VILLAGE OF TARRYTOWN
STORMWATER EDUCATION & OUTREACH OUTLINE

Stormwater contact: Donato R. Pennella, P.E., Village Engineer
Stormwater Hotline: 914-631-3668 Building Department
dpennella@tarrytowngov.com

Village of Tarrytown Stormwater Website:
http://www.tarrytowngov.com/engineering-department/pages/stormwater-education-outreach-program

What is an Illicit Discharge?

A discharge to the storm sewer that is not entirely storm water. Examples are sewage in the storm line, dumping of motor oil, household toxics, pesticides, paint, grease, pet waste, detergents and other materials into the storm sewer. **DUMPING ANY MATERIAL OR LIQUID, OTHER THAN WATER, INTO THE VILLAGE STORM DRAINS IS ILLEGAL**. Should you need to dispose of materials that cannot be placed in the garbage for collection by the Sanitation Department, please contact Westchester County Household Material Recovery Facility (H-MRF) for hazardous waste disposal. Should you see an Illicit Discharge or suspicious material in the storm drains, report it to the Building Department at (914) 631-3668.

Please refer to **Attachment 1** for the following information:
Exempt Discharges

What is the big deal about Stormwater?

Stormwater *runoff* is water from rain or even melting snow that doesn't soak into the ground, but runs-off over roads, paved areas, lawns, bare soils, etc., then into the storm sewer system or directly into waterways. The runoff picks up pollutants such as oil and grease, pesticides, animal wastes, salt, petroleum and other chemicals and materials along the way. One of the major sources of contamination in the Nation's waterbodies is polluted stormwater runoff.

What is an MS4 Permit and the Village of Tarrytown's requirements under one?

An MS4 is a *Municipal Separate Storm Sewer System* or, the entire storm sewer system within a municipal boundary. The MS4 system typically would not include the sanitary system, with the exception of combined sewer systems. There are no combined sewer systems in the Village of Tarrytown.

The Environmental Protection Agency implemented the Stormwater Program in an effort to improve the Nation's water from polluted stormwater runoff. Phase I of the Program focuses on areas with populations of 100,000 or greater. Phase II focuses on areas with populations smaller than 100,000. Municipalities under Phase II must obtain a State permit to address and discharge stormwater into their municipal storm sewer system (MS4). The Village of Tarrytown obtained MS4 permit coverage in 2003.

The Village of Tarrytown, a municipality with a population under 100,000, falls under the Phase II Stormwater Program, and is therefore required to abide by the terms and conditions of the **New York State Department of Environmental Conservation's SPDES General Permit for Stormwater Discharges**

from Municipal Separate Storm Sewer Systems (i.e. 'the NYSDEC MS4 Permit'), and to meet the **six Minimum Measure requirements** noted below.

Minimum Measure I: Public Outreach and Education on Stormwater

Identify Pollutants of Concern (POCs), waterbodies of concern, geographic areas of concern, and target audiences (see the Stormwater Website link for more information). Implement a public education and outreach program to describe the impacts of stormwater discharges on waterbodies, the POCs and their sources, and the steps that contributors of these pollutants can take to reduce pollutants in stormwater runoff.

Pollutants of Concern identified in the Village of Tarrytown:

- *Floatables & Trash Accumulation* in the storm sewer system and waterbodies.
- *Sediment.* The loose sand, clay, silt and other particles that settle at the bottom of a body of water. The EPA lists sediment as the most common pollutant in waterbodies.
- *Phosphorus & Nitrogen*. Nutrients that can cause the overgrowth of algae in waterbodies. Found in yard wastes like grass clippings and leaves, pet wastes, lawn fertilizers and detergents (car washing) carried directly into the catch basin or picked up in stormwater and carried to lakes, rivers and streams when it rains. The EPA considers phosphorus one of the most troublesome pollutants.

What you can do:

Many people do not realize it, but there are a number of simple things that homeowners can do to prevent storm water pollution.

Car Washing, Gutters and Sump Pumps:

Direct water to grassy areas instead of down the driveway. Lawns cleanse the water of pollutants. Collect roof runoff in rain barrels and use this water on your lawn and garden.

Pet Waste:

Bag it and throw it in the trash. Nitrogen and Phosphorus in pet waste (as well as bacteria and pathogens) is a large contributor of stormwater runoff pollution.

Lawn Maintenance:

Keeping grass clippings and leaves out of the catch basins has great benefits on the receiving lakes and streams. **Never drop leaves or grass clippings into the storm drain.** This will cause clogging and flooding in the storm sewer system, and will flush nutrients in to the receiving water body which will cause algae ("scum") growth. Blow grass clippings on to the lawn and not the street when mowing, and never hose clippings into the catch basin. See the Village website for leaf mulching-in-place instructions, and the Public Works page for the leaf pick-up program and yard waste collection schedule.

NEVER DUMP ANYTHING DOWN THE STORM DRAIN: Contact the Westchester County Hazardous Material Recovery Facility (H-MRF) for disposal of used oil, paint, etc.

Refer to the Westchester County Step-to-Step Guide to Cleaner Water at:

http://planning.westchestergov.com/images/stories/stormwater/stepbystep.pdf.

What's the connection between residents and Storm Water?

Village rainwater flows into storm drains and rapidly discharges into receiving water bodies, carrying with it pollutants such as oil, trash, pathogens, and Nitrogen and Phosphorus that can lead to excess algae growth.

How can you help minimize this impact?

Residents can offer a big hand reducing pollutants in the Village's receiving water bodies. The EPA lists Phosphorus as one of the most troublesome pollutants in the nation's waterways.

Visit
Tarrytown Environmental Advisory Council at
www.Tarrytownenvironmental.org
for info and community events.

PHOSPHORUS & NITROGEN**

Lawn Maintenance: Nitrogen and Phosphorus generate from yard waste (leaves and grass clippings), pet waste, and excess fertilizer. Proper lawn maintenance has great benefits on the receiving water. Keep yard waste out of catch basins and never dump into the storm sewer. Consider mulching in-place and phosphate free gardening techniques.

Car Washing, Gutters and Sump Pumps: Direct water to the lawn and not the driveway. Soaps will harm waterways but lawns will filter out contaminants. Collect roof runoff in rain barrels and use this water on your lawn and garden.

Pet Waste:
Bag it and throw it away. Animal waste is a large contributor of storm water pollution, also leeching **pathogens**.

TRASH, DUMPING**

Illicit Discharge:
Should you see an **Illicit Discharge** such as suspicious and/or odorous material in the storm drains, report it to the Building Department at (914) 631-3668.

IT IS AGAINST VILLAGE CODE TO DISPOSE OF USED OIL, PAINT, GREASE, PET WASTE, ETC...INTO THE STORM DRAIN. **Contact Westchester County Household Material Recovery Facility (H-MRF) for hazardous waste disposal.**

Visit www.tarrytowngov.com and click on the Stormwater link for more information and further links.

**Refer to Westchester County website for lawn maintenance, vehicle washing, pet waste & household chemicals and more at:
http://planning.westchestergov.com/environment/stormwater-management

The Tarrytown Lakes

What is the problem?

Algae in the Upper Reservoir. An unusually high concentration of Nitrogen and Phosphorus are entering the Upper Reservoir during rain events. The Tarrytown Lakes is a shallow lake bed that is particularly susceptible to algae blooms. If your property is located in the drainage area of the Tarrytown Lakes (see next page), you can help in giving the Lakes a hand!

What you can do:

- Car Washing, Outdoor washing: Direct wash water to the **lawn and not the driveway**, which will flow to catch basins then waterways. Soaps can contain phosphorus that will contribute to algae growth.

- Pet Waste: Bag it and throw it away. Animal waste contains Nitrogen and Phosphorus.

- Proper Lawn Maintenance: Nitrogen and Phosphorus generate mostly from yard waste (leaves, grass clippings) and excess fertilizer. If using fertilizers/pesticides, only apply at the proper rate. **Keep yard waste out of catch basins.** Consider leaving grass clippings in place for organic fertilizer that breaks down quickly, mulching in-place, and phosphate free gardening. See the Village of Tarrytown website for *Love 'em and Leave 'em* leaf management. **Proper lawn maintenance has great benefits on the receiving water.**

- Illicit Discharge: Should you see an **Illicit Discharge** such as suspicious and/or odorous material in the storm drains (most commonly septic), report it to the Building Department at (914) 631-3668.

