pond: VB-DI-32

The Year 6 work plan was submitted to and approved by the New York State Department of Environmental Conservation (NYSDEC). The SRPs are phosphorus reducing stormwater retrofit projects designed to attain the ten-year phosphorus removal requirement established by the NYSDEC. Construction contracts for those projects currently in design are expected to be executed between calendar years 2018-2020, depending on several factors including design progress, municipal review and acceptance, and easement negotiations.

The individual municipalities began stormwater retrofit projects in Year 1, and continued as individual municipalities in Year 2. EOHWC began to manage, administer, and fund stormwater retrofit projects in Year 3; and continued this role through Year 6. At the start of 2017, the EOHWC began the next 5-year phase of the program which will continue into 2021.

4. STORMWATER RETROFIT PLAN SUMMARY

The NYSDEC has confirmed and approved the completion of projects totaling 436.6 kg/yr of phosphorus removal. Table 1 provides an overall summary of the EOHWC Stormwater Retrofit Program. The Actual Phosphorus Reduction for Years 1 and 2 is based on documentation provided by the individual municipalities to EOHWC, and submitted



Pocket Pond: Y-MU-10

to the NYSDEC by EOHWC, for SRPs completed by each member

municipality prior to the formation of the EOHWC. The Year 1 and 2 submittals has been updated as Year 2 projects are completed by the member municipality and/or EOHWC. The Year 2 Phosphorus Reduction value is calculated from Year 2 SRPs that had been started by a member municipality, and were either completed by the member municipality or transferred to EOHWC to complete design and construction. For the Year 2 SRPs completed by the member municipalities, certification documents have been obtained from the member municipality and submitted to the NYSDEC. All projects which were actively worked on by the EOHWC during the Calendar Year of 2017 can be found within this section.

Table 1: Stormwater Retrofit Program Summary

MS4	Five Year Phosphorus Reduction Requirement (kg/yr)	Actual Phosphorus Reduction (kg/yr)					Estimated Phosphorus Reduction (kg/yr)					Estimated Totals (kg/yr) (1)	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 2 (1)	Year 3 (1)	Year 4 (1)	Year 5 (1)	Year 6 (1)	Total Reduction	Remaining Reduction Requirement
Bedford	64.4	9.11	7.29	5.34	3.65	11.29	-	-	-	-	1.04	37.7	26.7
Brewster	18.4	-	-	83.60	-	-	-	-	-	-	-	83.6	0.0
Carmel	144.0	3.68	7.52	14.44	3.00	-	-	-	-	-	4.22	32.9	111.1
Cortlandt	23.2	-	-	3.20	-	-	-	-	-	-	-	3.2	20.0
Kent	67.2	9.56	4.67	14.50	13.74	-	-	-	-	-	32.79	75.3	0.0
Lewisboro	71.0	4.03	-	-	22.90	3.60	-	-	-	-	-	30.5	40.5
Mount Kisco	37.4	0.81	-	-	10.85	-	-	-	8.50	-	15.21	35.4	2.0
New Castle	50.2	-	-	-	-	-	-	-	-	14.11	24.00	38.1	12.1
North Castle	2.0	-	-	-	-	-	-	-	-	-	-	0.0	2.0
North Salem	38.2	-	7.12	-	9.80	10.91	-	5.80	-	-	22.19	55.8	0.0
Patterson	34.4	3.31	1.62	10.36	-	4.38	-	-	-	-	46.03	65.7	0.0
Pound Ridge	19.0	-	-	-	-	-	-	-	-	-	-	0.0	19.0
Putnam Valley	2.0	-	7.90	-	-	-	-	-	-	-	-	7.9	0.0
Town of Pawling	7.0	-	1.75	-	-	5.31	-	-	-	-	-	7.1	0.0
Village of Pawling	8.6	-	0.03	-	-	-	-	-	-	-	-	0.0	8.6
Somers	100.0	10.41	1.45	15.97	24.20	2.93	-	-	-	-	-	55.0	45.0
Southeast	62.2	8.83	7.57	21.33	-	-	68.90	-	-	-	32.78	139.4	0.0
Yorktown	108.0	0.07	-	19.84	-	-	-	-	-	-	13.21	33.1	74.9
Putnam County	61.8	1.86	-	20.38	-	-	-	-	5.45	-	1.00	28.7	33.1
Total	919.0	51.67	46.92	208.96	88.14	38.42	68.90	5.80	13.95	14.11	192.47	729.34	189.7

Table Notes:

- (1) The above table reflects an accepted phosphorus reduction of 436.6 kg/yr.
- (2) Sources: "Stormwater Retrofit Program" by Putnam County MS4 Coordinating Committee, dated December 31, 2009; and "Regional Stormwater Implementation Plan", by CKWIC, August 2010.
- (3) Sources: "Summary of Completed Retrofit Projects: Project Years 1 & 2" and "Summary of Completed Retrofit Projects: Project Years 3 & 4" by EOHWC and dated 10/31/2014; email from Robert Capowski on 12/9 and 12/11/2014.
- (4) Estimated values are from information provided by engineering consultants providing professional services under EOHWC contracts; from some municipalities with NYSDEC grants for stormwater retrofit projects; and conceptual design from EOHWC. The actual phosphorus removal will be determined based on the submission of Record Documents stamped by a Professional Engineer to the NYSDEC.
- (5) Total Reduction value shown is expected to decrease as SRP evaluation and design progresses.

Table 2:

Summary of Completed Retrofit Projects: Project Years 1 & 2

Municipality	PJT YR	Project ID	Common Name	Retrofit	Phosphorus Removal (kg/yr)	Drainage Area (acres)	NYSDEC Acceptance Received Date
Bedford	1 (2010)	B-MU-23	North Street	Pavers/Underdrain	0.91	6.7	7/23/2013
		B-MU-24	School Street	Pavers/Underdrain	1.52	11	7/23/2013
		B-MU-25	Guard Hill Rd	Channel Stabilization	4.64	67.5	7/23/2013
		B-NCR-27	South Beach Rd	Channel Stabilization	0.97	12.9	7/23/2013
		B-MU-28	High St/Ridge St	Channel Stabilization	0.57	5.7	7/23/2013
		B-CR-29	Mount Holly Road	Channel Stabilization	0.50	8.8	7/23/2013
	2 (2011)	B-MU-21	Beaver Dam Road	New Forebay, HDS, and Infiltration	4.90	19.1	12/12/2014
		B-MU-22	Narrows	Hydrodynamic Separator and Infiltration	1.16	11.31	12/12/2014
		B-MU-30	South Church Street	Infiltration Trench	1.23	6.89	11/16/2012
Carmel	1 (2010)	Carmel-AM-129	Hitchcock Hill Rd	Hydrodynamic Separator	0.23	42	7/23/2013
		Carmel-PRE-02	Lakeview Court	Outfall Stabilization	0.26	3	7/23/2013
		Carmel-PRE-03	Silvergate Road	Outfall Stabilization	0.95	11	7/23/2013
		Carmel-PRE-04	Red Mills Road	Outfall Stabilization	0.77	9	7/23/2013
		Carmel-PRE-06	Belden Road	Linear Channel Stabilization	1.09	3	7/23/2013
		Carmel-PRE-07	Colier Drive	Linear Channel Stabilization	0.38	1.9	7/23/2013
	2 (2011)	Carmel-CF-119B	Kelly Ridge & St. Michael's Terrace	Channel Stabilization	7.10	40	12/12/2014
		Carmel-CF-123	Garret Place	Outfall Channel Stabilization	0.42	3.1	11/16/2012
Kent	1 (2010)	Kent-Pre-03	Barrett Hill/Route 52	Hydrodynamic Separator	4.31	138.8	7/23/2013
		Kent-Pre-06A	202 Boyds Corner Rd.	Deep Sump CB/Level Spreader	0.31	17.9	4/17/2012
		Kent-Pre-06B	236 Boyds Corner Rd.	Deep Sump CB/Level Spreader	1.33	49.4	4/17/2012
		Kent-Pre-06C	322 Boyds Corner Rd.	Deep Sump CB/Level Spreader	0.93	30.6	4/17/2012
		Kent-Pre-06D	326 Boyds Corner Rd.	Deep Sump CB/Level Spreader	0.24	8.8	4/17/2012
		Kent-Pre-06E	Farmers Mills Rd.	Channel Stabilization	0.80	6	4/17/2012
		Kent-Pre-06F	Meadow Brook Ct.	Deep Sump Catch Basins	1.64	19.8	4/17/2012
	2 (2011)	Kent-MB-NLC	North Lake Carmel SW Improvements	Multiple Retrofits	4.67	92.3	11/16/2012
Lewisboro	1 (2010)	L-CR-15	Twin Lakes Rd Drainage Improvements	Plunge Pool	0.09	0.7	7/23/2013
		L-CR-21	Lake Kitchawan Stream	HDS (Vortech Unit)	0.66	13.9	7/23/2013
		L-CR-26	Truesdale Lake Drive	HDS/Forebay	3.28	34.71	7/23/2013
Mount Kisco	1 (2010)	MK-NC-31		Subsurface Infiltration	0.12	0	7/23/2013
		MK-NC-15		Road Stabilization	0.21	1	7/23/2013
		MK-NC-18		Road Stabilization	0.11	0.05	7/23/2013
		MK-NC-19		Rooftop Disconnect	0.05	0.2	7/23/2013
		MK-NC-23		Road Stabilization	0.09	0.4	7/23/2013
		MK-NC-24		Road Stabilization	0.11	0.2	7/23/2013
		MK-NC-32		Road Stabilization	0.12	0.23	7/23/2013
North Salem	2 (2011)	NS-MU-08/09	Sunset Dr and Westview Cross Rd	Channel Stabilization/Infiltration	7.12	26.1	12/11/2014

