

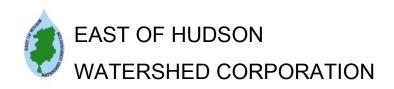
# EAST OF HUDSON WATERSHED CORPORATION

# 2019 ANNUAL REPORT



Pocket Wetland, Ryan Memorial Park, Kent, New York

Date: March 2020



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# **Appendices**

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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), Year 6(2017), Year 7 (2018), and Year 8 (2019).

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 2019 were:

- 1. Director of Engineering: Kevin Fitzpatrick, P.E. (Start Date: March 4, 2013)
- 2. Comptroller: Joanne Tavino (Start date: August 12, 2014)
- 3. Office Manager: Linda Matera (Start Date: September 29, 2014)

The Board Members which served through 2019 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: Gina Picinich

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: James Schmitt

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: Kevin Hansan

17. Town of Somers: Rick Morrissey

18. Town of Southeast: Tony Hay

19. Town of Yorktown: Ilan Gilbert

#### 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 8 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.





Organic Filter Construction: Pat-EB-09-03B

**Channel Stabilization: Pat-EB-603** 

The Year 8 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 2018-2021, 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 8.

#### 4. STORMWATER RETROFIT PLAN SUMMARY

The NYSDEC has confirmed and approved the completion of projects totaling 566.4

kg/yr of phosphorus removal. The Actual Phosphorus Reduction for Years 1 and 2 is based on documentation provided by the individual municipalities to EOHWC, and submitted 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 have been updated as Year 2 projects are completed by the



Typical catch basin filter unit

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 2019 can be found within this section.

Table 1: Stormwater Retrofit Program Summary

	Ten Year		Actual P	hospho	rus Red	uction	(kg/vr)		Estimated Phosphorus Reducti					Estimated To	tals (kg/yr) (1)
MS4	Phosphorus Reduction Requirement (kg/yr)	Year 1		Year 3				Year 7	Year 4 (1)		(kg/yr) Year 6 (1)		Year 8 (1)	Total Reduction	Remaining Reduction Requirement
Bedford	64.4	9.11	7.29	5.34	3.65	11.29	-	-		-	-	1.99	-	38.7	25.7
Brewster	18.4	-	-	83.60			-	-	-	-	-	-	-	83.6	0.0
Carmel	144.0	3.68	7.52	14.44	3.00	1-	-	-	- 11	-	4.22	10.86	11.57	43.7	100.3
Cortlandt	23.2	-		3.20					-				-	3.2	20.0
Kent	67.2	9.56	4.67	14.50	13.74		7.23	16.10	-		35.75	0.00	23.08	101.6	0.0
Lewisboro	71.0	4.03	-	-	22.89	3.60			-			6.80	31.21	37.3	33.7
Mount Kisco	37.4	0.81	-	-	10.85	-	-		8.50		20.64		-	40.8	0.0
New Castle	50.2	-	-	-		-	-	-	211	14.11	33.00	23.30	23.3	70.4	0.0
North Castle	2.0	-	-	-	-	-	-	-	-	٠	•	-	-	0.0	2.0
North Salem	38.2	-	7.12	-	9.80	10.91				٠	31.40	10.38	-	69.6	0.0
Patterson	34.4	3.31	1.62	10.36		4.38			1.80	٠	46.03	7.63	-	75.1	0.0
Pound Ridge	19.0	-	-	-	-	-	-	-	-	٠	1.45	3.70	-	5.2	13.9
Putnam Valley	2.0	-	7.90	-					-	٠			-	7.9	0.0
Town of Pawling	7.0	-	1.75	-	-	5.31	-	-		٠	-	4.66	-	11.7	0.0
Village of Pawlin	8.6	-	0.03	-					-			9.10	-	9.1	0.0
Somers	100.0	10.41	1.45	15.97	24.20	2.93	-	8.78	-	-	-	0.00	-	63.7	36.3
Southeast	62.2	8.83	80.87	21.33	-	-	-	-			5.59	9.14	40.46	125.8	0.0
Yorktown	108.0	0.07		19.84						٠	7.91			27.8	80.2
Putnam County	61.8	1.86		20.38	5.45			21.44		٠	٠		5.12	49.1	12.7
Total	919.0	51.67	120.22	208.96	93.58	38.42	7.23	46.32	10.30	14.11	185.99	87.56	134.74	999.09	0.0

#### Table Notes:

- (1) The above table reflects an accepted phosphorus reduction of 566.4 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.

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

- 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-701 (NYCDEP Commuter Lot – Year 7) –** Located in the Town of Bedford, the proposed SRP includes the installation of catch basin inserts on NYCDEP property. This project is currently in design and construction is expected to be completed in early 2020.

**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. This project is currently in design and construction is expected to be completed in early 2020.

**Carmel-CF-701 (Putnam County Hospital Center – Year 7)** – Located in the Town of Carmel, the proposed SRP includes the installation of catch basin inserts on private property. This project is currently inactive due to owner being non-responsive.

Carmel-CF-703 (Woodland Trail – Year 7) – Located in the Town of Carmel, the proposed SRP includes the stabilization of a classified stream, along with the installation of a filter chamber. The installation will take place within the Town right of way and on private property. The project is in design and is expected to go to construction in 2020.

Carmel-CF-801 (Fulmar Road Elementary – Year 8) – Located in the Town of Carmel, the proposed SRP includes the installation of a bioretention cell on School property in the Mahopac Central School District. The project is fully designed and is expected to go to construction in the summer of 2020.

Carmel-CF-802 (Fulmar Road Elementary – Year 8) – Located in the Town of Carmel, the proposed SRP includes the installation of a bioretention cell on School

property in the Mahopac Central School District. The project is fully designed and is expected to go to construction in the summer of 2020.

**Carmel-GL-815 (Ridge Rd – Year 8)** – Located in the Town of Carmel, the proposed SRP includes the installation of a filter chamber within the public right of way. The project is in design and is expected to be constructed in 2020.

**Kent-BC-830 (Rambler Rd – Year 8)** – Located in the Town of Kent, the proposed SRP includes the installation of a filter chamber within the public right of way. The project is in design and is expected to be constructed in 2020.

Kent-CF-845 (Palmer Lake - Year 8) - Located in the Town of Kent, the proposed

SRP includes the installation of subsurface infiltration on private property at the Lakeview Church Community parking lot. The project is being reevaluated for a new retrofit practice, and is expected to be constructed in 2020.

**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 construction and is expected to be completed in early 2020.

**Kent-MB-602 (Haviland Rd Outfall – Year 6) –** Located in the Town of Kent, the proposed SRP includes the construction of a pocket wetland and channel stabilization on Town property. This project was completed in 2019.

**L-CR-701** (Lewisboro Elementary School – Year 7) – Located in the Town of Lewisboro, the proposed SRP includes the installation of bioretention cells on school property. The project is currently in design and is expected to complete construction in 2020.

**L-CR-803 (Lewisboro Town Park – Year 8)** – Located in the Town of Lewisboro, the proposed SRP includes the installation of subsurface infiltration on town property. The project is currently in design and is expected to complete construction in 2020.

**L-CR-805 (Salem Hill Road – Year 8) –** Located in the Town of Lewisboro, the proposed SRP includes the installation of a filter chamber on town property. The project is currently in design and is expected to complete construction in 2020.

**L-MU-715 (Goldens Bridge Train Station – Year 7) –** Located in the Town of Lewisboro, the proposed SRP includes the installation of catch basin inserts on NYCDEP property. The project is currently in design and expected to go to construction in early 2020.

**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 2020.

**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-2020.

**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 has been awarded and will be completed in mid-2020.

**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 2020.

**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 2020.

**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-701 (Chappaqua Crossings – Year 7) –** Located in the Town of Chappaqua, the proposed SRP includes the installation of various green infrastructure techniques within a new commercial development. All items are being installed to reduce the phosphorus loading on the site from the existing conditions. Construction was complete in 2019.

**NewC-NCR-801 (Courmel Rd – Year 8)** – Located in the Town of New Castle, the proposed SRP is for the stabilization of two heavily eroded channels on NYCDEP property, with installation of filter chambers to address water quality. The project is currently in design and is expected to be constructed in 2021.