Make sure that your landscape contractor is registered with the Village.

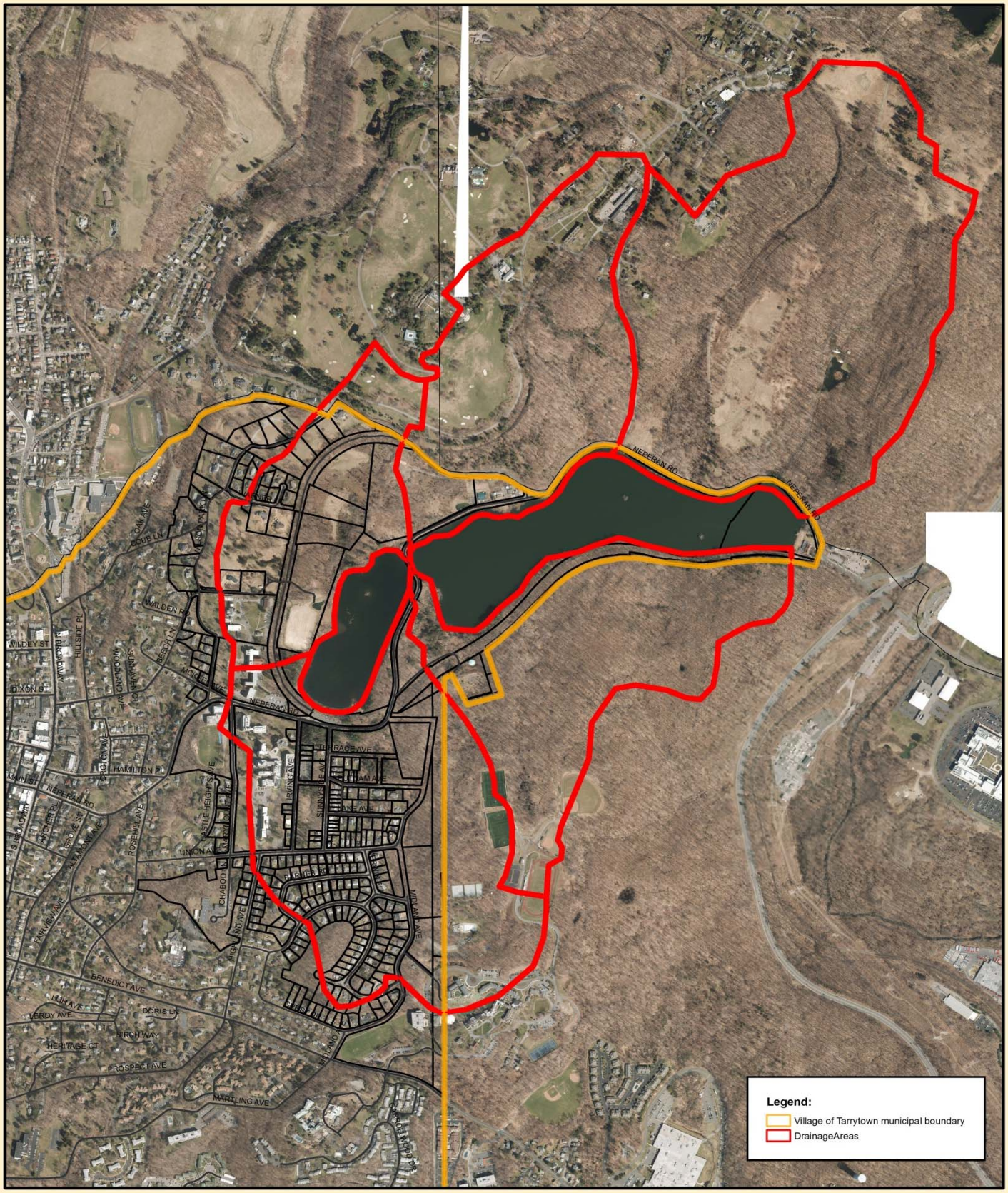
A landscaper is defined as a **Green Industry Contractor** by law and must be registered to legally work with the Village (Chapter 205). Registered workers are given orange permits which must be affixed to the left rear of the work vehicle.

PLEASE NOTE:

IT IS AGAINST VILLAGE CODE TO DISPOSE OF USED OIL, PAINT, GREASE, TRASH, PET WASTE, ETC…INTO THE STORM DRAIN.
Contact Westchester County Household Material Recovery Facility (H-MRF) for hazardous waste disposal.

Is your property is located in the drainage area of the Tarrytown Lakes?

Please see next page.



N
W E
S

Tarrytown Lakes Drainage Areas

0 345 690 1,380 2,070 2,760
Feet

Base planimetric data provided by
Westchester County GIS data warehouse and
NYS GIS Data Clearinghouse

Drainage Area delineated from
Tarrytown Lakes Watershed Drainage Study SWMP (2005)

Refer to the EPA's Homeowner brochures at:

https://www3.epa.gov/npdes/pubs/solution_to_pollution.pdf
https://www3.epa.gov/npdes/pubs/after_the_storm.pdf

Minimum Measure II: Public Involvement/Participation in Stormwater

Provide a local stormwater public contact (listed above). Identify key individuals/groups who are affected by the Stormwater Management Plan, and record participation activities such as water quality hotline for reporting illicit discharges, stream cleanups, storm drain marking, and other volunteer water quality activities.

For participation opportunities, please see the following:

- Tarrytown Environmental Advisory Council (TEAC): http://www.tarrytownenvironmental.org/
- Friends of the Riverwalk: www.frw-ttown.org
- Friends of Neperan Park: www.friendsofneperanpark.org
- NYSDEC Citizens Statewide Lake Assessment Program (CSLAP): www.dec.ny.gov/chemical/81576.html

Minimum Measure III: Illicit Discharge Detection and Elimination

Implement and enforce a program to detect and eliminate **illicit discharges** into the storm sewer system. Maintain a stormwater outfall inventory and a map showing the stormwater outfalls, the receiving surface waters, the storm sewersheds, and map new outfalls as they are constructed or newly discovered.

Adopt a local law to prohibit illicit discharges into the storm sewer system and implement appropriate enforcement procedures (see Village Code, Chapter 258: Stormwater Management; Article II: Prohibition of Illicit Discharges and Connections to Separate Storm Sewer System).

Please refer to **Attachment 2** for the following information (2014):
Village of Tarrytown Storm SewerShed Map
Village of Tarrytown Outfall Map spreadsheet

Minimum Measure IV: Construction Site Stormwater Runoff Control

Address stormwater runoff from construction activities of one acre or more and maintain an inventory of such sites with owner/operator contact information. Adopt a local law to address stormwater management and erosion and sediment control and ensure construction site operators have received erosion and sediment control training (see Village Code, Chapter 258: Stormwater Management; Article I, Stormwater Management and Erosion and Sediment Control). Such sites must submit and abide by all Stormwater Pollution Prevention Plan requirements, and local laws.

Please refer to **Attachment 3** for the following information (2014):
Village of Tarrytown Construction Site inventory (October 2014)

Minimum Measure V: Post-Construction Stormwater Management

Maintain an inventory of post-construction stormwater management practices, and ensure the adequate long-term operation and maintenance of such practices to ensure they are performing properly. Adopt a local law to reduce pollutants in stormwater runoff from post-construction practices, and after completion of construction (see Village Code, Chapter 258: Stormwater Management; Article I, Stormwater Management and Erosion and Sediment Control).

To reduce pollutants in post-construction stormwater runoff, construction site operators would build permanent stormwater management practices (structural) and/or other measures (non-structural) as defined in the New York State stormwater design manual to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP) in to the municipal storm sewer system (MS4).