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Patterson	1 (2010)	PAT-PRE-02	T&T Associates	Install Grass Swale	0.05	0.5	3/2/2011
		PAT-PRE-03	Brewster Plastics	Install Detention Pond	0.54	5.9	3/2/2011
		PAT-PRE-04	White Birch Realty	Install Sand Filter	0.30	0.7	3/2/2011
		PAT-PRE-05	Old Road Highway Improvement	Install Grass Swale	0.26	2.2	3/2/2011
		PAT-PRE-06a	Putnam Lake Retrofit Project - Site 1	Install Detention Pond	0.01	2.5	3/2/2011
		PAT-PRE-06b	Putnam Lake Retrofit Project - Site 2a	Install Detention Pond	0.04	63	3/2/2011
		PAT-PRE-06c	Putnam Lake Retrofit Project - Site 2b	Hydrodynamic Separator	0.29	5.5	3/2/2011
		PAT-PRE-06d	Putnam Lake Retrofit Project - Site 3a	Hydrodynamic Separator	0.48	9	3/2/2011
		PAT-PRE-06e	Putnam Lake Retrofit Project - Site 3b	Hydrodynamic Separator	0.27	5	3/2/2011
		PAT-PRE-06f	Putnam Lake Retrofit Project - Site 3c	Hydrodynamic Separator	0.11	2	3/2/2011
		PAT-PRE-06g	Putnam Lake Retrofit Project - Site 3d	Hydrodynamic Separator	0.48	9	3/2/2011
		PAT-PRE-06h	Putnam Lake Retrofit Project - Site 5	Detention Pond	0.18	12	3/2/2011
		PAT-PRE-06i	Putnam Lake Retrofit Project - Site 6	Hydrodynamic Separator	0.21	4	3/2/2011
		PAT-PRE-06j	Putnam Lake Retrofit Project - Site 7	Hydrodynamic Separator	0.09	1.7	3/2/2011
	2 (2011)	Pat-EB-09-04a/04b/04c	Old Rt 22	Grass Swales	1.39	0	3/2/2011
		Patterson-PA-10	Patterson Town Hall	Infiltration	0.23	0.5	3/2/2011
Pawling (Town)	2 (2011)	PW-120	138 South Harmony Rd	Outfall Protection, New Pipe, Channel Stabilization	0.13	6.5	7/23/2013
		PW-82	39 Sans Souci Dr	Outfall Protection, Ditch Stabilization, Sediment Removal	1.14	13.08	7/23/2013
		PW-83	47 Sans Souci Dr	Ditch Stabilization, Sediment/Debris Removal	0.48	2.44	7/23/2013
Pawling (Village)	2 (2011)	VPW-3		Channel Stabilization	0.02	1.26	7/23/2013
		VPW-4		Channel Stabilization	0.01	11.01	7/23/2013
Putnam County	1 (2010)	PC-4	North Brewster Rd	Road Resurfacing	1.50	4	4/17/2012
		PC-6	Teakettle Spout Lake	Pervious Pavement	0.34	0.5	4/17/2012
		PC-9	Veterans Memorial Park	Sand Filter	0.02	0.1	4/17/2012
Putnam Valley	2 (2011)	PutVal-PA-02	Greenway Terrace	Detention Pond/Stormfilter	7.90	41.9	6/8/2016
Somers	1 (2010)	S-MU-12	Plumbrook Pond Ditch Stabilization	Repair Eroded Drainage Ditch	1.12	41.2	7/23/2013
		S-MU-13	Plumbrook Pond Ditch Stabilization-2	Repair Eroded Drainage Ditch	3.09	31.8	7/23/2013
		S-MU-27a	Somers School District Ditch Stabilization	Stabilization	1.25	27	7/23/2013
		S-MU-27b		Stabilization	0.36	27	7/23/2013
		S-MU-29	Plum Brook Rd Retrofit	Stabilization	3.33	25.5	7/23/2013
		S-NC-31	Moseman Ave Water Quality Improvement	Micropool Extended Detention	0.81	8.5	7/23/2013
		S-MU-32	Erosion Control Near Muscote River	Stabilization	0.45	7.2	7/23/2013
	2 (2011)	S-MU-30	Jan Ridge Road Brook Stabilization	Channel Stabilization	1.45	22.6	11/16/2012
Southeast	1 (2010)	SE-PRE-01	Lower Mine Road	Plunge Pool	0.19	14.4	4/17/2012
		SE-PRE-02	Seven Oaks Lane	Check Dams/Plunge Pool	1.51	11.7	4/17/2012
		SE-PRE-03	Maple Road	Road Stabilization/Deep Sump	1.03	24.1	4/17/2012
		SE-PRE-04	Joe's Hill Road	Plunge Pool/Level Spreader	0.01	1	4/17/2012
		SE-PRE-05	Nichols Rd	Swale Stabilization	0.34	13.6	4/17/2012
		SE-PRE-07	Starlea Road	Plunge Pool/Deep Sump	0.44	17.1	4/17/2012
		SE-PRE-08	Ives Farm	Plunge Pool	0.78	9.1	4/17/2012
		SE-PRE-09	Panorama	Check Dams/Plunge Pool	0.51	5.9	4/17/2012
		SE-PRE-10	Carlson Lake	Deep Sump/Plunge pool	1.20	14.7	4/17/2012
		SE-PRE-11	Shore Drive, Lake Tonetta	Infiltration/HDS	2.82	26.3	4/17/2012
	2 (2011)	SE-POT-02	Brewster Heights	HDS, Channel Stabilization	67.60	58.9	TBD
		Southeast-EB-05	Rockledge Drive	Outfall Stabilization	0.81	12	5/22/2015
		Southeast-PA-05	Brewster Hill	Linear Channel Stabilization	6.64	35	5/22/2015
		Southeast-PA-24	Lower Mine Road/Rt 22	Grass Swales	0.12	-	5/22/2015
		SE-DI-03	Lincoln Rd	Outfall Stabilization	1.30	10.3	TBD
Yorktown	1 (2010)	Y-MU-11D	Junior Lake Parking Lot		0.07	0.1	7/23/2013

Table 3:

Summary of Completed Retrofit Projects: Project Years 3 through 5

Bedford	3 (2012)	B-MU-07	Bedford Hills Memorial Park	Extended Detention Pond (P-3)	5.34	30.80	12/9/2014
	4 (2013)	B-MU-32	Babbitt Road	Channel Stabilization	3.65	18.30	12/11/2014
	5 (2015)	B-MU-35	Broad Brook Rd	Subsurface Infiltration	8.10	24.32	6/8/2016
		B-MU-41	Succabone and Bisbee Rd	Subsurface Infiltration	3.19	16.10	11/8/2017
Brewster	3 (2012)	VB-DI-31	Tonetta Brook Retrofit	Extended Detention Pond (P-3)	15.80	28.50	12/11/2014
		VB-DI-32	Wells Brook Retrofit	Extended Detention Pond (P-3)	67.80	176.10	12/11/2014
Carmel	3 (2012)	Carmel-AM-112	Austin Rd Elementary School	Wet Extended Detention Pond (P-3)	5.12	7.50	12/11/2014
		Carmel-AM-116	Mahopac Middle School	Infiltration	2.60	2.71	12/11/2014
		Carmel-CF-102A	Guide Post Seminary	Channel Stabilization	4.00	2.31	5/22/2015
		Carmel-CF-102B	Guide Post Seminary	Channel Stabilization	2.72	2.50	5/22/2015
	4 (2013)	Carmel-AM-111A	Falls Elementary School	Subsurface Infiltration	3.00	2.10	12/29/2017
Cortlandt	3 (2012)	C-NC-01B	Quarry Acres Subdivision	Micropool Extended Detention and Channel Stabilization	3.20	16.58	11/2/2016
Kent	3 (2012)	Kent-MB-ADD-2	Lake Shore Dr & Cottage Rd	Wet Extended Detention Pond (P-3)	4.70	38.10	12/9/2014
		Kent-MB-ADD-3	Lake Shore Dr & Valhalla Rd	Micropool Extended Detention Pond (P-1)	1.40	7.80	12/9/2014
		Kent-MB-ADD-4	Ryan Park	Hydrodynamic Separator	0.20	1.50	12/9/2014
		Kent-MB-ADD-5	Kent Recreation Building	Dry Swale (O-1)	1.40	4.50	12/9/2014
		Kent-MB-ADD-19	Ryan Park	Sand Filter (F-1) and Eliminated Eroded Channel	2.30	29.20	12/9/2014
		Kent-PA-31	Putnam Stone & Mason Supply	Pocket Pond	4.50	3.40	11/21/2017
	4 (2013)	Kent-MB-311B	NYS Rt 311 & I-84	Channel Stabilization, P-1 Pond	13.74	36.40	11/8/2017
Lewisboro	4 (2013)	L-CR-11A	John Jay Middle and High School	Micropool ED Pond	4.80	7.50	5/22/2015
		L-CR-11B	John Jay Middle and High School	Wet ED Pond	2.20	3.40	5/22/2015
		L-CR-11C	John Jay Middle and High School	Channel Stabilization	11.30	18.70	5/22/2015
		L-CR-28	Schoolhouse Rd	Wet ED	4.59	103.90	11/8/2017
	5 (2015)	L-CR-30	Mead St	ED Shallow Wetland	3.60	24.60	6/8/2016
Mount Kisco	4 (2013)	MK-NC-20	CVS/South Bedford Road	Channel Stabilization	8.19	3.51	11/8/2017
		MK-NC-21	MKMG Satellite Offices	Pocket Wetland	2.66	3.54	11/21/2018
		MK-NC-22	Leonard Park	Bioretention/Surface Sand Filter	8.50	30.42	TBD
New Castle	5 (2015)	NewC-NCR-33A	Burden Preserve	Channel Stabilization	9.43	10.00	TBD
		NewC-NCR-33B	Burden Preserve	Channel Stabilization	4.68	2.78	TBD
North Salem	3 (2012)	NS-MU-11	Route 22 & Route 116	Extended Detention Pond	5.80	43.00	TBD
	4 (2013)	NS-MU-05	North Salem Highway Garage	Infiltration and micropool extended detention basin	9.80	22.20	12/11/2014
	5 (2015)	NS-EB-01	Peach Lake	Stormfilter	10.91	104.48	11/8/2017
Patterson	3 (2012)	Pat-EB-09-01	Big Elm Rd	Pocket Pond (P-5)	3.47	7.40	12/9/2014
		Pat-MB-06	Fields Corner Rd	Dry Swale (O-1)	0.78	4.00	12/9/2014
		Patterson-PA-11	Patterson Highway Garage	Two Pocket Ponds; Bioretention Basin	6.11	5.43	12/9/2014
	5 (2015)	Patterson-PA-15A	Matthew Paterson Elementary School	Surface Sand Filter	2.00	5.20	6/8/2016
		Patterson-PA-15B	Matthew Paterson Elementary School	Dry Swale	2.38	4.80	6/8/2016
Pawling (Town)	5 (2015)	PW-342A	Pawling Fire District	Pocket Pond	0.52	0.70	11/2/2016
		PW-342B	Pawling Fire District	Pocket Pond	1.44	11.54	11/2/2016
		PW-343	Holmes Whaley Lake Civic Association	Subsurface Infiltration	3.35	3.72	11/2/2016
Putnam County	3 (2012)	PC-1	Putnam National Golf Course	Subsurface Infiltration	4.40	2.70	12/11/2014
		PC-1A	Putnam National Golf Course	Wet Extended Detention Pond (P-3)	15.98	63.60	5/22/2015
	4 (2013)	PC-5N, 5S	PCDH&F	Wet Extended Detention Pond	5.45	18.20	TBD

Somers	3 (2012)	S-MU-01	Somers Town Hall	Permeable Pavement	1.29	0.66	12/11/2014
		S-MU-09A	Reis Park - Library Roof Disconnect	Hydrodynamic Separator and Infiltration	0.79	0.51	12/11/2014
		S-MU-09B	Reis Park - Maintenance Bldg and Parking Area	Hydrodynamic Separator and Infiltration	0.90	0.42	12/11/2014
		S-MU-09C	Reis Park - Main Parking Lot and Tennis Court	Permeable Pavement	3.35	2.28	12/11/2014
		S-MU-09D	Reis Park - Main Driveway and Rear Parking	Bioretention	0.92	2.53	12/11/2014
		S-MU-09E	Reis Park and Town Hall Porous Pavement	Middle Drive: UG Detention/Stormfilter; Upper Lot: Dry Swale	1.20	2.27	12/11/2014
		S-MU-09F	Reis Park - Athletic Fields	Bioretention	1.65	5.19	12/11/2014
		S-MU-16/17	Somers Town Highway Garage and Material Yard	16: Infiltration (I-2)/Bioretention (F-5); 17: Bioretention (F-5)	5.87	6.56	6/8/2016
	4 (2013)	S-MU-03	Boces	Channel Stabilization	24.20	13.26	5/22/2015
	5 (2015)	S-MU-33	Van Tassell Memorial Park	Infiltration Basin	2.93	1.20	11/21/2017
Southeast	3 (2012)	SE-POT-01	Lake Tonetta	Subsurface Gravel Wetland	14.40	57.50	12/11/2014
		Southeast-PA-23	CV Star Intermediate School	Micropool Extended Detention Pond (P-1)	6.93	17.40	12/9/2014
Yorktown	3 (2012)	Y-MU-10	Railroad Ave Park	Pocket Pond (P-5)	4.32	6.10	11/2/2016
		Y-MU-14	Police Station and Court	Wet Extended Detention Pond (P-3)	9.42	24.30	11/2/2016
		Y-MU-17A	Sparkle Lake	HDS and Infiltration Trench	1.80	1.24	12/11/2014
		Y-MU-17B	Sparkle Lake	Stormfilter	4.30	14.60	12/11/2014

The following nomenclature is used in this Annual Report to describe project status:

1. **Cancelled:** SRP was cancelled by EOHWC prior to or during design. Typical reasons for cancelling a SRP include: low phosphorus removal, located on private property, site constraints preventing proper design, permitting complexity, and/or cost.
2. **Postponed:** The SRP was submitted to and evaluated by EOHWC. Based on the current program parameters and progress, these projects will be evaluated for inclusion as part of Years 6-10.
3. **Complete:** SRP has been constructed however the project has not been completely removed from our tracking system. This occurs when a project still requires stabilizing or outstanding payments remain.
4. **Closed:** The SRP is no longer being tracked by EOHWC for project closeout.

EOHWC Project Summaries

B-MU-601 (Bedford Town Highway Garage – Year 6) – Located in the Town of Bedford, this retrofit includes the installation of a hydrodynamic separator. Construction is complete and is up for review for reimbursement.

B-MU-602 (Sunnyfield Farms – Year 6) – Located in the Town of Bedford on private property, this project included the proposed stabilization of existing eroded channels. The project has been cancelled due to lack of cooperation from the property owner.

B-MU-603 (Sunnyfield Farms – Year 6) – Located in the Town of Bedford on private property, this project included construction of a wet extended detention pond. The project has been cancelled due to lack of cooperation from the property owner.

B-MU-41 (Succabone and Bisbee Road – Year 5) – Located in the Town of Bedford, this retrofit project includes subsurface infiltration on public property on Mount Holly Road. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC.



Subsurface Infiltration at B-MU-41

Carmel-AM-111A (Mahopac Falls Elementary School – Year 4) – Located in the Town of Carmel, the proposed SRP includes construction of a new subsurface infiltration system to capture runoff associated with existing parking areas and roof runoff from the elementary school buildings. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC.

Carmel-CF-601 (Eleanor Drive – Year 6) – Located in the Town of Carmel, the proposed SRP includes the stabilization of an eroded channel on NYCDEP property. The project will be going out to design in early 2018. Construction is expected to occur in 2019.

Carmel-GL-615 (Willow Rd West – Year 6) – Located in the Town of Carmel, the proposed SRP includes the stabilization of an eroded channel on private property. The project has been cancelled by the property owner.

Carmel-GL-616 (Willow Rd East – Year 6) – Located in the Town of Carmel, the proposed SRP includes the stabilization of an eroded channel on private property. The project has been cancelled by the property owner.

Kent-MB-601 (Montrose Drive – Year 6) – Located in the Town of Kent, the proposed SRP includes the construction of a multiple pond system on Town property. The project is in the design phase and construction is expected to begin in 2019.

Kent-MB-602 (Haviland Rd – Year 6) – Located in the Town of Kent, the proposed SRP includes the construction of a pocket wetland and channel stabilization on Town

property. The project is in the design phase and construction is expected to begin in 2018.

Kent-MB-311B (State Route 311 and I-84 – Year 4) – Located in the Village of Kent, the proposed SRP had 3 major components; a new wet detention pond, channel stabilization, and pond enlargement. Drainage from an existing residential area has created an erosion channel which is to be repaired and runoff redirected to an engineered channel. The existing stormwater pond at the intersection of Route 311 and Interstate 84 was to be expanded to treat runoff from developed areas which currently bypass the existing pond. The portion of the project was cancelled/postponed due to funding constraints. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC.