**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 in the design phase and construction is estimated to occur in 2020.

**NS-MU-701 (Croton Falls Train Station – Year 7)** – Located in the Town of North Salem, the project involves the installation of catch basin inserts on NYCDEP property. The project is currently in design and expected to go to construction in early 2020.

**NS-MU-702** (Purdys' Train Station – Year 7) – Located in the Town of North Salem, the project involves the installation of catch basin inserts on NYCDEP property. The project is currently in design and expected to go to construction in early 2020.

**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 began in 2019, to be completed in 2020.

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 2021.

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 construction and will be completed in 2020.

**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 construction and is expected to be completed in 2020.

Pat-EB-701 (Patterson Train Station – Year 7) – Located in the Town of Patterson, the project involves the installation of catch basin inserts on municipal and MTA property. The project is currently in design and expected to go to construction in early 2020.

**PC-MB-701 (Tilly Foster Farm – Year 7)** – Located in the Town of Carmel, on Putnam County property, the proposed SRP is for the stabilization of an eroded channel and installation of a wet extended detention pond. The project has completed construction in 2019.

**PR-CR-601 (Cross Rd – Year 6) –** Located in the Town of Pound Ridge, the proposed SRP is for the installation of infiltration trenches within the right of way. The project is in design and will be constructed in 2020.

**PR-CR-701 (Parkview Drive – Year 7)** – Located in the Village of Pound Ridge, the proposed project is for the stabilization of an eroded channel on private property. The project is currently in design and is expected to be constructed in 2020.

**PR-CR-702 (Dingee Rd – Year 7)** – Located in the Village of Pound Ridge, the proposed project is for the stabilization of an eroded channel on private property. The project is currently in design and is expected to be constructed in 2020.

- **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 was completed in 2019.
- **SE-DI-601 (Brewster Hill Rd Year 6)** Located in the Town of Southeast, the proposed retrofit originally called for the installation of a pocket pond system on NYCDEP property. It has been revised to provide a filter chamber installation on a commercial private property. The project is in the design phase and is expected to be constructed in 2020.
- **SE-DI-701 (Southeast Train Station Year 7) –** Located in the Town of Southeast, the proposed retrofit is for the installation of catch basin inserts on MTA property. The project is in design and is expected to go to construction in 2020.
- **SE-EB-715 (Scolpino Park Year 7) –** Located in the Town of Southeast, the proposed SRP is for the installation of various surface sand filters within a Town park. The project will go to design and construction in 2020.
- **SE-DI-815** (Eagle's Ridge Subdivision Year 8) Located in the Town of Southeast, the project involves stabilization of heavily eroded channels and the installation of water quality treatment components (Wet ED Pond) on private property to treat runoff from the existing subdivision. The project is in design and construction is expected in 2021.
- **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. The pretreatment method was revised to include catch basin inserts in lieu of an HDS unit. This project completed construction in 2019.
- **S-MU-701 (Lake Shenorock Year 7)** Located in the Town of Somers, the proposed retrofit is for the stabilization of various outfalls and installation of HDS units at several locations around Lake Shenorock. This project completed construction in 2019.
- **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 2020.

#### 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 five 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): \$26.5 million
- 3. Westchester County from 1997 Memorandum of Agreement (MOA): \$10 million
- 4. Putnam County from 1997 Memorandum of Agreement (MOA): \$8.2 million
- 5. NYCDEP from 2018 Filtration Avoidance Determination (FAD):\$22 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.

On December 28, 2017, the New York State Department of Health issued the 2017 New York City Filtration Determination which requires, among other things, that NYC DEP:

"Execute and register a contract or contract amendment with the EOH Watershed Corporation to provide \$22 million to support the design and construction of stormwater retrofits int the EOH FAD Basins and in basins upstream and hydrologically connected to the Croton Falls Reservoir. A total of \$7 million shall be specifically committed to support stormwater retrofits within EOH FAD basins and \$15 million shall be specifically committed to support stormwater retrofits within the basis upstream and hydrologically connected to the Croton Falls Reservoir or within EOH FAD basins."

On January 18, 2019 a new contract for the above referenced \$22 million was signed between NYC DEP and East of Hudson Watershed Corp. On August 15, 2019 the initial payment of \$15 million was received and deposited to the FAD bank account. \$2.4 million was then transferred to the operating account to reimburse WQIP funds for dollars spent so far on FAD projects from 1/1/2017 through August 15, 2019. Of the \$22 million contracted, the remaining \$7 million will be invoiced to NYC DEP once there are \$7 million in committed (signed) contracts within the four FAD basins.

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 2A and 2B. 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 2A: Total Expenditures (2019)

Expense Type	Amount
General Administration	\$ 439,150 (25.6%)
Project Administration	\$ 88,812 ( 5.2%)
O&M	\$ 151,977 ( 8.9%)
Design	\$ 192,562 (11.3%)
Construction	\$ 837,547 (49.0%)
TOTAL	\$ 1,710,048

Table 2B: Total Expenditures (2012 thru 2019)

Expense Type	Amount
General Administration	\$ 3,451,594 (10.3%)
Project Administration	\$ 1,016,555 ( 3.0%)
O&M	\$ 445,222 ( 1.3%)
Design	\$ 4,887,663 (14.5%)
Construction	\$ 23,898,617 (70.9%)
TOTAL	\$ 33,699,651

Table 3 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. WQIP funds in the amount of \$2.4 million were used to fund FAD projects prior to receipt of new FAD funding and were replenished upon receipt of the \$15 million in August 2019.

Table 3: Fund Summary (2012-2019)

Table 6: Faria Carrillary (2012 2	 <u> </u>				
	EOHWC Funds				
Source Fund	Received		Expenses	F	Remaining
Putnam County MOA	\$ 7,773,796	(\$	4,629,942)	\$ :	3,143,854
Westchester County MOA	\$ 10,000,000	(\$	5,274,644)	\$ 4	4,725,356
DEP Funding Agreement (WSP)	\$ 15,500,000	(\$	15,500,000)	\$	0
DEP Funding Agreement (FAD)	\$ 19,500,000	(\$	7,398,935)	\$ 1	2,101,065
Non-SRP and Rental Income	\$ 457,230	(\$	457,230)	\$	0
O&M Bubble Compliance	\$ 445,222	(\$	445,222)	\$	0
Interest Earnings	\$ 335,209	(\$	6,702)	\$	328,507
Adjust for Receivables/Payables		\$	23,353	\$	23,353
Totals	\$ 54,011,457	(\$	33,689,322)	\$ 2	20,322,135

The target SRP efficiency, based on available funding of \$38.2 million and a phosphorus removal requirement of 459.5 kg, for the first 5-years of the program was 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 EOHWC intends to maintain this project efficiency for the remainder of the program.

Funding for all Operations and Maintenance (O&M) activities within Putnam and Dutchess Counties come from the member municipalities as part of the O&M Agreement accepted by all MS4s. Each MS4 is responsible for their share of O&M costs as defined by the agreement, and no project funding is used for maintenance. The EOHWC entered into an agreement on August 13, 2019 with Westchester County to utilize \$750,000 from earnings on the EOH QIP funds for eligible operations and maintenance costs and expenses for Eligible projects. The county shall disburse, on an annual basis, for member municipalities within Westchester county, reimbursement based upon actual costs submitted.

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 10-Year Stormwater Retrofit Program. Completion of all projects from the first 5-year work plan will amount to approximately 537 kg/yr of phosphorus removal from the NYCDEP Watershed.

The EOHWC has started work on Year 9 of the Stormwater Retrofit Program in the beginning of the year 2020. 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. The flexibility of project selection at this junction can allow the EOHWC to concentrate on construction

efforts at the conclusion of the program, and limit any open design contracts that are pursued.

#### 6.2 **Program Requirements and Funding for Years 6-10**

The Federal and State Grant programs will be researched and pursued annually to support any funding sources which the EOHW 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. New approaches may not be limited to product selection, but also include expansion of existing site development plans to incorporate a phosphorus reduction element to further advance the pollution reduction initiative.