Please also refer to **Attachment 3** for the following information (2014):
Village of Tarrytown Post-Construction Sites Map (October 2014)
Village of Tarrytown Post-Construction Sites spreadsheet (October 2014)

Minimum Measure VI: Pollution Prevention/Good Housekeeping For Municipal Operations

Incorporates an employee Pollution Prevention and Good Housekeeping training program. Addresses municipal operations and facilities that contribute or potentially contribute Pollutants of Concern to the storm sewer system.

At a minimum of once every 3 years, perform and document a self-assessment of all the Village's municipal operations and facilities to determine their potential sources of pollutants; and identify the Village's facilities that will be addressed by the Pollution Prevention and Good Housekeeping program. A Best Management Practices manual has been created based on the self-assessment, and will be updated accordingly.

Please refer to **Attachment 4** for the following information:
Village of Tarrytown MS4 Best Management Practices Manual (Simplified)

***All MS4 other documents, mapping, records, etc., are maintained at the Village of Tarrytown Building Department**

VILLAGE OF TARRYTOWN
STORMWATER OUTREACH & EDUCATION:

MAKING YOUR HOUSE AND LAWN STORMWATER SAFE:

Refer to Westchester County's information for properly mowing and maintaining your Lawn, Septic System, as well as salt, household chemicals and vehicle washing.
http://planning.westchestergov.com/environment/stormwater-management

Refer to the Westchester County Step-to-Step Guide to Cleaner Water at:
http://planning.westchestergov.com/images/stories/stormwater/stepbystep.pdf.

FERTILIZING YOUR LAWN:

Refer to NYSDEC's information to 'Look for the Zero, Protect your Waters'.
http://www.dec.ny.gov/docs/water_pdf/fertflyer15.pdf

NATIVE LANDSCAPING:

Refer to Westchester County's information on Native Landscaping
http://planning.westchestergov.com/images/stories/stormwater/GoNative.pdf

RAIN GARDENS & RAIN BARRELS:

Refer to Westchester County's information on Rain Gardens & Rain Barrels,
http://planning.westchestergov.com/rain-gardens

http://planning.westchestergov.com/rain-barrels

Rain Barrels/Permeable Pavement/Green Lawns Blue Waters (League of Women Voters):
http://www.watpa.org/lwv/greenlawnsbrochures/index.html

EPA KIDS FUN GAMES FOR NON-POINT POLLUTION:

http://water.epa.gov/polwaste/nps/kids/index.cfm

REGULATORY LINKS:

VILLAGE OF TARRYTOWN:

Green Industry Contractor
http://www.tarrytowngov.com/department-of-public-works/pages/leaf-blowers-and-landscapers-laws

NYSDEC:

NYSDEC Contractor Training:
http://www.dec.ny.gov/chemical/8699.html

NYSDEC Storwater MS4 Permit and Forms
http://www.dec.ny.gov/chemical/43150.html

Fertilizer and Detergent Law:
http://www.dec.ny.gov/chemical/67239.html

ENVIRONMENTAL PROTECTION AGENCY:

EPA Stormwater Homepage:
http://water.epa.gov/polwaste/npdes/stormwater/

EPA Green Infrastructure training:
http://water.epa.gov/infrastructure/greeninfrastructure/gi_training.cfm

WESTCHESTER COUNTY:

Westchester County Household Material Recovery Facility (H-MRF)
http://environment.westchestergov.com/new-h-mrf

Septic System Management:
http://health.westchestergov.com/septic-systems

ATTACHMENT 1

Exempt Discharges

Exempt Discharges

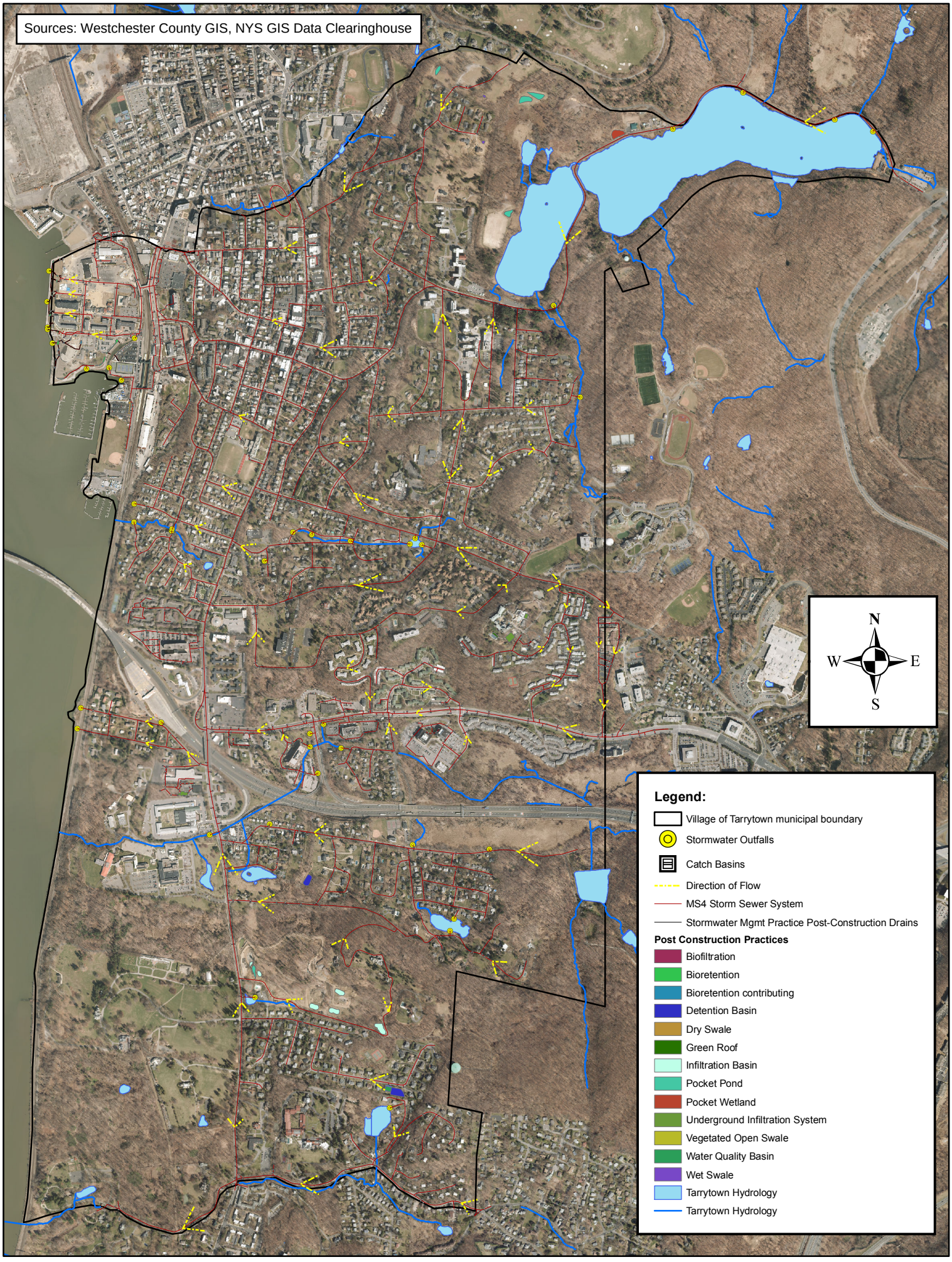
The following are listed as *Exempt Non-Stormwater Discharges* per the NYSDEC MS4 Permit and will remain as such unless the NYSDEC will determine them to be substantial contributors of pollutants.