Kent-PA-31 (Putnam Stone & Mason Supply – Year 3) – Located in the Town of Kent, the proposed retrofit originally included a Dry Swale (O-1). The project has been revised to a Pocket Pond. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC

L-CR-28 (Schoolhouse Road – Year 4) – Located on private property in the Town of Lewisboro, the project involved the construction of a Wet Extended Detention Pond. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC 2017.

MK-NC-601 (Village Hall – Year 6) – Located in the Village of Mt. Kisco, the proposed project includes the installation of catch basin inserts on Village property. The project is expected to be completed in mid-2018.

MK-NC-602 (Mt. Kisco Commons – Year 6) – Located in the Village of Mt. Kisco, the proposed project includes the installation of catch basin inserts on private property. The project is expected to be completed in mid-2018.

MK-NC-20 (CVS, South Bedford Road – Year 4) – Located in the Village of Mount Kisco, the proposed SRP is for channel stabilization on an existing drainage channel located on private property. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC.



MK-NC-20 Channel Stabilization Construction

MK-NC-21 (Mt. Kisco Medical Group Satellite Office – Year 4) – Located in the Village of Mount Kisco, the proposed SRP is a pocket wetland. The engineered wetland will replace an unclassified manmade wetland. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC.

MK-NC-22 (Leonard Park – Year 4) – Located in the Village of Mount Kisco, the proposed SRPs are one dry swale, six surface sand filters, and eight bioretention areas. This project is currently in the design phase with construction to begin in 2018.

NewC-NCR-601 (Sheather Rd – Year 6) – Located in the Town of New Castle, the proposed SRP is for the stabilization of a heavily eroded bank along the road on Town property. The project is currently being evaluated by the Town and EOHWC for further action.

NewC-NCR-33A (Burden Preserve – Year 5) – Located in the Town of New Castle, the proposed SRP includes channel stabilization on public property. This project is currently in design and construction expected to be completed in 2018.



NewC-NCR-33A Eroded Channel

NewC-NCR-33B (Burden Preserve – Year 5) – Located in the Town of New Castle, the proposed SRP includes channel stabilization on public property. This project is currently in design and construction expected to be completed in 2018.

NS-MU-11 (Hand Scrabble Road Park – Year 3) – Located in the Town of North Salem's Hand Scrabble Road Park, this retrofit includes the installation of a new Extended Detention Pond. This project is currently in construction and is expected to be completed in early 2018.

NS-MU-601 (Keeler Lane – Year 6) – Located in the Town of North Salem, the project involves the stabilization of a heavily eroded channel across multiple properties. The project is expected to go to design in 2018 and for construction to occur in 2019.

NS-MU-602 (Westview Ave – Year 6) – Located in the Town of North Salem, the project involves the stabilization of a heavily eroded channel across multiple properties. The project is being re-evaluated by EOHWC and the Town for efficiency and alternate SRPs.

Pat-EB-09-03B (Veteran's Memorial Park – Year 4) – Located in the Town of Patterson, the proposed SRP is an organic filter. Detailed design for this project has been completed and construction is anticipated to commence in 2018 by the Town of Patterson.

Pat-EB-601 (Valley Rd – Year 6) – Located in the Town of Patterson, the proposed SRP is for the installation of a multiple pond system on Town owned property. The project is currently being re-evaluated for expansion on to private property by the Town and design engineer. Construction is expected to occur in 2019.

Pat-EB-602 (Dayton Rd – Year 6) – Located in the Town of Patterson, the proposed SRP is for channel stabilization on Town property. The project is currently in the design phase and is expected to be constructed in 2018.

Pat-EB-603 (Lost Lake – Year 6) – Located in the Town of Patterson, the proposed SRP is for channel stabilization on private property. The project is currently in design and is expected to be constructed in 2018.

PR-CR-601 (Cross Rd – Year 6) – Located in the Town of Pound Ridge, the proposed SRP is for the stabilization of eroded banks on private property. The project is undergoing further evaluation by the Town and EOHWC for construction in 2019.

S-MU-601 (Lakeview Drive – Year 6) – Located in the Town of Somers, the proposed SRP is for channel stabilization on private property. The project has been cancelled due to withdrawal of support from the Town.

S-MU-33 (Van Tassell Memorial Park – Year 5) – Originally part of the Year 4 Plan postponed to Year 5, this SRP is located in the Town of Somers and includes construction of an infiltration basin. Construction was completed in 2017 and this project has been approved for final credit by the NYSDEC.

SE-DI-03 (Lincoln Road – Year 2) – Located in the Town of Southeast, this retrofit project was originally part of the Year 2 plan and includes the installation of Hydrodynamic Separator and channel stabilization. This project is under construction and expected to be completed in 2018.

SE-DI-601 (Brewster Hill Rd – Year 6) – Located in the Town of Southeast, the proposed retrofit is for the installation of a pocket pond system on NYCDEP property. The project is currently being re-evaluated for an alternate SRP.

SE-DI-602 (Route 22 Outfall – Year 6) – Located in the Town of Southeast, the proposed retrofit is for the stabilization of an eroded channel and outfall on private property. The project is being reevaluated for an alternate SRP.

SE-POT-02 (Brewster Heights – Year 2) – Located in the Town of Southeast, this retrofit project was originally part of the Year 2 plan and includes the installation of Hydrodynamic Separator and channel stabilization on both Town and private property. This project is currently in the design phase and expected to begin construction in 2018.

Y-MU-601 (Front Street – Year 6) – Located in the Town of Yorktown, the proposed SRP is for the installation of a designed wetland on Town property. The project is currently in the design phase and construction is expected to begin in 2019.

Y-MU-602 (Junior Lake – Year 6) – Located in the Town of Yorktown, the proposed SRP is for the installation of subsurface infiltration chambers on Town property. The project is currently in the design phase and construction is expected to occur in 2019.

5. FUNDING SOURCES AND FINANCIAL SUMMARY

The EOHWC funding has been and will be provided directly or indirectly by the New York City Department of Environmental Protection (NYCDEP). The legal structure of the EOHWC allows transfer of funds from the NYCDEP, Westchester County, and Putnam County to the EOHWC for implementing the SRPs. There are four primary funding sources for the design, permitting, and construction of SRPs:

1. NYCDEP from 2010 Water Supply Permit (WSP): \$15.5 million
2. NYCDEP from 2007 Filtration Avoidance Determination (FAD): \$4.5 million
3. Westchester County from 1997 Memorandum of Agreement (MOA): \$10 million
4. Putnam County from 1997 Memorandum of Agreement (MOA): \$8.2 million

The Westchester County MOA funds were transferred to the EOHWC on June 20, 2012. An initial transfer of \$250,000 of the Putnam County MOA funds to the EOHWC was completed in April 2012. A partial transfer (\$7,447,815.35) of the Putnam County MOA funds to the EOHWC was completed on June 15, 2012. The final transfer (\$75,981.11) of the Putnam County MOA funds was transferred to the EOHWC on October 22, 2012. The remainders of the Putnam County MOA funds were used by Putnam County to provide funding for Year 2 stormwater retrofit projects. The transfers were authorized by Intermunicipal Agreements between the County and the municipalities located in each County.

The NYCDEP Funding Agreement was registered on July 18, 2013. From the Funding Agreement, an initial disbursement of \$10,000,000 was transferred to EOHWC on September 23, 2013 from the Water Supply Permit (WSP) allocation. The FAD funding in the amount of \$4,500,000 was transferred to the EOHWC on March 21, 2014. The

remaining WSP funding in the amount of \$5,500,000 was transferred to the EOHWC on August 17, 2015.

The WSP and FAD funds are principal funds, bonded by the NYCDEP for capital expenditures. Thus, projects completed using these funds must, at minimum, have a 5-year life span, minimum total project cost of \$35,000, and have begun after January 1, 2011. The MOA funds are interest on funds previously provided by NYCDEP to Putnam and Westchester counties, and are only restricted to stormwater retrofit projects in the original County.

In addition, each municipality may seek grants from other sources (e.g. NYSDEC Water Quality Investment Program, Environmental Facilities Corporation, etc.). Grants for stormwater retrofits were awarded to the Town of Bedford, Town of Kent, Town of North Salem, Town of Somers, and Village of Pawling. NYSDEC grants include a match requirement by the recipient. EOHWC will reimburse the municipalities for the match component, if requested.

The following tables provide various data describing the EOHWC financial status. The Total Expenditures, based on the four primary expense categories, are shown in Tables 4A and 4B. The expense categories can be generally described as follows:

1. **General Administration:** Expenses internal to EOHWC operations, including non-project expenses (salaries, benefits, travel, office equipment/supplies, computer hardware and software, advertising, utilities, insurance, rent, etc.).
2. **Project Administration:** Expenses internal to EOHWC operations for project expenses (e.g. reviewing design submittals, project designs, coordinating with consultants and/or contractors, project meetings, etc.).
3. **Design:** Fees paid by EOHWC to engineering consultants, in accordance with Professional Service Contracts, Task Orders, and/or Change Orders. This may also include reimbursement to municipalities for design fees paid by the municipality,

and/or reimbursement to municipalities for the match component of a grant for the design of an acceptable SRP.