# EAST OF HUDSON WATERSHED CORPORATION

# Appendix A: ABO Budget



# EAST OF HUDSON WATERSHED CORPORATION BUDGET AND FINANCIAL PLAN

WATER							Actual							_	Budget	Т	otal Since
		2012		2013		2014	2015	2016	2017		2018		2019		2020		ion thru <b>2020</b>
FINANCIAL SOURCES																	
NYC DEP		-	\$1	0,000,000	\$	4,500,000	\$ 5,500,000	-	-		-	\$ :	15,000,000		-	\$ 35	,000,000
Interest	\$	23,555		32,757		15,730	6,524	\$ 5,229	\$ 40,271	\$	96,244		114,895	\$	200,000	\$	535,205
O&M Bubble Compliance		-		-		-	-	64,494	107,341		121,410		151,977		175,000	\$	620,222
Putnam County IDA Rent											1,250		3,000		3,000	\$	7,250
Putnam/Westchester Funds	1	7,773,796		-		-	-	-	-		-		-		83,800	\$ 17	,857,596
Non-SRP Fund Reimbursement		-		70,000		-	122,620	-	-		-		-		-	\$	192,620
TOTAL FINANCIAL SOURCES	\$1	7,797,351	\$1	0,102,757	\$	4,515,730	\$ 5,629,144	\$ 69,723	\$ 147,612	\$	218,904	\$ :	15,269,872	\$	461,800	\$ 54	,212,894
EXPENDITURES																	
Compensation (Salaries plus Hea	alth I	Insurance a	nd P	R Tax expe	nse	)											
Exec Dir/Dir of Engineering			\$	73,481		91,709	104,885	133,482	135,416		139,341		145,391		148,494	\$	972,200
Project Engineer/Watershed plan	ner					-	64,594	115,904	60,126		-		-		72,777		313,402
Comptroller						30,686	98,712	90,909	92,899		104,275		108,465		110,598		636,545
Accounts Payable Coordinator						3,648	18,334	28,121	28,020		10,270		-		-		88,394
Records Management Coordinat	or					3,648	22,578	37,353	36,767		-		-		-		100,347
Office Manager				18,396		60,000	28,620	-	-		44,688		59,808		63,966		275,477
Intern													-		-		-
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	\$	298,574	\$	313,664	\$	395,835	\$ 2	2,965,494
Project costs	\$	1,747,238	\$1	0,341,709	\$	7,714,170	\$ 2,582,642	\$ 2,122,912	\$ 1,671,886	\$2	2,195,594	\$	1,193,412	\$	8,695,000	\$ 38	3,264,563
Other Expenditures	\$	147,017	\$	164,114	\$	224,732	\$ 223,538	\$ 188,596	\$ 208,261	\$	201,199	\$	202,972	\$	208,200	\$ :	,768,629
TOTAL EXPENDITURES	\$	2,050,422	\$1	0,835,206	\$	8,314,050	\$ 3,143,903	\$ 2,717,279	\$ 2,233,376	\$2	2,695,367	\$	1,710,048	\$	9,299,035	\$ 42	2,998,686

Cumulative excess (deficiency) of financial sources over expenditures

\$ 11,214,208

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



# EAST OF HUDSON WATERSHED CORPORATION

# Appendix B: EOHWC Project Data Sheets for Year 8

As submitted February 2020 to the NYSDEC



Agreements:

Tel: 845-319-6349

Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

No

Private Installation Complete? No

EOHWC Year 7(2018) Project Summary - Interim

Municipal Reimbursement Complete? N/A Municipal Installation Complete?

	1/	i reject Carrinary					
Project ID:	B-MU-70	)1	Project Status:	Design			
Common Name:	NYCDEF	Commuter Lot					
Watershed:	Muscoot						
Site Owner:	NYCDEF		Design Engineer:	KC Engineering			
Site Address:	Woods B	ridge Rd					
County:	Westche	ster	60% Submission Date:				
Municipality:	Bedford		100% Submission Date:	e: TBD			
Supervisor:	Chris Bu	dick	Record Document Rec'd Date: N/A				
Original Proposed Retrofit:	Catch Ba	sin Inserts	Field Recon Date:				
Revised Retrofit:	Catch Ba	sin Inserts	Associated Permits:	NYCDEP LUP			
Original P Removal:	3.58	kg/yr	Proposed Drainage Area:	2.08	acres		
Revised P Removal:	1.99	kg/yr					
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start da Construction Comple		TBD TBD					



Municipal Reimbursement Complete? N/A

Tel: 845-319-6349

Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Private Installation Complete? No

Checked by:

EOHWC Year 6(2017) Project Summary - Interim

	-1/	r roject Gammary	micomin				
Project ID:	Carmel-C	F-601	Project Status:	Design			
Common Name:	Eleanor D	rive					
Watershed:	Croton Fa	lls					
Site Owner:	Multiple ov	wners	Design Engineer:	KC Engineering			
Site Address:	22 Eleano	r Drive (Mult. Owners)					
County:	Putnam		60% Submission Date:	60% Submission Date: 6/11/2019			
Municipality:	Carmel		100% Submission Date:				
Supervisor:	Kenneth S	Schmitt	Record Document Rec'd Date:	N/A			
Original Proposed Retrofit:	Channel S	Stabilization	Field Recon Date:	11/30/2016	5		
Revised Retrofit:	Channel S	Stabilization	Associated Permits:	NYCDEP LUP			
Original P Removal:	4.22	kg/yr	Proposed Drainage Area:	11.79	acres		
Revised P Removal:	6.27	kg/yr					
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start da Construction Comple		TBD TBD					
Agreements:							

Municipal Installation Complete?

No



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

Project ID:	Carmel-CI	F-701	Project Status:	Concept					
Common Name:	Putnam Co	ounty Hospital Center							
Watershed:	Croton Fall	ls							
Site Owner:	Putnam Co	ounty Hospital	Design Engineer:						
Site Address:	670 Stonel	eigh Ave							
County:	Putnam		60% Submission Date:						
Municipality:	Carmel		100% Submission Date:						
Supervisor:	Kenneth S	chmitt	Record Document Rec'd Date: N/A						
Original Proposed Retrofit:	Catch Basi	n Inserts	Field Recon Date:						
Revised Retrofit:	Catch Basi	n Inserts	Associated Permits:	None					
Original P Removal:	5.45	kg/yr	Proposed Drainage Area:	5.50 acres					
Revised P Removal:	5.45	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									



Municipal Reimbursement Complete? N/A

Tel: 845-319-6349

Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Private Installation Complete? No

Checked by:

### EOHWC Year 7(2018) Project Summary - Interim

LOTTIO TOUT	7(2010)	T TOJECT Summary	- IIICEI IIII		
Project ID:	Carmel-	CF-703	Project Status:	Design	
Common Name:	Woodlan	d Trail			
Watershed:	Croton F	alls			
Site Owner:	Multiple o	owners	Design Engineer:	P&D Consultin	ng Engineers, P.C.
Site Address:	Woodlan	d Trail			
County:	Putnam		60% Submission Date:		
Municipality:	Carmel		100% Submission Date:		
Supervisor:	Kenneth	Schmitt	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Stormfilte Stabilizat	er, Channel tion	Field Recon Date:	6/1/2018	
Revised Retrofit:	Channel Chamber	Stabilization and Filter	Associated Permits:	Protection	of Waters
Original P Removal:	32.80	kg/yr	Proposed Drainage Area:	4.20	acres
Revised P Removal:	32.80	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start da Construction Comple		TBD TBD			
Constitution Comple					
Agreements:					

Municipal Installation Complete?