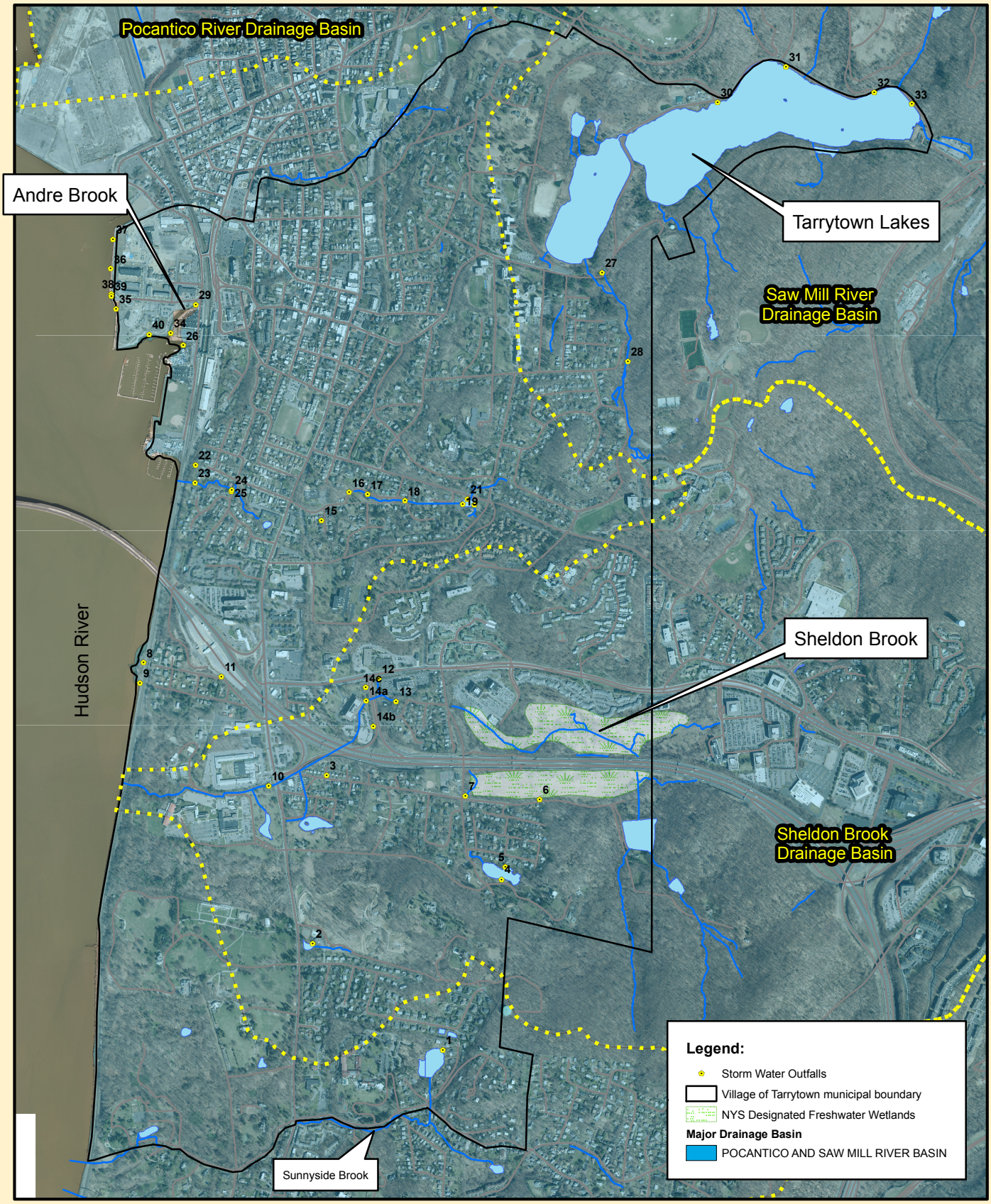
a. water line flushing
b. landscape irrigation
c. diverted stream flows
d. riding ground waters
e. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
f. uncontaminated ground water
g. discharges from potable water sources
h. foundation drains
i. air conditioning condensate
j. irrigation water
k. springs
l. water from crawl space and basement sump pumps
m. footing drains
n. lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label;
o. water from individual residential car washing
p. flows from riparian habitats and wetlands
q. dechlorinated swimming pool discharges
r. residual street wash water
s. discharges or flows from fire fighting activities
t. dechlorinated water reservoir discharges
u. any SPDES permitted discharge

ATTACHMENT 2

Village of Tarrytown Storm Sewershed Map

Village of Tarrytown Outfall Map Spreadsheet


Sources: Westchester County GIS, NYS GIS Data Clearinghouse
N
W
E
S
Legend:
Village of Tarrytown municipal boundary
Stormwater Outfalls
Catch Basins
Direction of Flow
MS4 Storm Sewer System
Stormwater Mgmt Practice Post-Construction Drains
Post Construction Practices
Biofiltration
Bioretention
Bioretention contributing
Detention Basin
Dry Swale
Green Roof
Infiltration Basin
Pocket Pond
Pocket Wetland
Underground Infiltration System
Vegetated Open Swale
Water Quality Basin
Wet Swale
Tarrytown Hydrology
Tarrytown Hydrology



N
W E
S

Storm Sewer Shed

0 450 900 1,800 2,700 3,600
Feet

Base planimetric data provided by
Westchester County GIS data warehouse and
NYS GIS Data Clearinghouse