4. **Construction:** Fees paid by EOHWC to construction contractors, in accordance with an executed Agreement included within the Contract/ Bid Documents, and/or Change Orders. This may also include reimbursement to municipalities for construction costs paid by the municipality.

Table 4A: Total Expenditures (2017)

Expense Type	Amount
General Administration	\$ 479,063 (21.5%)
Project Administration	\$ 129,786 (5.8%)
O&M	\$ 107,341 (4.8%)
Design	\$ 166,231 (7.4%)
Construction	\$ 1,350,955 (60.5%)
TOTAL	\$ 2,233,376

Table 4B: Total Expenditures (2012 thru 2017)

Expense Type	Amount
General Administration	\$ 2,612,512 (8.9%)
Project Administration	\$ 805,013 (2.7%)
O&M	\$ 171,835 (0.6%)
Design	\$ 4,493,983 (15.3%)
Construction	\$ 21,230,324 (72.4%)
TOTAL	\$ 29,313,667

Table 5 includes a summary of the various source funds available to EOHWC for stormwater retrofit projects, and lists the total expenses against each source fund. Putnam County funds in the amount of \$4.7 million were used to fund WSP projects above the initial \$10 million received prior to 2015 and were replenished upon receipt of the additional \$5.5 million WSP funding in August, 2015.

Table 5: Fund Summary (2012-2017)

Source Fund	EOHWC Funds Received	Expenses	Remaining
Putnam County MOA	\$ 7,773,796	(\$ 4,220,814)	\$ 3,552,982
Westchester County MOA	\$ 10,000,000	(\$ 4,439,743)	\$ 5,560,257
DEP Funding Agreement (WSP)	\$ 15,500,000	(\$ 15,500,000)	\$ 0
DEP Funding Agreement (FAD)	\$ 4,500,000	(\$ 4,500,000)	\$ 0
Various Non-SRP	\$ 452,980	(\$ 452,980)	\$ 0
O&M Bubble Compliance	\$ 171,835	(\$ 171,835)	\$ 0
Interest Earnings	\$ 143,373	(\$ 6,702)	\$ 136,671
Adjust for Receivables/Payables		\$ 226,914	\$ 226,914
Totals	\$ 38,541,985	(\$ 29,065,160)	\$ 9,476,824

The target SRP efficiency, based on available funding of \$38.2 million and a phosphorus removal requirement of 459.5 kg, is approximately \$83,000/kg. Based on the project and financial data to date, the approximate average SRP efficiency for SRPs in progress, completed, and/or cancelled as part of the EOHWC program, is \$60,000/kg. The average SRP efficiency in 2014 was \$70,000/kg, showing a trend towards better project selection and design. The EOHWC will have a surplus of funding available and surpass the 459.6 kg/yr goal for projects as part of the Year 1-5 Work Plan. All phosphorus reductions past the 5-year goal will be applied to the future of the program.

As the Funding Agreement source funds were not available to EOHWC until September 2013, project and administration costs were charged against the Putnam and/or Westchester MOA source funds. Upon receipt of the disbursements from the Funding Agreement, funds previously spent from the Putnam and/or Westchester MOA source funds on eligible expenses were reclassified from the Funding Agreement to the Putnam and/or Westchester MOA source funds.

6. FUTURE WORK

6.1 Completion of the 10-Year Stormwater Retrofit Program

The EOHWC is advancing towards the completion of the first 5-Years of the Stormwater Retrofit Program. The projects from the first 5 years of the program are scheduled for completion by summer of 2019. Completion of all projects from the first 5-year work plan will amount to approximately 528 kg/yr of phosphorus removal from the NYCDEP Watershed.

The EOHWC has started work on Year 7 of the Stormwater Retrofit Program in the beginning of the year 2018. This Work Plan will provide the EOHWC with enough projects to reach our goal of 919.2 kg/yr at the completion of the program.

6.2 Program Requirements and Funding for Years 6-10

The East of Hudson Watershed Coalition is in negotiations with the NYCDEP for the receipt of an additional \$22 million which can be applied to a select group of projects within the program. All projects which are located within the Filtration Avoidance Determination (FAD) Basins are eligible for this funding, along with those basins hydrologically connected.

The Federal and State Grant programs will be researched and pursued annually to support any funding sources which the EOHWC Coalition are able to secure.

6.3 Advancement of Engineering and Project Techniques

The EOHWC will continue to explore new techniques and products to further the advancement of the phosphorus reduction program with the NYCDEP and NYSDEC. In the 2015 calendar year, a new method for channel stabilization was identified by staff, which has identified a more accurate rate of phosphorus loading on open channels. EOHWC will be utilizing approved proprietary practices such as catch basin inserts to advance the program efficiency, opening up new avenues for phosphorus reduction.



EAST OF HUDSON WATERSHED CORPORATION

Appendix A: ABO Budget



**EAST OF HUDSON WATERSHED CORPORATION
BUDGET AND FINANCIAL PLAN**

	Actual						Budget	Total Since Inception thru 2018
	2012	2013	2014	2015	2016	2017	2018	
FINANCIAL SOURCES								
Interest	\$ 23,555	\$ 32,757	\$ 15,730	\$ 6,524	\$ 5,229	\$ 40,271	\$ 50,000	\$ 174,066
Putnam/Westchester Funds	17,773,796	-	-	-	-	-	-	\$ 17,773,796
Non-SRP Fund Reimbursement	-	70,000	-	122,620	-	-	-	\$ 192,620
O&M Bubble Compliance	-	-	-	-	64,494	107,341	-	\$ 171,835
NYC DEP	-	10,000,000	4,500,000	5,500,000	-	-	-	\$ 20,000,000
TOTAL FINANCIAL SOURCES	\$ 17,797,351	\$ 10,102,757	\$ 4,515,730	\$ 5,629,144	\$ 69,723	\$ 147,612	\$ 50,000	\$ 38,312,318
EXPENDITURES								
Compensation (Salaries plus Health Insurance and PR Tax expense)								
Exec Dir/Dir of Engineering		\$ 73,481	91,709	104,885	133,482	133,746	141,034	\$ 678,338
Project Engineer			-	64,594	115,904	61,926	-	242,425
Comptroller			30,686	98,712	90,909	92,770	104,091	417,168
Accounts Payable Coordinator			3,648	18,334	28,121	28,020	28,580	106,704
Records Management Coordinator			3,648	22,578	37,353	36,767	37,501	137,848
Office Manager		18,396	60,000	28,620	-	-	-	107,016
In-house Attorney			67,457	-	-	-	-	67,457
Executive Director	105,907	166,043	118,000	-	-	-	-	389,950
Prior (other staff)	50,260	71,463	-	-	-	-	-	121,723
Total Compensation	\$ 156,167	\$ 329,383	\$ 375,148	\$ 337,723	\$ 405,771	\$ 353,229	\$ 311,206	\$ 2,268,627
Project costs	\$ 1,747,238	\$ 10,341,709	\$ 7,714,170	\$ 2,582,642	\$ 2,122,912	\$ 1,671,886	\$ 3,796,889	\$ 29,977,446
Other Expenditures	\$ 147,017	\$ 164,114	\$ 224,732	\$ 223,538	\$ 188,596	\$ 208,261	\$ 207,614	\$ 1,363,872
TOTAL EXPENDITURES	\$ 2,050,422	\$ 10,835,206	\$ 8,314,050	\$ 3,143,903	\$ 2,717,279	\$ 2,233,376	\$ 4,315,709	\$ 33,609,945
Cumulative excess (deficiency) of financial sources over expenditures								\$ 4,702,372

(1) Other expenditures include Legal/Audit, Rent and Insurance.

(2) Cumulative excess is County funds (WQIP) since WSP and FAD funds have been committed and/or spent in full.