No



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

	9(=0:0)	10,0	ot Gaiiiiiai y	111011111			
Project ID:	Carmel-Cl	-801		Project Status:		Design	
Common Name:	Fulmar Rd	Ele. S	chool (A)				
Watershed:	Croton Fal	s					
Site Owner:	Mahopac C	entral	School District	Design Engine	er:		
Site Address:	55 Fulmar	Rd					
County:	Putnam			60% Submission	on Date:		
Municipality:	Carmel			100% Submiss	ion Date:	6/11/2014	
Supervisor:	Kenneth S	chmitt		Record Document	Rec'd Date:	N/A	
Original Proposed Retrofit:	Bioretentio	n		Field Recon Da	ate:		
Revised Retrofit:	Bioretentio	n		Associated Per	mits:	None	
Original P Removal:	1.07	kg/yr		Proposed Drain	nage Area:	3.35	acres
Revised P Removal:	1.07	kg/yr					
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start da Construction Complete		TBD TBD					
Agreements: Municipal Reimbursem	nent Complete?	N/A	Municipal Installat	ion Complete?	No Pri	vate Installation	Complete? No



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

Project ID: Carmel-CF-802  Common Name: Fulmar Rd Ele. School (B)  Watershed: Croton Falls Site Owner: Mahopac Central School District Site Address: 55 Fulmar Rd  County: Putnam 60% Submission Date:  Municipality: Carmel 100% Submission Date: 6/11/2014 Supervisor: Kenneth Schmitt Record Document Rec'd Date: N/A  Original Proposed Retrofit: Bioretention Field Recon Date:  Revised Retrofit: Bioretention Associated Permits: None  Original P Removal: 1.54 kg/yr  Final P Removal: 1.54 kg/yr  Final P Removal: TBD kg/yr	2011110		initially interior	
Watershed: Croton Falls Site Owner: Mahopac Central School District Site Address: 55 Fulmar Rd  County: Putnam 60% Submission Date: Municipality: Carmel 100% Submission Date: 6/11/2014 Supervisor: Kenneth Schmitt Record Document Rec'd Date: N/A  Original Proposed Retrofit: Bioretention Field Recon Date:  Revised Retrofit: Bioretention Associated Permits:  Original P Removal: 1.54 kg/yr Final P Removal TRD kg/yr  Final P Removal TRD kg/yr	Project ID:	Carmel-CF-802	Project Status:	Design
Site Owner: Mahopac Central School District Site Address: 55 Fulmar Rd  County: Putnam 60% Submission Date: Municipality: Carmel 100% Submission Date: 6/11/2014 Supervisor: Kenneth Schmitt Record Document Rec'd Date: N/A  Original Proposed Retrofit: Bioretention Field Recon Date:  Revised Retrofit: Bioretention Associated Permits:  Original P Removal: 1.54 kg/yr  Final P Removal TRD kg/yr  TRD kg/yr	Common Name:	Fulmar Rd Ele. School (F	B)	
Site Address: 55 Fulmar Rd  County: Putnam 60% Submission Date:  Municipality: Carmel 100% Submission Date: 6/11/2014  Supervisor: Kenneth Schmitt Record Document Rec'd Date: N/A  Original Proposed Retrofit: Bioretention Field Recon Date:  Revised Retrofit: Bioretention Associated Permits: None  Original P Removal: 1.54 kg/yr  Revised P Removal: 1.54 kg/yr  Final P Removal TRD kg/yr	Watershed:	Croton Falls		
County: Putnam  60% Submission Date:  Municipality: Carmel  Supervisor: Kenneth Schmitt  Original Proposed Retrofit:  Revised Retrofit: Bioretention  Driginal P Removal: 1.54 kg/yr  Revised P Removal: 1.54 kg/yr  Final P Removal  TRD  Revised Retrofit: 60% Submission Date:  60% Submission Date:  6/11/2014  Record Document Rec'd Date: N/A  Field Recon Date:  None  Proposed Prainage Area: 3.26 acres  Revised P Removal: 1.54 kg/yr  Final P Removal  TRD  Revised P Removal  TRD  Revised P Removal	Site Owner:	Mahopac Central School	District Design Engineer:	
Municipality: Carmel 100% Submission Date: 6/11/2014 Supervisor: Kenneth Schmitt Record Document Rec'd Date: N/A  Original Proposed Retrofit: Bioretention Field Recon Date:  Revised Retrofit: Bioretention Associated Permits:  Original P Removal: 1.54 kg/yr Proposed Drainage Area: 3.26 acres  Revised P Removal: 1.54 kg/yr  Final P Removal TRD kg/yr	Site Address:	55 Fulmar Rd		
Supervisor: Kenneth Schmitt  Original Proposed Retrofit:  Revised Retrofit:  Bioretention  Associated Permits:  Original P Removal:  1.54 kg/yr  Revised P Removal:  Final P Removal  TRD  Record Document Rec'd Date:  N/A  Field Recon Date:  None  Proposed Permits:  Proposed Drainage Area:  3.26 acres	County:	Putnam	60% Submission Date:	
Original Proposed Retrofit:  Revised Retrofit:  Bioretention  Associated Permits:  Original P Removal:  1.54 kg/yr  Revised P Removal:  1.54 kg/yr  Final P Removal  TRD kg/yr	Municipality:	Carmel	100% Submission Date:	6/11/2014
Retrofit:  Revised Retrofit:  Bioretention  Associated Permits:  Original P Removal:  Revised P Removal:  1.54 kg/yr  Revised P Removal:  TRD kg/yr	Supervisor:	Kenneth Schmitt	Record Document Rec'd Date:	N/A
Revised Retrofit: Bioretention Associated Permits:  Original P Removal: 1.54 kg/yr Proposed Drainage Area: 3.26 acres  Revised P Removal: 1.54 kg/yr  Final P Removal TRD kg/yr	•	Bioretention	Field Recon Date:	
Revised P Removal: 1.54 kg/yr  Final P Removal TRD kg/yr	Revised Retrofit:	Bioretention	Associated Permits:	None
Revised P Removal: 1.54 kg/yr Final P Removal TRD kg/yr	Original P Removal:	1.54 kg/yr	Proposed Drainage Area:	3.26 acres
IBI) Vd/Vr	Revised P Removal:			
		TBD kg/yr		
Construction Start date: TBD Construction Completion date: TBD	-			
Agreements:  Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete?				



Print Date: January 30, 2020

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Checked by:

armel-GL-815 idge Rd lenieda		Project Status:	Design	
lenieda				
armel		Design Engineer:	P&D Consultin	g Engineers, P.C
idge Rd/Fowler Ave				
utnam		60% Submission Date:		
armel		100% Submission Date:		
enneth Schmitt		Record Document Rec'd Date:	N/A	
lter Chamber w/Cha	nnel St.	Field Recon Date:		
Filter Chamber		Associated Permits:	None	
20		Proposed Drainage Area:	N/A	acres
/A				
BD kg/yr				
TBD date: TBD				
Complete 2 NI/A Muni	icinal Installat	ion Complete? No P	rivate Installation	Complete 2 NI/A
	armel dge Rd/Fowler Ave utnam armel enneth Schmitt Iter Chamber w/Cha Iter Chamber 20 A BD kg/yr  TBD date: TBD	dge Rd/Fowler Ave utnam armel enneth Schmitt Iter Chamber w/Channel St. Iter Chamber 20 A BD kg/yr TBD date: TBD	Design Engineer:  dge Rd/Fowler Ave  utnam 60% Submission Date: 100% Submission Date: Record Document Rec'd Date: Reter Chamber w/Channel St.  Iter Chamber Associated Permits: Proposed Drainage Area:  TBD  TBD  date: TBD	Design Engineer: P&D Consulting dge Rd/Fowler Ave utnam 60% Submission Date: 100% Submis



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Checked by:

Project ID:	Kent-B0	C-830	Project Status:	Design		
Common Name:	Ramble	r Rd				
Watershed:	Boyds C	Corner				
Site Owner:	Town of	Kent	Design Engineer:	P&D Consulting Engineers, P.C		
Site Address:	Rambler	Rd and Seven Lakes Dr				
County:	Putnam		60% Submission Date:			
Municipality:	Kent		100% Submission Date:			
Supervisor:	Maureer	n Flemming	Record Document Rec'd Date:	N/A		
Original Proposed Retrofit:	Filter Ch	namber	Field Recon Date:			
Revised Retrofit:			Associated Permits:	None		
Original P Removal:	2.73		Proposed Drainage Area:	N/A	acres	
Revised P Removal:	N/A					
Final P Removal Credit by NYSDEC:	TBD	kg/yr				
Construction Start da		TBD				
Construction Comple	uon date.	TBD				
Agreements:						
Municipal Reimbursen	nent Comple	ete? N/A Municipal Installa	ation Complete? No Pi	rivate Installatio	n Complete? No	