Outfall	Outfall_ID	Location	Outlets_to	Dimension	Outfall Shape	Material	Outfall Type	Major Drainage Basin	Drainage Basin	Submerged	POINT_X	POINT_Y	Notes
1	OF-01	Whitetail Road	Surface Water	12"	Circular	PVC	Closed Pipe	Pocantino and Saw Mill River Basin		NO	670227.1252	808323.8749	Outfall submerged in pond. Inspection and photo taken from last receiving catch basin.
2	OF-02	Tarryhill Road	Surface Water	24"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	668556.2038	809696.7785	Storm water exits pond to the MS4 conveyance system, then to Hudson River. Greystone on Hudson directly above.
3	OF-03	Sheldon Avenue	Sheldon Brook	-	Box	Concrete	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	668731.7773	811856.2621	OF 3 located behind chain link fence, therefore inaccessible. Should be removed from survey and inspection should commence at Outfall 10
4	OF-04	Gracemere Road	Gracemere Lake (Surface Water)	12"	Circular	CMP	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	670979.6475	810519.4831	Federal Wetlands PUBHh
5	OF-05	NA	NA	NA	NA	NA	NA	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	671027.7807	810677.6778	DOES NOT EXIST. Mapped on original OF map as last receiving catch basin to Gracemere Lake. No OF at lake.
6	OF-06	Sheldon Avenue	State Regulated Freshwater Wetlands	12"	Circular	CMP	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	671470.1462	811543.2758	State Regulated Freshwater Wetlands (Wetland ID W-3, Wetland Class 2)
7	OF-07	Sheldon Avenue	State Regulated Freshwater Wetlands	12" x 36"	Box	Stone with open conveyance on bottom	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	670515.4843	811590.4602	State Regulated Freshwater Wetlands (Wetland ID W-3, Wetland Class 2)
8	OF-08	Van Mart Avenue	Hudson River	-	-	-	-	Pocantino and Saw Mill River Basin		NO	666382.6861	813300.2879	Inaccessible, located on Metro North Property. Outfall Location identified above from point of discharge.
9	OF-09	Paulding Avenue	Hudson River	-	-	-	-	Pocantino and Saw Mill River Basin		NO	666337.8015	813040.3733	Inaccessible, located on Metro North Property. Outfall Location identified above from point of discharge.
10	OF-10	S. Broadway	Sheldon Brook	5' x 5' Arch	Parabolic	Stone with brick reinforcement at arch	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	667988.2877	811720.8455	
11	OF-11	Van Mart Avenue	Hudson River	Inlet	Elliptical	Grate	NA	Pocantino and Saw Mill River Basin		NO	667383.4308	813120.7024	Inlet grate, last receiving inlet to OF-8
12	OF-12	White Plains Road	Sheldon Brook	24"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	669405.0039	813095.9731	Possibly DOT
13	OF-13	2 Summit Street	Sheldon Brook	5' x 5' Arch	Parabolic	Stone with brick reinforcement at arch	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	669625.3576	812803.8609	
14a	OF-14a	120 White Plains Road complex	Sheldon Brook	8' x 5'	Box	Concrete	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	669240.7592	812813.0323	
14b	OF-14b	120 White Plains Road complex	Sheldon Brook	18"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	669334.2097	812487.9319	
14c	OF-14c	120 White Plains Road complex	Sheldon Brook	18"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Sheldon Brook Basin	NO	669234.1697	812978.8565	
15	OF-15	Grove Street	Unnamed Tributary to Hudson River	25" x 48"	Box	Stone	Closed Pipe	Pocantino and Saw Mill River Basin		NO	668669.9915	815128.9465	
16	OF-16	Loh Avenue	Unnamed Tributary to Hudson River	36"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	669022.3004	815487.8056	
17	OF-17	Loh Avenue	Unnamed Tributary to Hudson River	12"	Circular	Earthen (VCP- Citrified Clay Pipe)	Closed Pipe	Pocantino and Saw Mill River Basin		NO	669259.9170	815458.3895	
18	OF-18	Leroy Avenue	Unnamed Tributary to Hudson River	36"	Circular	CMP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	669738.1916	815377.2786	
19	OF-19	Benedict & Prospect Ave	Surface Water	12"	Circular	Ductile Iron	Closed Pipe	Pocantino and Saw Mill River Basin		NO	670481.3849	815337.7897	
20	OF-20	Benedict & Prospect Ave	Surface Water	-	Circular	-	Closed Pipe	Pocantino and Saw Mill River Basin		NO	670628.7412	815326.6264	Heavy growth at time of 2014 inspection.
21	OF-21	Benedict & Prospect Ave	Surface Water	18"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	670541.6670	815404.7699	
22	OF-22	Church Street	Unnamed Tributary to Hudson River	18"	Circular	CMP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	667050.1243	815841.7766	
23	OF-23	Tappan Landing Road	Unnamed Tributary to Hudson River	14"	Circular	Concrete	Closed Pipe	Pocantino and Saw Mill River Basin		NO	667045.2287	815609.8457	
24	OF-24	Church Street	Unnamed Tributary to Hudson River	12"	Circular	PCV	Closed Pipe	Pocantino and Saw Mill River Basin		NO	667517.1833	815521.5101	ENTER TO INSPECTION OUTFALLS 24 & 25 FROM CHURCH STREET
25	OF-25	Tappan Landing Road	Unnamed Tributary to Hudson River	10"	Circular	PVC	Closed Pipe	Pocantino and Saw Mill River Basin		NO	667511.4430	815503.7149	ENTER TO INSPECTION OUTFALLS 24 & 25 FROM CHURCH STREET
26	OF-26	Tarrytown Boat Club	Hudson River	-	Circular	CMP	Closed Pipe	Pocantino and Saw Mill River Basin		TIDAL	666891.2316	817378.6222	
27	OF-27	Neperan Road	Tarrytown Lakes	24"	Circular	PVC	Closed Pipe	Pocantino and Saw Mill River Basin	Saw Mill River Basin	NO	672270.0895	818307.5145	
28	OF-28	Midland Avenue	Surface Water	24" x 40"	Elliptical	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Saw Mill River Basin	NO	672601.2523	817166.5851	
29	OF-29	Andre Brook	Hudson River	11'6" x 5'	Box	Concrete	Closed Pipe	Pocantino and Saw Mill River Basin		NO	667052.6582	817900.4871	Also on Sleepy Hollow Stormwater Outfall inventory
30	OF-30	Neperan Road & Tower Hill Road	Tarrytown Lakes	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Saw Mill River Basin	NO	673752.4541	820500.7783	
31	OF-31	Neperan Road & Lake Road	Tarrytown Lakes	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Saw Mill River Basin	NO	674630.8437	820950.6334	
32	OF-32	Neperan Road	Tarrytown Lakes	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Saw Mill River Basin	NO	675767.0947	820622.9160	
33	OF-33	Neperan Road	Tarrytown Lakes	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin	Saw Mill River Basin	NO	676246.3532	820473.4346	
34	OF-34	Pierson Park	Andre Brook	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	666731.6307	817533.7366	Added in 2014
35	OF-35	Scenic Husdon Riverwalk Park	Hudson River	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		TIDAL	666029.4912	817843.0918	Added in 2014. Green Infrastructure Practice Outfall.
36	OF-36	Scenic Hudson Riverwalk Park	Hudson River	8"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		TIDAL	665961.9445	818359.0117	Added in 2014. Green Infrastructure Practice Outfall.
37	OF-37	Scenic Hudson Riverwalk Park	Hudson River	8"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		TIDAL	665990.3998	818739.0307	Added in 2014. Green Infrastructure Practice Outfall.
38	OF-38	Scenic Hudson Riverwalk Park	Hudson River	48"	Elliptical	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	665970.6333	818035.2066	Added in 2014
39	OF-39	Scenic Hudson Riverwalk Park	Hudson River	48"	Elliptical	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		NO	665970.6333	818008.8177	Added in 2014
40	OF-40	Scenic Hudson Riverwalk Park	Hudson River	12"	Circular	RCP	Closed Pipe	Pocantino and Saw Mill River Basin		YES	666455.3555	817516.8039	Added in 2014. Listed as a 12" RCP "Existing outlet to remain" on Scenic Hudson drainage plan