EAST OF HUDSON WATERSHED CORPORATION

Appendix B: EOHWC Project Data Sheets for Year 6

As submitted January 5, 2018 to the
NYSDEC



EAST OF HUDSON WATERSHED CORPORATION

2 NYS Route 164
Patterson, NY 12563
Tel: 845-319-6349
Fax: 845-319-6391

Print Date: January 5, 2018
Prepared by: Kevin Fitzpatrick, PE
Checked by: _____

EOHWC Year 5 (2014) Project Summary - Interim

Project ID:	B-MU-41	Project Status:	Complete
Common Name:	Succabone and Bisbee Rd		
Watershed:	Muscoot		
Site Owner:	Town of Bedford	Design Engineer:	Hudson Engineering
Site Address:	103 Succabone Rd		
County:	Westchester	60% Submission Date:	
Municipality:	Bedford	100% Submission Date:	6/28/2016
Supervisor:	Chris Burdick	Record Document Rec'd Date:	11/8/2017
Original Proposed Retrofit:	Subsurface Infiltration	Field Recon Date:	3/21/2014
Revised Retrofit:	Subsurface Infiltration	Associated Permits:	None
Original P Removal:	2.90 kg/yr	Proposed Drainage Area:	16.10 acres
Revised P Removal:	3.19 kg/yr		
Final P Removal Credit by NYSDEC:	3.19 kg/yr		

Construction Start date: 10/7/2016
Construction Completion date: 5/4/2017

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? N/A



EAST OF HUDSON WATERSHED CORPORATION

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Checked by: _____

EOHWC Year 6(2017) Project Summary - Interim

Project ID:	B-MU-601	Project Status:	Construction
Common Name:	Bedford Town Highway Garage		
Watershed:	Muscoot		
Site Owner:	Town of Bedford	Design Engineer:	Hahn Engineering
Site Address:	301 Adams Street		
County:	Westchester	60% Submission Date:	
Municipality:	Bedford	100% Submission Date:	
Supervisor:	Chris Burdick	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	HDS/Subsurface Infiltration	Field Recon Date:	
Revised Retrofit:		Associated Permits:	None
Original P Removal:	0.90 kg/yr	Proposed Drainage Area:	NA acres
Revised P Removal:	1.04 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	BY TOWN		
Construction Completion date:	BY TOWN		
Agreements:			
Municipal Reimbursement Complete?	No	Municipal Installation Complete?	No
Private Installation Complete?	NA		



EAST OF HUDSON WATERSHED CORPORATION

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Checked by: _____

EOHWC Year 6(2017) Project Summary - Interim

Project ID:	B-MU-602	Project Status:	Cancelled
Common Name:	Sunnyfield Farms Channel Stabilization		
Watershed:	Muscot		
Site Owner:	Sunnyfileld Farms Inc.	Design Engineer:	Lawerence Paggi Engineering
Site Address:	787 S Bedford Rd (Mult. Owners)		
County:	Westchester	60% Submission Date:	
Municipality:	Bedford	100% Submission Date:	
Supervisor:	Chris Burdick	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	8/12/2016
Revised Retrofit:	Channal Stabilization with Forebay	Associated Permits:	None
Original P Removal:	18.54 kg/yr	Proposed Drainage Area:	116.00 acres
Revised P Removal:	31.44 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? Municipal Installation Complete? Private Installation Complete?



EAST OF HUDSON WATERSHED CORPORATION

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Print Date: January 5, 2018
Prepared by: Kevin Fitzpatrick, PE
Checked by: _____

EOHWC Year 6(2017) Project Summary - Interim

Project ID:	B-MU-603	Project Status:	Cancelled
Common Name:	Sunnyfield Farms Pond		
Watershed:	Muscoot		
Site Owner:	Sunnyfield Farm, Inc	Design Engineer:	Lawrence Paggi Engineering
Site Address:	787 S Bedford Rd		
County:	Westchester	60% Submission Date:	
Municipality:	Bedford	100% Submission Date:	
Supervisor:	Chris Burdick	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Wet ED Pond	Field Recon Date:	8/12/2016
Revised Retrofit:	Wet ED Pond	Associated Permits:	None
Original P Removal:	10.87 kg/yr	Proposed Drainage Area:	90.10 acres
Revised P Removal:	15.96 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? Municipal Installation Complete? Private Installation Complete?



EAST OF HUDSON WATERSHED CORPORATION

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Patterson, NY 12563
Tel: 845-319-6349
Fax: 845-319-6391

Print Date: January 5, 2018
Prepared by: Kevin Fitzpatrick, PE
Checked by: _____

EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	Carmel-AM-111A	Project Status:	Complete
Common Name:	Falls Elementary School		
Watershed:	Amawalk		
Site Owner:	Mahopac Central School District	Design Engineer:	Lawrence J. Paggi
Site Address:	90-100 Myrtle Ave., Mahopac, NY		
County:	Putnam	60% Submission Date:	
Municipality:	Carmel	100% Submission Date:	7/1/2014
Supervisor:	Kenneth Schmitt	Record Document Rec'd Date:	12/29/2017
Original Proposed Retrofit:	Subsurface Sand Filter	Field Recon Date:	1/26/2010
Revised Retrofit:	Subsurface Infiltration	Associated Permits:	None
Original P Removal:	3.75 kg/yr	Proposed Drainage Area:	2.10 acres
Revised P Removal:	3.00 kg/yr		
Final P Removal Credit by NYSDEC:	3.00 kg/yr		

Construction Start date: 6/27/2018
Construction Completion date: 8/24/2017

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? Yes



EAST OF HUDSON WATERSHED CORPORATION

2 NYS Route 164
Patterson, NY 12563
Tel: 845-319-6349
Fax: 845-319-6391

Print Date: January 5, 2018
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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Carmel-CF-601	Project Status:	Concept
Common Name:	Eleanor Drive		
Watershed:	Croton Falls		
Site Owner:	Multiple owners	Design Engineer:	
Site Address:	22 Eleanor Drive (Mult. Owners)		
County:	Putnam	60% Submission Date:	
Municipality:	Carmel	100% Submission Date:	
Supervisor:	Kenneth Schmitt	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	11/30/2016
Revised Retrofit:		Associated Permits:	NYCDEP LUP
Original P Removal:	4.22	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
Private Installation Complete?	No		



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Carmel-GL-615	Project Status:	Cancelled
Common Name:	Willow Rd		
Watershed:	Lake Gleneida		
Site Owner:	Gary Austin <garyaustin1@yahoo.com>	Design Engineer:	Lawrence Paggi Engineering
Site Address:	6 Willow Rd		
County:	Putnam	60% Submission Date:	
Municipality:	Carmel	100% Submission Date:	
Supervisor:	Kenneth Schmitt	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilization	Associated Permits:	None
Original P Removal:	17.50 kg/yr	Proposed Drainage Area:	17.00 acres
Revised P Removal:	17.54 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? Municipal Installation Complete? Private Installation Complete?



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Carmel-GL-616	Project Status:	Cancelled
Common Name:	Willow Rd East		
Watershed:	Lake Gleneida		
Site Owner:	Gary Austin <garyaustin1@yahoo.com>	Design Engineer:	
Site Address:	6 Willow Rd		
County:	Putnam	60% Submission Date:	
Municipality:	Carmel	100% Submission Date:	
Supervisor:	Kenneth Schmitt	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilization	Associated Permits:	None
Original P Removal:	5.80	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? Municipal Installation Complete? Private Installation Complete?



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	Kent-MB-311B	Project Status:	Closed
Common Name:	NYS Rt 311 & I-84		
Watershed:	Middle Branch		
Site Owner:	Patterson Crossing Realty	Design Engineer:	Insite Engineering
Site Address:	Route 311 & I-84, Kent, NY		
County:	Putnam	60% Submission Date:	6/5/2014
Municipality:	Kent	100% Submission Date:	2/26/2016
Supervisor:	Maureen Fleming	Record Document Rec'd Date:	7/17/2017
Original Proposed Retrofit:	Channel Stabilization, P-1 Pond, P-2 Pond	Field Recon Date:	9/20/2012
Revised Retrofit:	Channel Stabilization, P-1 Pond	Associated Permits:	None
Original P Removal:	13.10 kg/yr	Proposed Drainage Area:	36.40 acres
Revised P Removal:	13.74 kg/yr		
Final P Removal Credit by NYSDEC:	13.74 kg/yr		

Construction Start date: 8/23/2016
Construction Completion date: 12/2/2016

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Kent-MB-601	Project Status:	Design
Common Name:	Montrose Drive		
Watershed:	Middle Branch		
Site Owner:	Town of Kent	Design Engineer:	Lawrence Paggi Engineering
Site Address:	640 NYS Rte 52		
County:	Putnam	60% Submission Date:	
Municipality:	Kent	100% Submission Date:	
Supervisor:	Maureen Fleming	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Multiple Pond	Field Recon Date:	
Revised Retrofit:	Multiple Ponds	Associated Permits:	None
Original P Removal:	20.50 kg/yr	Proposed Drainage Area:	TBD acres
Revised P Removal:	25.56 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? N/A



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EOHWC Year 3 (2012) Project Summary - Interim

Project ID:	Kent-PA-31	Project Status:	Closed
Common Name:	Putnam Stone & Mason Supply		
Watershed:	Croton Falls		
Site Owner:	Formerly Putnam Stone and Mason Supply	Design Engineer:	Insite Engineering
Site Address:	301 Rt 52		
County:	Putnam	60% Submission Date:	
Municipality:	Kent	100% Submission Date:	10/15/2016
Supervisor:	Maureen Fleming	Record Document Rec'd Date:	10/31/2017
Original Proposed Retrofit:	Dry Swale (O-1)	Field Recon Date:	12/14/2011
Revised Retrofit:	Pocket Pond	Associated Permits:	SPDES Construction GP NYSDEC Freshwater Wetland Permit
Original P Removal:	0.87 kg/yr	Proposed Drainage Area:	3.40 acres
Revised P Removal:	4.50 kg/yr		
Final P Removal Credit by NYSDEC:	4.50 kg/yr		