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Prepared by: Kevin Fitzpatrick, PE

Checked by:

EOHWC Year 8(2019) Project Summary - Interim

	-1/					
Project ID:	Kent-CF-8	345	Project Status:	Design		
Common Name:	Palmer Lal	ke				
Watershed:	Croton Fal	ls				
Site Owner:	Private		Design Engineer:	Insite Engineering		
Site Address:	Palmer Tra	ail and Route 52				
County:	Putnam		60% Submission Date:			
Municipality:	Kent		100% Submission Date:			
Supervisor:	Maureen F	lemming	Record Document Rec'd Date:	N/A		
Original Proposed Retrofit:	Wet ED Pond		Field Recon Date:			
Revised Retrofit:	Subsurface Infiltration		Associated Permits:	None		
Original P Removal:	8.29	kg/yr	Proposed Drainage Area:	25.12 acres		
Revised P Removal:	12.74	kg/yr				
Final P Removal Credit by NYSDEC:	TBD	kg/yr				
Construction Start date: Construction Completion date:		TBD TBD				
Agreements:						
Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No						



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

## EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Kent-MB-601		Project Status:	Construction	1
Common Name:	Montrose	Drive			
Watershed:	Middle Bra	anch			
Site Owner:	Town of K	ent	Design Engineer:	Lawerence Paggi Engineering	
Site Address:	640 NYS	Rte 52			
County:	Putnam		60% Submission Date:	2/22/2019	
Municipality:	Kent		100% Submission Date:	5/9/2019	
Supervisor:	Maureen I	Elemming	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:	54.10	acres
Revised P Removal:	12.67	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
		8/9/2019 TBD			

Construction Completion date: IBD

#### Agreements:

Private Installation Complete? N/A Municipal Installation Complete? **TBD** Municipal Reimbursement Complete? N/A



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

## EOHWC Year 6(2017) Project Summary - Interim

Project ID:	Kent-ME	3-602	Project Status:	Complete		
Common Name:	Haviland Rd Outfall					
Watershed:	Middle B	ranch				
Site Owner:	Town of	Kent Parks	Design Engineer:	Insite Engineering		
Site Address:	60 Havila	and Rd				
County:	Putnam		60% Submission Date:			
Municipality:	Kent		100% Submission Date:	8/20/2018		
Supervisor:	Maureer	Flemming	Record Document Rec'd Date:	8/21/2019		
Original Proposed Retrofit:	Channel Wetland	Stabilization, Pocket	Field Recon Date:	7/14/2017		
Revised Retrofit:	Channel Stabilization and Pocket Wetland		Associated Permits:	None		
Original P Removal:	5.40	kg/yr	Proposed Drainage Area:	8.40	acres	
Revised P Removal:	7.23	kg/yr				
Final P Removal Credit by NYSDEC:	7.23 kg/yr					
Construction Start date:		10/1/2018				

Construction Start date: 10/1/2018
Construction Completion date: 8/21/2019

#### Agreements:

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



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

2011110	- (=0.0)	, , ojet	ot Garriniar y	1111011111			
Project ID:	L-CR-701			Project Status:		Design	
Common Name:	Lewisboro	Elemer	ntary School				
Watershed:	Cross Rive	r					
Site Owner:	Katonah-Le	wisboro	School District	Design Engine	er:	Rennia Engineering	
Site Address:	79 Bouton	Rd					
County:	Westchest	er		60% Submission Date:			
Municipality:	Lewisboro			100% Submission Date:			
Supervisor:	Peter Pars	ons		Record Document	Rec'd Date:	N/A	
Original Proposed Retrofit:	Catch Basin Inserts		Field Recon Da	ate:			
Revised Retrofit:	Bioretention		Associated Per	mits:	None		
Original P Removal:	1.18	kg/yr		Proposed Drain	nage Area:	1.10	acres
Revised P Removal:	2.35	kg/yr					
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start date: Construction Completion date:		TBD TBD					
Agreements:							
Municipal Reimbursem	ent Complete?	N/A	Municipal Installat	ion Complete?	No Pri	vate Installatio	n Complete? No



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

	-(,				
Project ID:	L-CR-803		Project Status:	Design	
Common Name:	Lewisboro	Town Park			
Watershed:	Cross Rive	er			
Site Owner:	Lewisboro		Design Engineer:	Rennia Engineering	
Site Address:	890 Route	35			
County:	Westchest	er	60% Submission Date:		
Municipality:	Lewisboro		100% Submission Date:		
Supervisor:	Peter Pars	ons	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Subsurface Infiltration		Field Recon Date:		
Revised Retrofit:	Subsurface Infiltration		Associated Permits:	None	
Original P Removal:	3.00	kg/yr	Proposed Drainage Area:	1.40 acres	
Revised P Removal:	3.00	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start date Construction Complete		TBD TBD			
Agreements:  Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? N/A					



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

LOTTIO TOUT	<del>5(2576)</del>	ojc	ot Garrinary	IIICI IIII				
Project ID:	L-CR-805			Project Status:	Design			
Common Name:	Salem Hill	Rd						
Watershed:	Cross Rive	er						
Site Owner:	Lewisboro			Design Engineer:	Rennia Er	Rennia Engineering		
Site Address:	Salem Hill	Rd and	d Mead St					
County:	Westches	ter		60% Submission Date:				
Municipality:	Lewisboro			100% Submission Date:				
Supervisor:	Peter Pars	sons		Record Document Rec'd Date:	N/A			
Original Proposed Retrofit:	Chamber	Filter		Field Recon Date:				
Revised Retrofit:				Associated Permits:	None			
Original P Removal:	2.48	kg/yr		Proposed Drainage Area:	12.40	acres		
Revised P Removal:	2.48	kg/yr						
Final P Removal Credit by NYSDEC:	TBD	kg/yr						
Construction Start date: TBD Construction Completion date: TBD								
Agreements:		o N1/A		N		0 1 1 0 111		
Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? N/A								



Print Date: January 30, 2020

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EOHWC Year 7(2018) Project Summary - Interim

Project ID:	L-MU-715		Project Status:	Design	
Common Name:	Goldens B	ridge Train Station			
Watershed:	Muscoot				
Site Owner:	NYCDEP/I	MTA	Design Engineer:	KC Enginee	ring
Site Address:	1 Old Bedf	ord Rd			
County:	Westchest	er	60% Submission Date:	5/8/2019	
Municipality:	Lewisboro		100% Submission Date:	TBD	
Supervisor:	Peter Pars	ons	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Catch Bas	in Inserts	Field Recon Date:		
Revised Retrofit:	Catch Bas	in Inserts	Associated Permits:	None	
Original P Removal:	5.62		Proposed Drainage Area:	5.25	acres
Revised P Removal:	N/A				
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start date: Construction Completion date:		TBD TBD			

Agreements:

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



Tel: 845-319-6349

Private Installation Complete? N/A

Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

Yes

# EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	MK-NC-2	22	Project Status:	Construction	n	
Common Name:	Leonard F	Park				
Watershed:	New Crot	on				
Site Owner:	Village of	Mt Kisco	Design Engineer:	Rennia Engi	neering Design	
Site Address:	Leonard Par	k Parking Area & Tennis Cts.				
County:	Westches	ster	60% Submission Date:	4/28/2014		
Municipality:	Mt. Kisco		100% Submission Date:	7/31/2015		
Supervisor:	Gina Picir	nich	Record Document Rec'd Date:	TBD		
Original Proposed Retrofit:	Bioretenti	on/Wet Pond	Field Recon Date:			
Revised Retrofit:	Bioretenti Filter	on/Surface Sand	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		TBD TBD				
Agreements:						

Municipal Installation Complete?