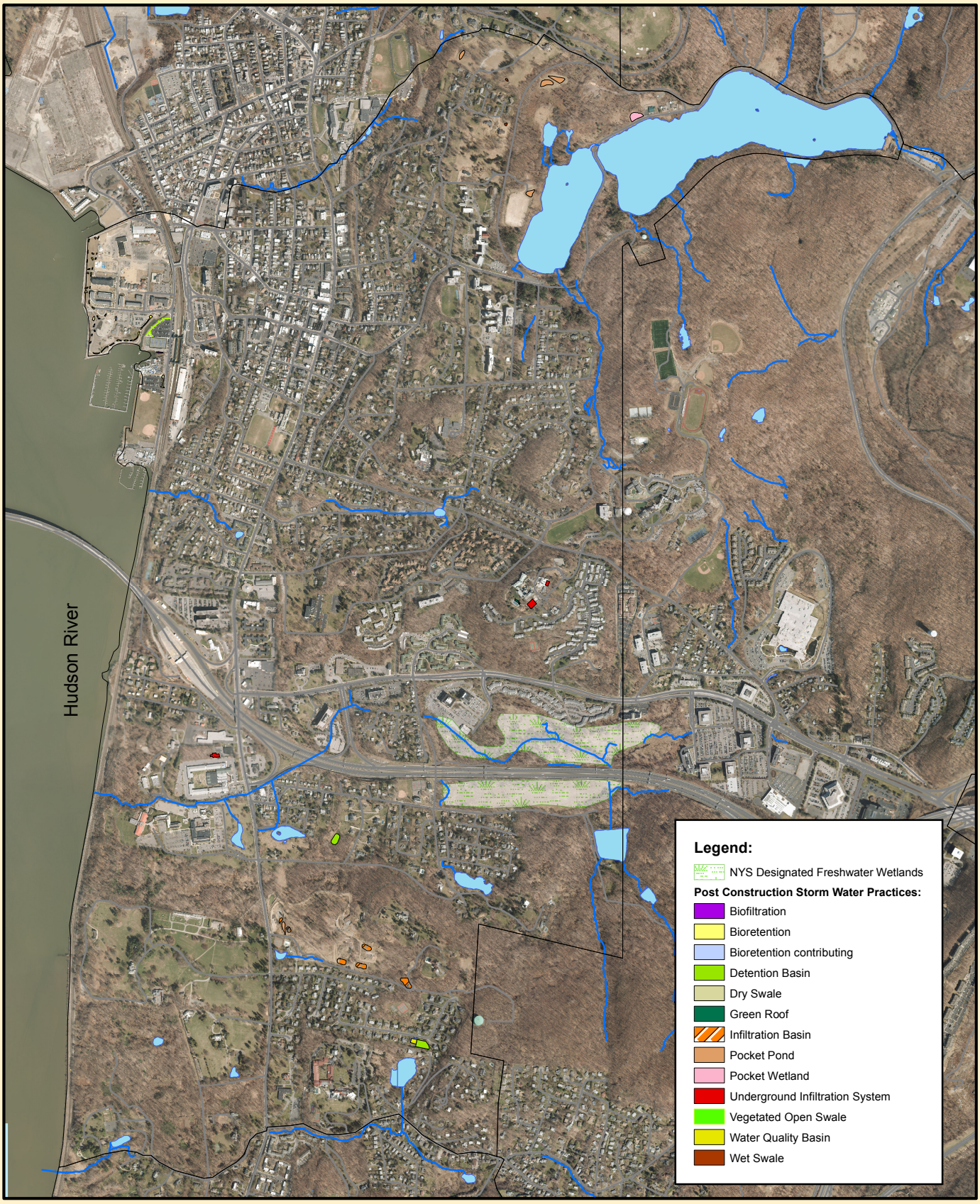
ATTACHMENT 3

Village of Tarrytown Construction Site Inventory

Village of Tarrytown Post-Construction Sites Map

Village of Tarrytown Post-Construction Sites Spreadsheet

Name	NOI DATE	Location	SPDES Permit	Owner Name	Owner Address	Owner Phone #
Jewish Community Center on the Hudson Renovation and Addition	1/15/13	371 South Broadway Tarrytown, NY	NYR10W281	CRESCENT ASSOCIATES LLC	371 South Broadway Tarrytown, NY 10591	914-366-7898
The Castle	8/2/12	400 Benedict Avenue Tarrytown, NY	NYR10V771	LENIMENTUS NY, INC	400 Benedict Avenue Tarrytown, NY 10591	914-631-1980
Greystone on Hudson Phase I	6/25/12	South Broadway Tarrytown, NY	NYR10V614	BROADWAY ON HUDSON ESTATES LLC	15 Paulkner Lane Dix Hills, NY 11746	516-652-2195
Pierson Park & Andre Brook Restoration	6/8/12	238-240 West Main Street Tarrytown, NY	NYR10V542	VILLAGE OF TARRYTOWN	1 Depot Plaza Tarrytown, NY 10591	914-631-1885
Commuter Parking Lot Improvements	5/20/11	Green Street Tarrytown, NY	NYR10U334	VILLAGE OF TARRYTOWN	1 Depot Plaza Tarrytown, NY 10591	914-631-1885
Legends at Wilson Park	3/3/11	Wilson Park Drive Tarrytown, NY	NYR10U027	TOLL BROTHERS, INC	60 Merritt Boulevard, Suit 100 Fishkill, NY 12524	845-897-8900
Tarrytown Scenic Hudson Riverwalk Park	3/5/09	238-240 West Main Street Tarrytown, NY	NYR10Q885	VILLAGE OF TARRYTOWN	1 Depot Plaza Tarrytown, NY 10591	914-631-1885
Briarcliff Manor Pump Station (Briarcliff Manor NY Water Supply Project)	9/29/08	Neperan Road Tarrytown, NY	NYR10Q458	VILLAGE OF BRIARCLIFF MANOR	1111 Pleasantville Road Briarcliff Manor, NY 10510	914-944-2782
Tarrytown Riverwalk Improvements	12/5/07	Van Mart Avenue to Lyndhurst Estate Tarrytown, NY	NYR10N924	WESTCHESTER COUNTY DEPARTMENT OF PLANNING	148 Martine Avenue White Plains, NY 10601	914-995-4415
New construction of Village Hall, Court & Police Headquarters	2/8/07	1 Depot Plaza Tarrytown, NY	NYR10M293	VILLAGE OF TARRYTOWN	21 Wildley Street, Village Hall Tarrytown, NY 10591	914-631-3668
Ferry Landings	6/28/06	Main Street Tarrytown, NY	NYR10L207	NATIONAL RE/SOURCES	485 West Putname Avenue Greenwich, CT 06830	203-661-0055
Gracemere (Tarry Grand Estates) (Jardim Estates) Housing Development	6/13/05	South Broadway Tarrytown, NY	NYR10J109	HSA-UWC	4 West 43rd Street New York, NY 10036	212-719-4980
Neperan Road Rehabilitation	4/14/05	Neperan Road Nearest Cross Road: Route 9 & Saw Mill Parkway Tarrytown, NY	NYR10I669	VILLAGE OF TARRYTOWN	21 Wildley Street, Village Hall Tarrytown, NY 10591	914-631-3668



N
W E
S

Post Construction Storm Water Practices

0 450 900 1,800 2,700 3,600
Feet

Base planimetric data provided by
Westchester County GIS data warehouse and
NYS GIS Data Clearinghouse

Village of Tarrytown
Post-Construction Sites (Simplified)

Property	Area	Practice_1	Practice_2	Method	Receiving Water	Drainage Basin
Windsor Estates	14418.36	Detention Basin	Detention Basin	Standard	Next pond then Village of Irvington MS4	Pocantico and Saw Mill River Basin
Windsor Estates	4101.38	Water Quality Basin	WQ Basin	Standard	Next pond then Village of Irvington MS4	Pocantico and Saw Mill River Basin
Briarcliff Manor Pump Station	12341.04	Pocket Wetland	W4	Standard	Tarrytown Lakes	Saw Mill River Basin
Jardim Estates	9918.49	Detention Basin	Detention Basin	Standard	Sheldon Brook	Sheldon Brook Basin
Legends at Wilson Park	5980.78	Pocket Pond	P5	Standard	Tarrytown Lakes	Saw Mill River Basin
Legends at Wilson Park	9704.66	Pocket Pond	P5	Standard	Tarrytown Lakes	Saw Mill River Basin
Legends at Wilson Park	9724.41	Pocket Pond	P5	Standard	Tarrytown Lakes	Saw Mill River Basin
Legends at Wilson Park	4274.96	Pocket Pond	P5	Standard	Hudson River	Pocantico and Saw Mill River Basin
Legends at Wilson Park	829.00	Wet Swale	O-2	Standard	Ground Water	Saw Mill River Basin
Legends at Wilson Park	995.62	Wet Swale	O-2	Standard	Ground Water	Saw Mill River Basin
The Castle	2323.70	Underground Infiltration System	I4 (UIS)	Standard w/RRV Capacity	Sheldon Brook	Sheldon Brook Basin
The Castle	7739.45	Underground Infiltration System	I4 (UIS)	Standard w/RRV Capacity	Sheldon Brook	Sheldon Brook Basin
The Castle	1484.44	Green Roof	Green Roof	RRv Techniques (Volume Reduction)	NA	Sheldon Brook Basin
Greystone on Hudson	11090.31	Infiltration Basin	I2	Standard w/RRV Capacity	Ground Water	Pocantico and Saw Mill River Basin
Greystone on Hudson	1667.21	Infiltration Basin	I2	Standard w/RRV Capacity	Ground Water	Pocantico and Saw Mill River Basin
Greystone on Hudson	4308.59	Pocket Pond	P5	Standard	Hudson River	Pocantico and Saw Mill River Basin
Greystone on Hudson	3019.63	Infiltration Basin	I2	Standard w/RRV Capacity	Ground Water	Pocantico and Saw Mill River Basin
Greystone on Hudson	7671.63	Infiltration Basin	I2	Standard w/RRV Capacity	Ground Water	Pocantico and Saw Mill River Basin
Greystone on Hudson	6826.59	Infiltration Basin	I2	Standard w/RRV Capacity	Ground Water	Pocantico and Saw Mill River Basin
Greystone on Hudson	6693.88	Infiltration Basin	I2	Standard w/RRV Capacity	Ground Water	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	892.63	Biofiltration	-	Standard w/RRv Capacity	Andre Brook	Pocantico and Saw Mill River Basin
Commuter Lot Improvements	3199.59	Dry Swale	O-1	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Jewish Community Center on the Hudson	4897.05	Underground Infiltration System	I4 (UIS)	Standard w/RRV Capacity	Hudson River	Sheldon Brook Basin
Pierson Park & Andre Brook Restoration	2888.64	Bioretention	F-5	Standard w/RRV Capacity	Andre Brook	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	360.54	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	446.76	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	381.96	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	321.33	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	472.07	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	102.36	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	214.95	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	392.41	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	243.93	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	198.04	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	298.28	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	303.47	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	408.80	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	447.28	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	193.42	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	224.85	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	693.29	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	339.62	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	485.34	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	1083.70	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	628.86	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	1213.83	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	596.91	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	602.86	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	670.97	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	255.90	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Scenic Hudson Riverwalk Park	1693.16	Bioretention	F-5	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	239.96	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	337.58	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	495.18	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	262.46	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	310.72	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	271.05	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	306.44	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	1232.73	Vegetated Open Swale	Vegetated Open Swale	RRv Techniques (Volume Reduction)	Andre Brook	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	486.61	Vegetated Open Swale	Vegetated Open Swale	RRv Techniques (Volume Reduction)	Andre Brook	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	1075.77	Vegetated Open Swale	Vegetated Open Swale	RRv Techniques (Volume Reduction)	Andre Brook	Pocantico and Saw Mill River Basin
Pierson Park & Andre Brook Restoration	712.98	Bioretention contributing	F-5 contributing	Standard w/RRV Capacity	Hudson River	Pocantico and Saw Mill River Basin