Construction Start date: 5/15/2017
Construction Completion date: 10/31/2017

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	L-CR-28	Project Status:	Closed
Common Name:	Schoolhouse Rd		
Watershed:	Cross River		
Site Owner:	Town of Lewisboro/Private	Design Engineer:	Insite Engineering
Site Address:	123 North Salem Road, Lewisboro, NY		
County:	Westchester	60% Submission Date:	4/22/2014
Municipality:	Lewisboro	100% Submission Date:	8/15/2016
Supervisor:	Peter Parsons	Record Document Rec'd Date:	9/5/2017
Original Proposed Retrofit:	Pocket Wetland	Field Recon Date:	
Revised Retrofit:	Wet ED	Associated Permits:	CPDP Fresh Water Wetland
Original P Removal:	10.38 kg/yr	Proposed Drainage Area:	103.90 acres
Revised P Removal:	4.59 kg/yr		
Final P Removal Credit by NYSDEC:	4.59 kg/yr		

Construction Start date: 4/17/2017
Construction Completion date: 9/5/2017

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	MK-NC-20	Project Status:	Complete
Common Name:	CVS/South Bedford Road		
Watershed:	New Croton		
Site Owner:	Gale Boker, Patricia Boyle, Betty Roemer	Design Engineer:	Rennia Engineering Design
Site Address:	10 South Bedford Road		
County:	Westchester	60% Submission Date:	4/28/2014
Municipality:	Mt. Kisco	100% Submission Date:	6/3/2016
Supervisor:	J. Michael Cindrich	Record Document Rec'd Date:	9/28/2017
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	8/18/2009
Revised Retrofit:	Channel Stabilization	Associated Permits:	None
Original P Removal:	4.23 kg/yr	Proposed Drainage Area:	3.51 acres
Revised P Removal:	8.19 kg/yr		
Final P Removal Credit by NYSDEC:	8.19 kg/yr		

Construction Start date: 9/30/2016
Construction Completion date: 10/26/2016

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	MK-NC-21	Project Status:	Complete
Common Name:	MKMG Satellite Offices		
Watershed:	New Croton		
Site Owner:	IPERS 34S Bedford Road Inc.	Design Engineer:	Rennia Engineering Design
Site Address:	34 So. Bedford Road, Mt. Kisco, NY		
County:	Westchester	60% Submission Date:	4/28/2014
Municipality:	Mt. Kisco	100% Submission Date:	6/3/2016
Supervisor:	J. Michael Cindrich	Record Document Rec'd Date:	9/28/2017
Original Proposed Retrofit:	Bioretention	Field Recon Date:	
Revised Retrofit:	Pocket Wetland	Associated Permits:	Water Quality
Original P Removal:	2.46 kg/yr	Proposed Drainage Area:	3.54 acres
Revised P Removal:	2.66 kg/yr		
Final P Removal Credit by NYSDEC:	2.66 kg/yr		

Construction Start date: 9/30/2016
Construction Completion date: 4/24/2017

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	MK-NC-22	Project Status:	Construction
Common Name:	Leonard Park		
Watershed:	New Croton		
Site Owner:	Village of Mt Kisco	Design Engineer:	Rennia Engineering Design
Site Address:	Leonard Park Parking Area & Tennis Cts.		
County:	Westchester	60% Submission Date:	4/28/2014
Municipality:	Mt. Kisco	100% Submission Date:	7/31/2015
Supervisor:	J. Michael Cindrich	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Bioretention/Wet Pond	Field Recon Date:	
Revised Retrofit:	Bioretention/Surface Sand Filter	Associated Permits:	Stream Disturbance
Original P Removal:	4.80 kg/yr	Proposed Drainage Area:	30.42 acres
Revised P Removal:	8.50 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	MK-NC-601	Project Status:	Concept
Common Name:	Village Hall		
Watershed:	New Croton		
Site Owner:	Multiple owners	Design Engineer:	BY TOWN
Site Address:	104 Main Street		
County:	Westchester	60% Submission Date:	
Municipality:	Mount Kisco	100% Submission Date:	
Supervisor:	J. Michael Cindrich	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Sand Filters	Field Recon Date:	
Revised Retrofit:	Catch Basin Inserts	Associated Permits:	None
Original P Removal:	4.41 kg/yr	Proposed Drainage Area:	4.26 acres
Revised P Removal:	4.45 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? No Municipal Installation Complete? No Private Installation Complete? N/A



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	MK-NC-602	Project Status:	Concept
Common Name:	Mt. Kisco Commons		
Watershed:	New Croton		
Site Owner:	Urban Edge Properties	Design Engineer:	
Site Address:	195 North Bedford Rd		
County:	Westchester	60% Submission Date:	
Municipality:	Mount Kisco	100% Submission Date:	
Supervisor:	J. Michael Cindrich	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	StormBasin	Field Recon Date:	
Revised Retrofit:	Catch Basin Inserts	Associated Permits:	None
Original P Removal:	16.23 kg/yr	Proposed Drainage Area:	9.90 acres
Revised P Removal:	10.76 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	No	Municipal Installation Complete?	No
Private Installation Complete?	No		



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EOHWC Year 5 (2014) Project Summary - Interim

Project ID:	NewC-NCR-33A	Project Status:	Design
Common Name:	Burden Preserve		
Watershed:	New Croton		
Site Owner:	Town of New Castle	Design Engineer:	Municipal Engineer
Site Address:	Harriman Rd/Sheather Rd		
County:	Westchester	60% Submission Date:	
Municipality:	New Castle	100% Submission Date:	4.25.17
Supervisor:	Robert Greenstein	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilization	Associated Permits:	Wetlands Permit E&SC Permit
Original P Removal:	3.11 kg/yr	Proposed Drainage Area:	10.00 acres
Revised P Removal:	9.43 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? N/A



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EOHWC Year 5 (2014) Project Summary - Interim

Project ID:	NewC-NCR-33B	Project Status:	Design
Common Name:	Burden Preserve		
Watershed:	New Croton		
Site Owner:	Town of New Castle	Design Engineer:	Municipal Engineer
Site Address:	Harriman Rd/Sheather Rd		
County:	Westchester	60% Submission Date:	
Municipality:	New Castle	100% Submission Date:	4.25.17
Supervisor:	Robert Greenstein	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilization	Associated Permits:	Wetland Permit E&SC Permit
Original P Removal:	3.11 kg/yr	Proposed Drainage Area:	2.78 acres
Revised P Removal:	4.68 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	Yes
Private Installation Complete?	N/A		



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	NewC-NCR-601	Project Status:	Concept
Common Name:	Sheather Rd		
Watershed:	New Croton		
Site Owner:	Town of New Castle	Design Engineer:	
Site Address:	Burden Preserve		
County:	Westchester	60% Submission Date:	
Municipality:	New Castle	100% Submission Date:	
Supervisor:	Robert Greenstein	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Bank Stabilization	Field Recon Date:	
Revised Retrofit:		Associated Permits:	None
Original P Removal:	24.00	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No Private Installation Complete? N/A



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EOHWC Year 3 (2012) Project Summary - Interim

Project ID:	NS-MU-11	Project Status:	Construction
Common Name:	Route 22 & Route 116		
Watershed:	Muscot		
Site Owner:	NYCDEP	Design Engineer:	O'Brien & Gere
Site Address:	Hardscrabble Rd & Titicus Rd		
County:	Westchester	60% Submission Date:	6/17/2013
Municipality:	North Salem	100% Submission Date:	7/1/2016
Supervisor:	Warren Lucas	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Extended Detention Pond	Field Recon Date:	8/12/2009
Revised Retrofit:	Extended Detention Pond	Associated Permits:	Land Use Permit Perm 33
Original P Removal:	2.00 kg/yr	Proposed Drainage Area:	43.00 acres
Revised P Removal:	5.80 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	NS-MU-601	Project Status:	Concept
Common Name:	Keeler Lane		
Watershed:	Muscot		
Site Owner:	Multiple owners	Design Engineer:	
Site Address:	Multiple addresses		
County:	Westchester	60% Submission Date:	
Municipality:	North Salem	100% Submission Date:	
Supervisor:	Warren Lucas	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilization	Associated Permits:	None
Original P Removal:	17.65	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
		Private Installation Complete?	No



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	NS-MU-602	Project Status:	Concept
Common Name:	Westview Avenue		
Watershed:	Muscot		
Site Owner:	Multiple owners	Design Engineer:	
Site Address:	Multiple addresses		
County:	Westchester	60% Submission Date:	
Municipality:	North Salem	100% Submission Date:	
Supervisor:	Warren Lucas	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:		Associated Permits:	None
Original P Removal:	4.54	Proposed Drainage Area:	5.00 acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
		Private Installation Complete?	No