Print Date: January 30, 2020

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EOHWC Year 6(2017) Project Summary - Interim

EOTIVO TOU	0(2011)	i i Oje	ot Gairmary	michini			
Project ID:	MK-NC-60	)1		Project Status:		Design	
Common Name:	Village Hal	I					
Watershed:	New Croto	n					
Site Owner:	Multiple ov	ners		Design Engine	er:	BY TOWN	
Site Address:	104 Main S	Street					
County:	Westchest	er		60% Submission	on Date:		
Municipality:	Mount Kisc	Ю		100% Submiss	ion Date:		
Supervisor:	Gina Picini	ch		Record Document	Rec'd Date:	N/A	
Original Proposed Retrofit:	Catch Bas	in Inse	rts	Field Recon Da	ate:		
Revised Retrofit:	Catch Bas	in Inse	rts	Associated Per	mits:	None	
Original P Removal:	4.41	kg/yr		Proposed Drain	nage Area:	4.26	acres
Revised P Removal:	4.33	kg/yr					
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start date: Construction Completion date:		TBD TBD					
Agreements:							
Municipal Reimbursement Complete? No Municipal Installation Complete? No Private Installation					vate Installation (	Complete? N/A	



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Prepared by: Kevin Fitzpatrick, PE

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EOHWC Year 6(2017) Project Summary - Interim

2011110	9(=911)	r rojest Sammary	111(011111		
Project ID:	MK-NC-60	02	Project Status:	Design	
Common Name:	Mt. Kisco (	Commons			
Watershed:	New Croto	n			
Site Owner:	Urban Edg	e Properties	Design Engineer:	HVEA	
Site Address:	195 North	Bedford Rd			
County:	Westchest	er	60% Submission Date:		
Municipality:	Mount Kisc	co	100% Submission Date:		
Supervisor:	Gina Picini	ich	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Catch Bas	in Inserts	Field Recon Date:		
Revised Retrofit:	Catch Bas	in 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: Construction Completion date:		TBD TBD			
Agreements:					
Municipal Reimbursem	nent Complete?	N/A Municipal Installa	ition Complete? No Pri	ivate Installation Co	mplete? No



Print Date: January 30, 2020

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EOHWC Year 5 (2014) Project Summary - Interim

Project ID:	NewC-NC	R-33A	Project Status:	Design		
Common Name:	Burden Pre	eserve				
Watershed:	New Croto	n				
Site Owner:	Town of No	ew Castle	Design Engineer:	Municipal Engineer		
Site Address:	Harriman F	Rd/Sheather Rd				
County:	Westchest	er	60% Submission Date:			
Municipality:	New Castle	е	100% Submission Date:	4.25.17		
Supervisor:	Robert Gre	eenstein	Record Document Rec'd Date:	TBD		
Original Proposed Retrofit:	Channel S	tabilization	Field Recon Date:			
Revised Retrofit:	Channel S	tabilization	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				
		TBD TBD				
Agraemente						

Agreements:

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



Print Date: January 30, 2020

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EOHWC Year 5 (2014) Project Summary - Interim

		r oject Gammary				
Project ID:	NewC-NC	R-33B	Project Status:	Design		
Common Name:	Burden Pre	eserve				
Watershed:	New Croto	n				
Site Owner:	Town of Ne	ew Castle	Design Engineer:	Municipal Engineer		
Site Address:	Harriman F	Rd/Sheather Rd				
County:	Westchest	er	60% Submission Date:			
Municipality:	New Castle	е	100% Submission Date:	4.25.17		
Supervisor:	Robert Gre	eenstein	Record Document Rec'd Date:	TBD		
Original Proposed Retrofit:	Channel S	tabilization	Field Recon Date:			
Revised Retrofit:	Channel S	tabilization	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: Construction Completion date:		TBD TBD				
Agreements:						

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

EOTIVO TOUT	9,2011)	<u> </u>	ot Gairminary	michini			
Project ID:	NewC-NC	R-601		Project Status:		Concept	
Common Name:	Sheather F	₹d					
Watershed:	New Croto	n					
Site Owner:	Town of No	ew Cas	stle	Design Engine	er:		
Site Address:	Burden Pre	eserve					
County:	Westchest	er		60% Submission	on Date:		
Municipality:	New Castle	Э		100% Submiss	ion Date:		
Supervisor:	Ivy Pool			Record Document	Rec'd Date:	N/A	
Original Proposed Retrofit:	Bank Stab	ilizatior	ı	Field Recon Da	ate:		
Revised Retrofit:				Associated Per	mits:	None	
Original P Removal:	24.00			Proposed Drain	nage Area:	N/A	acres
Revised P Removal:	N/A						
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start date: Construction Completion date:		TBD TBD					
_							
- · · · · · · · · · · · · · · · · · · ·	Agreements:						
Municipal Reimbursen	nent Complete?	N/A	Municipal Installat	tion Complete?	No Pri	vate Installation	Complete? N/A



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EOHWC Year 7(2018) Project Summary - Interim

2011110	1 (=0.10)	Tojeet Gaillillary	1111011111		
Project ID:	NewC-NC	R-701	Project Status:	Construction	
Common Name:	Chappaqua	a Crossings			
Watershed:	New Croto	n			
Site Owner:	Private		Design Engineer:	BY TOWN	
Site Address:	Chappaqua	a Crossings			
County:	Westcheste	er	60% Submission Date:	BY TOWN	
Municipality:	New Castle	e	100% Submission Date:	BY TOWN	
Supervisor:	Ivy Pool		Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Multiple		Field Recon Date:		
Revised Retrofit:			Associated Permits:	None	
Original P Removal:	7.70	kg/yr	Proposed Drainage Area:	N/A	acres
Revised P Removal:	7.70	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start day Construction Complete		BY TOWN BY TOWN			
Agreements:					
Municipal Reimbursem	nent Complete?	N/A Municipal Installa	tion Complete? <b>N</b> /A Pri	ivate Installation C	complete? N/A



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EOHWC Year 8(2019) Project Summary - Interim

LOTTIVE TEAT	0(2013)	Froject Summary	- IIICHIIII	
Project ID:	NewC-NO	CR-801	Project Status:	Design
Common Name:	Courtmel	Rd		
Watershed:	New Crot	on		
Site Owner:	NYCDEP		Design Engineer:	Hudson Engineering
Site Address:	24 Courtn	nel Rd		
County:	Westches	ter	60% Submission Date:	
Municipality:	New Cast	le	100% Submission Date:	
Supervisor:	Ivy Pool		Record Document Rec'd Date:	N/A
Original Proposed Retrofit:	Channel Stabilization		Field Recon Date:	
Revised Retrofit:	Channel S Chamber	Stabilization and Filter	Associated Permits:	None
Original P Removal:	22.67	kg/yr	Proposed Drainage Area:	12.10 acres
Revised P Removal:	20.75	kg/yr		
Final P Removal Credit by NYSDEC:	TBD	kg/yr		
Construction Start date: Construction Completion date:		TBD TBD		
Agreements:				
Municipal Reimbursen	nent Complete	e? <b>N</b> /A Municipal Installa	tion Complete? No Pr	rivate Installation Complete? No



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Private Installation Complete? No

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# EOHWC Year 6(2017) Project Summary - Interim

Project ID:	NS-MU-6	01	Project Status:	Design		
Common Name:	Keeler Lar	ne				
Watershed:	Muscoot					
Site Owner:	Multiple ov	wners	Design Engineer:	Insite Engineering		
Site Address:	Multiple ad	ddresses				
County:	Westchest	ter	60% Submission Date:			
Municipality:	North Sale	em	100% Submission Date:			
Supervisor:	Warren Lu	ıcas	Record Document Rec'd Date:	N/A		
Original Proposed Retrofit:	Channel Stabilization		Field Recon Date:			
Revised Retrofit:	Channel S	tabilization	Associated Permits:	None		
Original P Removal:	17.65	kg/yr	Proposed Drainage Area:	126.00	acres	
Revised P Removal:	31.36	kg/yr				
Final P Removal Credit by NYSDEC:	TBD	kg/yr				
Construction Start date: TBD						
Construction Complete	uon date:	TBD				
Agreements:						

Municipal Installation Complete?