ATTACHMENT 4

Village of Tarrytown MS4 Best Management Practices Manual (Simplified)

Best Management Practices (BMP) Manual

Municipal Highway Garage
Village of Tarrytown Shaft 10 Pump Station

NEW YORK STATE
DEPARTMENT OF ENVIROMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM

Municipal Separate Storm Sewer Systems (MS4)

VILLAGE OF TARRYTOWN
Westchester County, New York

BEST MANAGEMENT PRACTICES (BMP) MANUAL

Introduction

This Manual is designed for use by the municipal operations located within the Village of Tarrytown. The Village of Tarrytown is an operator of a small municipal separate storm sewer system (MS4) located in an urbanized area. As such, coverage must be obtained under the *NYSDEC SPDES General Permit for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4)*. Permit requirements mandate that a *Storm Water Management Program (SWMP)* be developed and implemented to be authorized to discharge storm water to the storm sewer system. This BMP Manual has been created as part of the SWMP.

Purpose

Permit requirements mandate that all permittees perform a self-assessment to (1) address municipal operations and facilities that contribute or potentially contribute Pollutants of Concern (POCs) to the MS4 system; (2) determine the source of pollutants potentially generated by the covered entity's operations and facilities; and (3) identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program.

The following municipal operations have been assessed:

- Municipal Highway Garage
- Village of Tarrytown Shaft 10 Pump Station

BEST MANAGEMENT PRACTICES MANUAL

for:

Village of Tarrytown Municipal Highway Garage
4 Division Street
Tarrytown, NY 10591
(914) 631-0356

Contact(s):

Howard Wessells, Highway Superintendent

and:

Village of Tarrytown Shaft 10 Pump Station
Neperan Road
Tarrytown, NY 10591

Contact(s):

Howard Wessells, Highway Superintendent

BMP Preparation Date:

03/ 15 / 2014

Contents

Storm Water Management Plan (SWMP)

NEW YORK STATE
DEPARTMENT OF ENVIROMENTAL CONSERVATION
SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES FROM

Municipal Separate Storm Sewer Systems (MS4)

VILLAGE OF TARRYTOWN
Westchester County, New York

November 2012
Updated continually

STORMWATER MANAGEMENT PLAN

TABLE OF CONTENTS

APPENDICES

APPENDIX I Certification of Local Laws

APPENDIX II Storm Water Mapping

- Adjacent MS4's
- Storm Water Outfalls
- Storm Sewer Shed
- Post Construction Storm Water Practices
- Street Sweeping Map

APPENDIX III Other Mapping

- Critical Environmental Areas Map
- Zoning Map (Village of Tarrytown Comprehensive Plan, March 2007)
- Waterbody Inventory- Priority Waterbody List

Introduction

This Stormwater Management Plan (SWP) has been prepared for the Village of Tarrytown to address the *MS4 system* requirements and oversite. This plan is written in accordance with NYSDEC's SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s)(GP-0-10-002). The plan will be maintained with the Village's Storm Water Management Program (SWMP) documentation at the Building Department at Village Hall. Per permit requirements, the plan will be periodically assessed and modified as needed to address measurable goals, and select and implement the appropriate measures needed to ensure the reduction of Pollutants of Concern (POCs) in the Village's stormwater discharges to the Maximum Extent Practicable (MEP).

What is an MS4?

An MS4 is a Municipal Separate Storm Sewer System or, the entirety of the storm sewer system that is maintained within the municipal boundaries. The MS4 system is typically entirely inclusive of storm sewer lines, and would not include the sanitary system, with the exception of combined sewers systems. There are no combined sewers in the Village of Tarrytown.

How was the MS4 Program enacted? The Phase II Stormwater Program Overview

The Phase II Stormwater Program was implemented by the Environmental Protection Agency in an effort to preserve, protect and improve the Nation's water resources from polluted stormwater runoff. Phase I of the Program was implemented in 1990 under the Clean Water Act, and relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from MS4s typically servicing populations of 100,000 or greater.

The Phase II effort is EPA's next step effort to protect water resources from polluted stormwater runoff. The Phase II program expands to the Phase I program by addressing stormwater runoff from urbanized MS4s servicing populations smaller than 100,000. Phase II relies on individual State permit coverage to address stormwater runoff from such MS4s.

The Village of Tarrytown, a small urbanized entity with a population of 11,354 (per 2011 census), fits into the category of a "small MS4" under the Phase II Stormwater Program, and is therefore required to abide by the terms and conditions of the New York State Department of Environmental Conservation's SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (i.e. 'the NYSDEC MS4 Permit'). The permit was enacted and is enforced by the regulatory oversite agency, the New York State Department of Environmental Conservation. The Village of Tarrytown falls under the requirements of a *traditional land-use control* MS4 per the permit.

Village of Tarrytown MS4 System

The Village of Tarrytown is a riverfront community, located east of the Hudson River. Topography in the village runs in a downward slope, starting at 400' on the east side of the Village, descending down to the Hudson River (see Appendix II). In accordance with Part VII.A.3.b of the NYSDEC MS4 Permit, all of the outfalls within the jurisdiction of the Village of Tarrytown, known as the 'covered entity', have been

mapped. Mapping also includes the Receiving Water Bodies, the general Storm Sewer Shed, the completed Storm Sewer Lines, Catch Basins, and the Post-Construction Stormwater Management practices.

Exempt Discharges

The following are listed as *Exempt Non-Stormwater Discharges* per Part I.A.2 of the Permit and will remain as such unless the Department will determine them to be substantial contributors of pollutants.