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	Pat-EB-09-03B	Project Status:	Postponed
Common Name:	Veterans Memorial Park		
Watershed:	East Branch		
Site Owner:	Town of Patterson	Design Engineer:	Lawrence J. Paggi
Site Address:	North Street, Patterson, NY 12563		
County:	Putnam	60% Submission Date:	2/27/2014
Municipality:	Patterson	100% Submission Date:	7/30/2015
Supervisor:	Michael Griffin	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Bioretention	Field Recon Date:	
Revised Retrofit:	Organic Filter (F-4)	Associated Permits:	None
Original P Removal:	1.51 kg/yr	Proposed Drainage Area:	9.40 acres
Revised P Removal:	1.80 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
Private Installation Complete?	N/A		



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Pat-EB-601	Project Status:	Design
Common Name:	Valley Rd		
Watershed:	East Branch		
Site Owner:	Multiple owners	Design Engineer:	KC Engineering
Site Address:	Multiple addresses		
County:	Putnam	60% Submission Date:	
Municipality:	Patterson	100% Submission Date:	
Supervisor:	Richard Williams	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Multiple Ponds	Field Recon Date:	
Revised Retrofit:	Multiple Ponds	Associated Permits:	None
Original P Removal:	19.80 kg/yr	Proposed Drainage Area:	96.40 acres
Revised P Removal:	19.80 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Pat-EB-602	Project Status:	Design
Common Name:	Dayton Rd		
Watershed:	East Branch		
Site Owner:	Town of Patterson	Design Engineer:	Lawrence Paggi Engineering
Site Address:	Dayton Rd		
County:	Putnam	60% Submission Date:	
Municipality:	Patterson	100% Submission Date:	
Supervisor:	Richard Williams	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilisation	Associated Permits:	None
Original P Removal:	11.63 kg/yr	Proposed Drainage Area:	N/A acres
Revised P Removal:	11.63 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No



EAST OF HUDSON WATERSHED CORPORATION

2 NYS Route 164
Patterson, NY 12563
Tel: 845-319-6349
Fax: 845-319-6391

Print Date: January 5, 2018
Prepared by: Kevin Fitzpatrick, PE
Checked by: _____

EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Pat-EB-603	Project Status:	Design
Common Name:	Lost Lake		
Watershed:	East Branch		
Site Owner:	Lost Lake, Inc.	Design Engineer:	KC Engineering
Site Address:			
County:	Putnam	60% Submission Date:	
Municipality:	Patterson	100% Submission Date:	
Supervisor:	Richard Williams	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:	Channel Stabilization	Associated Permits:	None
Original P Removal:	14.60	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	PR-CR-601	Project Status:	Concept
Common Name:	Cross Rd		
Watershed:	Cross River		
Site Owner:		Design Engineer:	
Site Address:	Cross Rd and Route 121		
County:	Westchester	60% Submission Date:	
Municipality:	Pound Ridge	100% Submission Date:	
Supervisor:	Richard Lyman	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Bank Stabilization	Field Recon Date:	
Revised Retrofit:		Associated Permits:	None
Original P Removal:	21.30	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
Private Installation Complete?	No		



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EOHWC Year 2 (2011) Project Summary - Interim

Project ID:	SE-DI-03	Project Status:	Construction
Common Name:	Lincoln Rd		
Watershed:	Middle Branch		
Site Owner:	Unknown	Design Engineer:	Municipal Engineer
Site Address:	Lincoln Rd		
County:	Putnam	60% Submission Date:	By Town
Municipality:	Southeast	100% Submission Date:	By Town
Supervisor:	Tony Hay	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Hydrodynamic Separator and Outfall Stabilization	Field Recon Date:	10/4/2010
Revised Retrofit:	Hydrodynamic Separator and Outfall Stabilization	Associated Permits:	None
Original P Removal:	1.32 kg/yr	Proposed Drainage Area:	10.30 acres
Revised P Removal:	1.30 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: By Town
Construction Completion date: By Town

Agreements:

Municipal Reimbursement Complete? By Town Municipal Installation Complete? By Town Private Installation Complete? By Town



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	SE-DI-601	Project Status:	Concept
Common Name:	Brewster Hill Road		
Watershed:	Diverting		
Site Owner:	NYCDEP	Design Engineer:	
Site Address:	Brewster Hill Rd		
County:	Putnam	60% Submission Date:	
Municipality:	Southeast	100% Submission Date:	
Supervisor:	Tony Hay	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Pocket Pond	Field Recon Date:	
Revised Retrofit:	Catch Basin Inserts	Associated Permits:	None
Original P Removal:	5.18 kg/yr	Proposed Drainage Area:	N/A acres
Revised P Removal:	3.09 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
Private Installation Complete?	No		



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	SE-DI-602	Project Status:	Concept
Common Name:	Route 22 Outfall		
Watershed:	Diverting		
Site Owner:	Multiple owners	Design Engineer:	
Site Address:	963 Route 22		
County:	Putnam	60% Submission Date:	
Municipality:	Southeast	100% Submission Date:	
Supervisor:	Tony Hay	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:		Associated Permits:	None
Original P Removal:	29.69	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
Private Installation Complete?	No		



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EOHWC Year 2 (2011) Project Summary - Interim

Project ID:	SE-POT-02	Project Status:	Construction
Common Name:	Brewster Heights		
Watershed:	Middle Branch		
Site Owner:	Town/Private	Design Engineer:	Municipal Engineer
Site Address:	Bloomer Rd & 2350 Rt 6		
County:	Putnam	60% Submission Date:	By Town
Municipality:	Southeast	100% Submission Date:	By Town
Supervisor:	Tony Hay	Record Document Rec'd Date:	TBD
Original Proposed Retrofit:	Hydrodynamic Separators	Field Recon Date:	
Revised Retrofit:	Multiple Channel Stabilization	Associated Permits:	None
Original P Removal:	15.51 kg/yr	Proposed Drainage Area:	58.90 acres
Revised P Removal:	67.60 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? Yes



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EOHWC Year 5 (2014) Project Summary - Interim

Project ID:	S-MU-33	Project Status:	Complete
Common Name:	Van Tassell Memorial Park		
Watershed:	Muscoot		
Site Owner:	Town of Somers	Design Engineer:	Rennia Engineering Design
Site Address:	Van Tassell Memorial Park		
County:	Westchester	60% Submission Date:	
Municipality:	Somers	100% Submission Date:	8/10/2016
Supervisor:	Rick Morrissey	Record Document Rec'd Date:	11/10/2017
Original Proposed Retrofit:	Porous Pavement/Infiltration	Field Recon Date:	10/8/2012
Revised Retrofit:	Infiltration Basin	Associated Permits:	None
Original P Removal:	1.98 kg/yr	Proposed Drainage Area:	1.20 acres
Revised P Removal:	2.93 kg/yr		
Final P Removal Credit by NYSDEC:	2.93 kg/yr		

Construction Start date: 10/15/2016
Construction Completion date: 11/10/2017

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? Yes Private Installation Complete? N/A



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	S-MU-601	Project Status:	Cancelled
Common Name:	Lakeview Drive		
Watershed:	Muscoot		
Site Owner:	Multiple owners	Design Engineer:	N/A
Site Address:	2 Lakeview Drive		
County:	Westchester	60% Submission Date:	
Municipality:	Somers	100% Submission Date:	
Supervisor:	Rick Morrissey	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization	Field Recon Date:	
Revised Retrofit:		Associated Permits:	None
Original P Removal:	7.57	Proposed Drainage Area:	N/A acres
Revised P Removal:	N/A		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	Municipal Installation Complete?	Private Installation Complete?	



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Y-MU-601	Project Status:	Design
Common Name:	Front Street		
Watershed:	Muscot		
Site Owner:	Town of Yorktown	Design Engineer:	Diverka & Bartillucci
Site Address:	1785 Front Street		
County:	Westchester	60% Submission Date:	
Municipality:	Yorktown	100% Submission Date:	
Supervisor:	Michael Grace	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Pocket Wetland	Field Recon Date:	
Revised Retrofit:	Wetland System	Associated Permits:	None
Original P Removal:	27.38 kg/yr	Proposed Drainage Area:	82.50 acres
Revised P Removal:	7.91 kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		

Construction Start date: TBD
Construction Completion date: TBD

Agreements:

Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No



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EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Y-MU-602	Project Status:	Design
Common Name:	Junior Lake		
Watershed:	Muscoot		
Site Owner:	Town of Yorktown	Design Engineer:	
Site Address:	Haylan Rd and Edgewater St		
County:	Westchester	60% Submission Date:	
Municipality:	Yorktown	100% Submission Date:	
Supervisor:	Michael Grace	Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Surface Sand Filters	Field Recon Date:	
Revised Retrofit:	Subsurface Infiltration	Associated Permits:	None
Original P Removal:	5.30 kg/yr	Proposed Drainage Area:	44.60 acres
Revised P Removal:	TBD kg/yr		
Final P Removal Credit by NYSDEC:	TBD kg/yr		
Construction Start date:	TBD		
Construction Completion date:	TBD		
Agreements:			
Municipal Reimbursement Complete?	N/A	Municipal Installation Complete?	No
Private Installation Complete?	No		