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EOHWC Year 7(2018) Project Summary - Interim

LOTITIO TOUT	7(2070)	i roject Gair	iiiiai y	mem		
Project ID:	NS-MU-7	01		Project Status:	Design	
Common Name:	Croton Fa	lls Train Station	1			
Watershed:	Muscoot					
Site Owner:	NYCDEP			Design Engineer:	KC Engi	neering
Site Address:	Back Stree	et				
County:	Westchest	ter		60% Submission Date:	5/8/2019	)
Municipality:	North Sale	em		100% Submission Date:		
Supervisor:	Warren Lu	ıcas		Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Catch Bas	in Inserts		Field Recon Date:		
Revised Retrofit:				Associated Permits:	NYCDE	PLUP
Original P Removal:	1.98	kg/yr		Proposed Drainage Area:	1.85	acres
Revised P Removal:	1.97	kg/yr				
Final P Removal Credit by NYSDEC:	TBD	kg/yr				
Construction Start da Construction Comple		TBD TBD				
Agreements:		- 111				
Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No						



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Print Date: January 30, 2020

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Private Installation Complete? No

Checked by:

EOHWC Year 7(2018) Project Summary - Interim

	- (/	r rojest sammary	nncon nn			
Project ID:	NS-MU-70	02	Project Status:	Design		
Common Name:	Purdys Tra	ain Station				
Watershed:	Muscoot					
Site Owner:	NYCDEP		Design Engineer:	KC Engineering		
Site Address:	Route 116					
County:	Westchest	er	60% Submission Date:	5/8/2019		
Municipality:	North Sale	em	100% Submission Date:			
Supervisor:	Warren Lu	cas	Record Document Rec'd Date:	N/A		
Original Proposed Retrofit:	Catch Basin Inserts		Field Recon Date:			
Revised Retrofit:	Catch Bas	in Inserts	Associated Permits:	None		
Original P Removal:	3.21	kg/yr	Proposed Drainage Area:	3.00	acres	
Revised P Removal:	3.21	kg/yr				
Final P Removal Credit by NYSDEC:	TBD	kg/yr				
Construction Start da		TBD TBD				
Construction Complet	lion date.	עסו				
Agreements:						

Municipal Installation Complete?



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EOHWC Year 4 (2013) Project Summary - Interim

Project ID:	Pat-EB-0	9-03B	Project Status:	Construction	
Common Name:	Veterans I	Memorial Park			
Watershed:	East Bran	ch			
Site Owner:	Town of P	atterson	Design Engineer:	Lawrence J. Pag	gi
Site Address:	North Stree	et, Patterson, NY 12563			
County:	Putnam		60% Submission Date:	2/27/2014	
Municipality:	Patterson		100% Submission Date:	7/30/2015	
Supervisor:	Richard W	/illiams	Record Document Rec'd Date:	TBD	
Original Proposed Retrofit:	Bioretention		Field Recon Date:		
Revised Retrofit:	Organic F	ilter (F-4)	Associated Permits:	None	
Original P Removal:	1.51	kg/yr	Proposed Drainage Area:	9.40 acre	es
Revised P Removal:	1.80	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start date: Construction Completion date:		Fall 2019 TBD			

Agreements:

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



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Private Installation Complete? No

Checked by:

### EOHWC Year 6(2017) Project Summary - Interim

	7	Troject Gairmary	111011111		
Project ID:	Pat-EB-6	01	Project Status:	Design	
Common Name:	Valley Rd				
Watershed:	East Bran	ch			
Site Owner:	Multiple ov	wners	Design Engineer:	KC Engineering	
Site Address:	Multiple ad	ddresses			
County:	Putnam		60% Submission Date:		
Municipality:	Patterson		100% Submission Date:		
Supervisor:	Richard W	/illiams	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Multiple Ponds		Field Recon Date:		
Revised Retrofit:	Multiple P	onds	Associated Permits:	CPDP	
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 Comple	tion date:	TBD			
Agreements:					

Municipal Installation Complete?



Print Date: January 30, 2020

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EOHWC Year 6(2017) Project Summary - Interim

	- 1 - /	i rojoot Gaiiiiiai y			
Project ID:	Pat-EB-6	02	Project Status:	Construction	
Common Name:	Dayton R	d			
Watershed:	East Bran	ich			
Site Owner:	Town of F	Patterson	Design Engineer:	Lawerence Paggi Engineerin	
Site Address:	Dayton Re	d			
County:	Putnam		60% Submission Date:		
Municipality:	Patterson		100% Submission Date:	9/4/2019	
Supervisor:	Richard V	Villiams	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Channel S	Stabilization	Field Recon Date:		
Revised Retrofit:	Channel S	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: Construction Completion date:		11/8/2019 TBD			

Agreements:

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



Print Date: January 30, 2020

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Private Installation Complete? No

Checked by:

No

EOHWC Year 6(2017) Project Summary - Interim

Municipal Reimbursement Complete? N/A Municipal Installation Complete?

Project ID:	Pat-EB-6	03	Project Status:	Construction	n
Common Name:	Lost Lake				
Watershed:	East Bran	ch			
Site Owner:	Lost Lake,	, Inc.	Design Engineer:	KC Enginee	ering
Site Address:					
County:	Putnam		60% Submission Date:	4/26/2019	
Municipality:	Patterson		100% Submission Date:	10/30/2019	
Supervisor:	Richard W	/illiams	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Channel Stabilization		Field Recon Date:		
Revised Retrofit:	Channel S	Stabilization	Associated Permits:	None	
Original P Removal:	14.60	kg/yr	Proposed Drainage Area:	N/A	acres
Revised P Removal:	14.60	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start date: Construction Completion date:		TBD TBD			
Agreements:					



Agreements:

Municipal Reimbursement Complete? N/A

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Private Installation Complete? No

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EOHWC Year 7(2018) Project Summary - Interim

Project ID:	Pat-EB-7	01	Project Status:	Design	
Common Name:	Patterson	Train Station			
Watershed:	East Bran	ch			
Site Owner:	MTA		Design Engineer:	KC Enginee	ring
Site Address:	Front Stre	et			
County:	Putnam		60% Submission Date:		
Municipality:	Patterson		100% Submission Date:	7/24/2019	
Supervisor:	Richard W	/illiams	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Catch Basin Inserts		Field Recon Date:		
Revised Retrofit:	Catch Bas	sin Inserts	Associated Permits:	None	
Original P Removal:	1.71	kg/yr	Proposed Drainage Area:	1.34	acres
Revised P Removal:	1.33	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start data:		TBD			
Construction Start date: Construction Completion date:		TBD			

Municipal Installation Complete?



Print Date: January 30, 2020

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EOHWC Year 7(2018) Project Summary - Interim

		i i ojest edillilla. j			
Project ID:	PC-MB-7	701	Project Status:	Complete	
Common Name:	Tilly Fost	er Farm			
Watershed:	Middle Bı	ranch			
Site Owner:	Putnam (	County	Design Engineer:	Insite Engineering	
Site Address:	NYS Rou	te 312			
County:	Putnam		60% Submission Date:	BY COUNTY	
Municipality:	Putnam (	County	100% Submission Date:	BY COUNTY	
Supervisor:	Maryellen O'Dell		Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Wet ED F Stabilizat	Pond and Channel ion	Field Recon Date:		
Revised Retrofit:	Wet ED F Stabilizat	Pond and Channel ion	Associated Permits:	None	
Original P Removal:	12.64	kg/yr	Proposed Drainage Area:	10.60 acres	
Revised P Removal:	21.44	kg/yr			
Final P Removal Credit by NYSDEC:	21.44	kg/yr			
Construction Start date: Construction Completion date:		By County By County			

Agreements:

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



Tel: 845-319-6349

Print Date: January 30, 2020

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Private Installation Complete? No

Checked by:

EOHWC Year 6(2017) Project Summary - Interim

	0(=011)	r roject Gammary	1111011111		
Project ID:	PR-CR-60	)1	Project Status:	Design	
Common Name:	Cross Rd				
Watershed:	Cross Rive	er			
Site Owner:	Municipal		Design Engineer:	HVEA	
Site Address:	Cross Rd a	and Route 121			
County:	Westchest	er	60% Submission Date:		
Municipality:	Pound Rid	ge	100% Submission Date:		
Supervisor:	Kevin Han	san	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Bank Stabilization		Field Recon Date:		
Revised Retrofit:	Infiltration	Trench	Associated Permits:	None	
Original P Removal:	21.30	kg/yr	Proposed Drainage Area:	5.80	acres
Revised P Removal:	2.40	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start date: Construction Completion date:		TBD TBD			
Construction Complete	don dato.				
Agreements:					

Municipal Installation Complete?