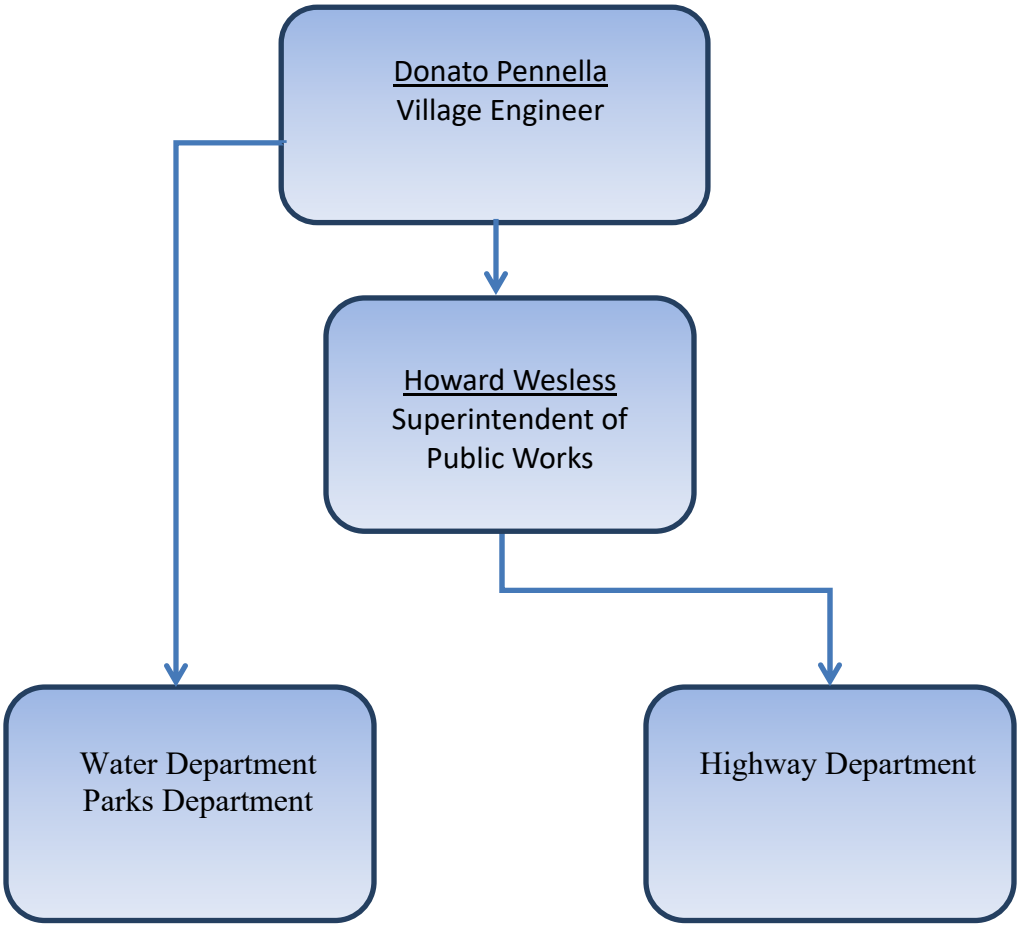
a. water line flushing
b. landscape irrigation
c. diverted stream flows
d. riding ground waters
e. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
f. uncontaminated ground water
g. discharges from potable water sources
h. foundation drains
i. air conditioning condensate
j. irrigation water
k. springs
l. water from crawl space and basement sump pumps
m. footing drains
n. lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label;
o. water from individual residential car washing
p. flows from riparian habitats and wetlands
q. dechlorinated swimming pool discharges
r. residual street wash water
s. discharges or flows from firefighting activities
t. dechlorinated water reservoir discharges
u. any SPDES permitted discharge

Organizational Structure

The Stormwater Management Organizational Structure is maintained as outlined and required per the NYSDEC MS4 Permit. Updates to the Structure will be made when required and updated in the SWMP.

VILLAGE OF TARRYTOWN

Storm Water Management Program
Organizational Structure



Adjacent MS4 Map

Adjacent MS4 boundaries have been identified on the 'Adjacent MS4 Boundaries' map included in this plan as required by the NYSDEC MS4 Permit (see Appendix II).

Local Storm Water Contact

The Local Storm Water Contact is listed on the Municipal Compliance Certification (MCC) form of the Annual Report as Donato Pennella, Village Engineer. The Assistant Village Engineer's office is located in the Building Department at the Village Hall, 1 Depot Plaza, Tarrytown, NY.

Measurable Goals

Per Part V.A, *Program Assessment*, conditions specific to the Village of Tarrytown have been evaluated to determine the Measurable Goals for meeting the requirements of the MS4 program. The Village has selected and implemented the following education and outreach activities and measurable goals to ensure reduction of POC's in stormwater discharges to the MEP. Measurable Goals are outlined below.

The Village of Tarrytown has recognized the following:

Pollutants of Concern (POCs):

- *Floatables & Trash Accumulation* in the storm sewer system and waterbodies.
- *Sediment*, the loose sand, clay, silt and other particles that settle at the bottom of a body of water. The EPA lists sediment as the most common pollutant in waterbodies.
- *Phosphorus & Nitrogen*. Nutrients that can cause the overgrowth of algae in waterbodies. Yard wastes (leaves and grass clippings), pet wastes, fertilizers and detergents carried through stormwater.

Geographic Areas of Concern:

- Main Corridor Business Area- For trash and sediment. Swept 6 days per week.
- Village Parks - For Trash Accumulation. No Fertilizer or Phosphorus use.

Waterbodies of Concern:

- Hudson River, Sheldon Brook & Andre Brook- For illicit discharge, trash accumulation and sediment. Multiple Village outfalls located along the Sheldon Brook and its tributaries. Andre Brook at end of conveyance system.
- Tarrytown Upper/Lower Reservoirs- For Trash, Phosphorus & Nitrogen. The Reservoirs can be described as a shallow lake bed. There are four stormwater outfalls and one inlet from the Briarcliff Manor Pump Station stormwater control, a 1.6 Acre development with one pocket wetland (W-4) constructed in 2009. The Legends at Wilson Park subdivision went under construction in 2011 and will discharge to Tarrytown Reservoirs from Water Quality Ponds 1, 4A, 4B. However, the development is being constructed with an on-site storm water management system complete with oil water separators. A covenant has been placed in the Homeowners deed and Homeowners Association documents that prohibits the use of phosphate fertilizers. Organic, non-phosphate fertilizers may be used. Stormwater entering from the surrounding area includes Marymount Campus, Sisters of Sacred Heart Marymount Convent, residential areas on Warner Lane and Lake Terrace, and a portion of the Rockefeller Estates (Village of Tarrytown Comprehensive Plan, March 2007). Outfall 27 contributes from a small culvert area to the Tarrytown Reservoirs. Improvements have included upgrading the walking trails from dirt to gravel and improving some areas of erosion around the reservoirs through a project funded by NYSDEC and matched by the Village.
- NYSDEC 303d List: In accordance with the NYSDEC's Waterbody Inventory/Priority Waterbody List, small segments of the 'Saw Mill River, Upper, and tribs' (WIN H-4) are located within and from the Tarrytown Reservoirs. These segments were 303d listed in 2010 for Chlordane, a pesticide used until 1988, with contaminated sediment listed as the suspected source. There are also some 'Minor Tribs to East of Hudson' that have been UnAssessed, as well as the Hudson River which is listed as Impaired.

Target Audiences:

- All Audiences (Homeowners, Businesses, Commercial)
- Homeowners
- Contractors

Measurable Goals to ensure POC reduction:

Trash Accumulation:

- Clean-up events by local organizations include areas of the Hudson River, Andre Brook, the Tarrytown Reservoirs, and village parks. The waterbodies are listed in the *waterbodies of concern*, identified in the SMP for floatables/trash accumulation.
- Main Corridor Business Area swept 6 days per week, and other areas swept (see Street Sweeping map).

Sediment:

- Street sweeping 6 days per week to keep sediment out of the MS4 system.

- Outreach to contractors during pre-construction meetings for sediment and Village's local law. Must have Erosion and Sediment Control training.
- Construction site inspections are conducted to reduce sediment runoff.
- LeRoy, Loh and Sheldon Avenues- For sediment. Steep slope Avenue with flooding concerns. Catch basins visually inspected frequently and prior to large storm events. Flooding will be mitigated after Loh Park is installed with a straight pipe system (currently in planning).
- Depot Plaza- For sediment. Area of lowest topography in village, more susceptible for sediment build-up. Visually inspected frequently and typically cleaned on seasonal basis.

Phosphorus & Nitrogen:

- Outreach and Education through the Village storm water website, Tarrytown Environmental Advisory Council, and outreach materials distributed at Town Hall. Outreach materials have included pesticide free lawn care, mulching in place, the leaf pick up and yard waste collection programs.
- For new developments, a covenant is placed in the Homeowners deed and in the Homeowners Association documents that prohibits the use of phosphate fertilizers.

Other Outreach and Education Materials:

- Outreach and Education materials are distributed at Town Hall for Target Audiences. Refer to the appropriate binder.

Certification of Local Laws

As required by the conditions of the NYSDEC MS4 permit, the Village of Tarrytown has enacted and adopted a Local Law for 'Village of Tarrytown Stormwater Management and Erosion and Sediment Control Local Law.' and a Local Law for 'Illicit Discharge, Elimination and Detection Local Law'. Both laws have been certified to be equivalent to the State Model law. See Appendix I.

MS4 Annual Reports and related correspondence

MS4 Annual Reports and related correspondence (Public Notices, notifications, etc) will be maintained on-file under the corresponding reporting year. Prior to submitting the Annual Report, the Village will present the draft annual report in a format open to the public where they can ask question and make comments per Part VII.A.2.d of the permit. Public notice will be made in accordance with local requirements, and retained with MS4 records.