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EOHWC Year 7(2018) Project Summary - Interim

2011110	7 (-0 / 0)	r roject Garinnar y	111011111			
Project ID:	PR-CR-70	11	Project Status:	Design		
Common Name:	Parkview D	)rive				
Watershed:	Cross Rive	r				
Site Owner:	Private		Design Engineer:	P&D Consulting Engineers, P.C.		
Site Address:	114 Parkvi	ew Drive				
County:	Westchest	er	60% Submission Date:			
Municipality:	Pound Rid	ge	100% Submission Date:			
Supervisor:	Kevin Hans	san	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:	1.39	kg/yr	Proposed Drainage Area:	N/A acres		
Revised P Removal:	1.39	kg/yr				
Final P Removal Credit by NYSDEC:	TBD	kg/yr				
Construction Start date: Construction Completion date:		TBD TBD				
_						
Agreements:						
Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No						



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Private Installation Complete? No

Checked by:

No

### EOHWC Year 7(2018) Project Summary - Interim

Municipal Reimbursement Complete? N/A Municipal Installation Complete?

	- ()	r roject Garrinary	111011111		
Project ID:	PR-CR-70	02	Project Status:	Design	
Common Name:	Dingee Ro	oad			
Watershed:	Cross Rive	er			
Site Owner:	Private		Design Engineer:	P&D Consultin	g Engineers, P.C.
Site Address:	26 Dingee	Road			
County:	Westchest	ter	60% Submission Date:		
Municipality:	Pound Rid	lge	100% Submission Date:		
Supervisor:	Kevin Han	san	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Channel Stabilization		Field Recon Date:		
Revised Retrofit:	Channel S	tabilization	Associated Permits:	None	
Original P Removal:	2.31	kg/yr	Proposed Drainage Area:	N/A	acres
Revised P Removal:	2.31	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
_	Construction Start date:				
Construction Complete	tion date:	TBD			
Agreements:					



Print Date: January 30, 2020

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## EOHWC Year 2 (2011) Project Summary - Interim

Project ID:	SE-DI-0	3	Project Status:	Complete	
Common Name:	Lincoln F	Rd			
Watershed:	Middle B	ranch			
Site Owner:	Unknow	n	Design Engineer:	Municipal E	ngineer
Site Address:	Lincoln F	Rd			
County:	Putnam		60% Submission Date:	By Town	
Municipality:	Southeast		100% Submission Date:	By Town	
Supervisor:	Tony Hay		Record Document Rec'd Date:	12/11/2019	
Original Proposed Retrofit:	•	namic Separator and tabilization	Field Recon Date:	10/4/2010	
Revised Retrofit:	, ,	namic Separator and tabilization	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:	1.30	kg/yr			
Company ration Start do		Dy Tours			

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

#### Agreements:

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



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Private Installation Complete? No

Checked by:

EOHWC Year 6(2017) Project Summary - Interim

ECTIVO TOUT	0(2011)	T TOJECE Gaillina	ny michini		
Project ID:	SE-DI-60	)1	Project Status:	Design	
Common Name:	Brewster	Hill Road			
Watershed:	Diverting				
Site Owner:	Multiple o	wners	Design Engineer:	Insite En	gineering
Site Address:	Brewster	Hill Rd			
County:	Putnam		60% Submission Date:		
Municipality:	Southeas	t	100% Submission Date:		
Supervisor:	Tony Hay	,	Record Document Rec'd Date:	N/A	
Original Proposed Retrofit:	Pocket Pond		Field Recon Date:		
Revised Retrofit:	Filter Cha	mber	Associated Permits:	None	
Original P Removal:	5.18	kg/yr	Proposed Drainage Area:	3.90	acres
Revised P Removal:	3.09	kg/yr			
Final P Removal Credit by NYSDEC:	TBD	kg/yr			
Construction Start date: Construction Completion date:		TBD TBD			
Agreements:					
Agreements.					

Municipal Installation Complete?



Print Date: January 30, 2020

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EOHWC Year 7(2018) Project Summary - Interim

	- ()		<u> </u>				
Project ID:	SE-DI-701			Project Status:		Design	
Common Name:	Southeast	Train S	tation				
Watershed:	Diverting						
Site Owner:	MTA			Design Engine	er:	KC Engine	ering
Site Address:	1 Independ	dent Wa	ny				
County:	Putnam			60% Submission	on Date:		
Municipality:	Southeast			100% Submiss	ion Date:		
Supervisor:	Tony Hay			Record Document	Record Document Rec'd Date: N/A		
Original Proposed Retrofit:	Catch Basin Inserts		Field Recon Da	ite:			
Revised Retrofit:	Catch Basin Inserts		Associated Per	mits:	None		
Original P Removal:	7.80	kg/yr		Proposed Drain	nage Area:	7.88	acres
Revised P Removal:	4.20	kg/yr					
Final P Removal Credit by NYSDEC:	TBD	kg/yr					
Construction Start date: Construction Completion date:		TBD TBD					
_							
	Agreements:						
Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No							



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### EOHWC Year 8(2019) Project Summary - Interim

Rennia Engineering						
CPDP, NYCDEP SWPPP						
acres						
Agreements:  Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? No						



Print Date: January 30, 2020

Prepared by: Kevin Fitzpatrick, PE

Checked by:

EOHWC Year 2 (2011) Project Summary - Interim

Project ID:	SE-POT-	-02	Project Status:	Complete		
Common Name:	Brewster	Heights				
Watershed:	Middle Br	anch				
Site Owner:	Town/Priv	vate	Design Engineer:	Municipal Engineer		
Site Address:	Bloomer l	Rd & 2350 Rt 6				
County:	Putnam		60% Submission Date:	By Town		
Municipality:	Southeas	t	100% Submission Date:	By Town		
Supervisor:	Tony Hay	1	Record Document Rec'd Date:	6/27/2019		
Original Proposed Retrofit:	Hydrodyn	amic 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:	72.00	kg/yr				
Final P Removal Credit by NYSDEC:	72.00	kg/yr				
Construction Start do	to:	Spring 2019				
Construction Start date: Construction Completion date:		Spring 2018 Spring 2019				

Agreements:

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



Print Date: January 30, 2020

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EOHWC Year 7(2018) Project Summary - Interim

Project ID:	S-MU-70	1	Project Status:	Complete		
Common Name:	Lake Sher	norock				
Watershed:	Muscoot					
Site Owner:	Town of S	omers	Design Engineer:	BY TOWN		
Site Address:						
County:	Westchest	ter	60% Submission Date:			
Municipality:	Somers		100% Submission Date:	10/18/2018		
Supervisor:	Rick Morri	ssey	Record Document Rec'd Date:	11/21/2019		
Original Proposed Retrofit:	HDS and	Channel Stabilization	Field Recon Date:			
Revised Retrofit:	HDS and Channel Stabilization		Associated Permits:	None		
Original P Removal:	8.78	kg/yr	Proposed Drainage Area:	86.52	acres	
Revised P Removal:	8.78	kg/yr				
Final P Removal Credit by NYSDEC:	8.78	kg/yr				
Construction Start date: Construction Completion date:		By Town By Town				

Agreements:

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



Print Date: January 30, 2020

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Checked by:

EOHWC Year 6(2017) Project Summary - Interim

LOTIVE Tear	0(2011)	rroje	ct Summary	- IIIICI IIII				
Project ID:	Y-MU-601			Project Status:		Design		
Common Name:	Front Stree	et						
Watershed:	Muscoot							
Site Owner:	Town of Yorktown			Design Enginee	er:	D&B Engineers and Architects, PC		
Site Address:	1785 Front Street							
County:	Westchester			60% Submissio	n Date:	6/20/2019		
Municipality:	Yorktown			100% Submissi	100% Submission Date:			
Supervisor:	llan Gilbert			Record Document F	Rec'd Date:	N/A	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 Drain	age Area:	82.50	acres	
Revised P Removal:	8.13	kg/yr						
Final P Removal Credit by NYSDEC:	TBD	kg/yr						
Construction Start date: Construction Completion date:		TBD TBD						
Agreements:								
Municipal Reimbursement Complete? N/A Municipal Installation Complete? No Private Installation Complete? N/A								