



Title: Loading Calculations
 Project #: 174840035
 Prepared By: GKK
 Date: 2/28/2018

Revised By: GKK
 Date: 12/4/2020
 Checked By:
 Date:

NEWTOWN TOWNSHIP NPDES PRP SEDIMENT LOADING CALCULATIONS

Note: All calculated areas are based on areas derived from GIS data sets projected in Pennsylvania State Plane South NAD83, US Survey Foot.

Approach to calculating the PRP Loading:

1. Determine Township MS4 Drainage Area within the Darby Creek and Crum Creek watersheds.
2. Remove/Parse State Road right-of-ways and portions of open water within each Drainage Area.
3. Calculate the Zoning, Parcel and Township Road area within each Drainage Area.
4. Determine the Township owned Open Space and undeveloped areas for areas which do drain to the MS4 for each zoning district based on aerial imagery and Delaware County parcel description information.
5. Calculate impervious area and pervious area for remaining area based on maximum allowable impervious for each zoning district. For Township Road Right-of-Ways, the impervious coverage is assumed to be 75% and pervious coverage to be 25%. Township owned properties (including parks with improvements such as playgrounds, paved walking paths, and baseball fields) impervious coverage is assumed based on the Zoning district and is not included in Open Space/Undeveloped.
6. Calculate sediment and nutrient loading based on PADEP Simplified method for the impervious developed, pervious developed, and undeveloped areas.
7. Calculate sediment loading reduction from installed BMP's within the MS4 and each watershed.
8. Subtract loading reduction from installed BMP's to determine final sediment and nutrient loading for each watershed.
9. Determine BMP's to be implemented to account for 10% reduction requirement.

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 Township Area Per PennDOT Municipalities Boundary = 281,652,507 sq. ft

 or 10.103 sq. mi

Properties with Private Roadways and Storm Sewers	Total	46,061,382 sf
Melmark	2,811,205	sf
Episcopal Academy	5,540,758	sf
Liseter	16,524,771	sf
BPG	9,496,898	sf
Marville Joyfor	6,130,750	sf
Terrazza / Muirwood	1,755,724	sf
Dunwoody	3,801,276	sf

Portions of properties with Private Roadways and Storm Sewers are included in the Township MS4 area when the runoff mixes with Township MS4 runoff.



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CRUM CREEK WATERSHED AREA

Township area within Crum Creek Watershed	167,527,578 sq. ft
Areas outside MS4 Outfall Drainage Areas	98,093,540 sq. ft
Township MS4 Drainage Area within Crum Creek Watershed	69,434,038 sq. ft
Parsed Area from MS4 Drainage Area	3,535,853 sq. ft
Open Space	9,643,243 sq. ft
Impervious Developed, Area	24,192,280 sq. ft
Pervious Developed, Area	32,062,662 sq. ft
Non Developed Area	9,643,243 sq. ft

Crum Creek PRP Sediment Loading Calculations

Land Cover	Area		TN		TP		TSS	
	(sf)	(ac)	#/ac/yr	lb/yr	#/ac/yr	lb/yr	#/ac/yr	lb/yr
Undeveloped Area	9,643,243	221.38	10	2,213.78	0.33	73.05	234.6	51,935.37
Impervious Developed	24,192,280	555.38	23.06	12,807.02	2.28	1,266.26	1839	1,021,340.77
Pervious Developed	32,062,662	736.06	20.72	15,251.11	0.84	618.29	264.96	195,025.78
Subtotal	65,898,186	1,512.81		30,271.92		1,957.61		1,268,301.92
Pollutants Removed By Existing BMPs				569.09		57.05		51,400.03
Total				29,702.83		1,900.56		1,216,901.89

Pollutants of Concern for Crum Creek:

Pathogens
Siltation

Required 10% Reduction due to Siltation: 121,690.2 lb/year TSS

BMP to Reduce Siltation

BMP Name	BMP Effectiveness			BMP Area	Pollutant Removal
	TN	TP	Sediment		
Stream Restoration	0.075 lb/ft/yr	0.068 lb/ft/yr	44.88 lb/ft/yr	2715 lf	121,849 lb/yr
Tree Planting	10%	15%	20%	500 Trees	1,839 lb/yr
Rain Gardens / Bioretention	80%	85%	90%	2 imp. ac.	3,310 lb/yr
Total TSS Reduction					126,998



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DARBY CREEK WATERSHED AREA

Township area within Darby Creek Watershed	114,124,929 sq. ft
Areas outside MS4 Outfall Drainage Areas	37,659,802 sq. ft
Township MS4 Drainage Area within Darby Creek Watershed	76,465,127 sq. ft
Parsed Area from MS4 Drainage Area	2,603,797 sq. ft
Open Space	2,008,837 sq. ft
Impervious Developed, Area	25,941,046 sq. ft
Pervious Developed, Area	45,769,859 sq. ft
Non Developed Area	2,008,837 sq. ft

Darby Creek PRP Sediment Loading Calculations

Land Cover	Area		TN		TP		TSS	
	(sf)	(ac)	#/ac/yr	lb/yr	#/ac/yr	lb/yr	#/ac/yr	lb/yr
Undeveloped Area	2,008,837	46.12	10	461.17	0.33	15.22	234.6	10,818.94
Impervious Developed	25,941,046	595.52	23.06	13,732.79	2.28	1,357.80	1839	1,095,169.52
Pervious Developed	45,769,859	1,050.73	20.72	21,771.15	0.84	882.61	264.96	278,401.79
Subtotal	73,719,742	1,692.37		35,965.11		2,255.63		1,384,390.25
Pollutants Removed By Existing BMPs				629.40		55.98		72,804.17
Total				35,335.71		2,199.64		1,311,586.09

Pollutants of Concern for Darby Creek:

Pathogens
Siltation
PCBs

Required 10% Reduction due to Siltation: 131,158.61 lb/year TSS

BMP to Reduce Siltation

BMP Name	BMP Effectiveness			BMP Area	Pollutant Removal
	TN	TP	Sediment		
Stream Restoration	0.075 lb/ft/yr	0.068 lb/ft/yr	44.88 lb/ft/yr	2925 lf	131,274 lb/yr
Tree Planting	10%	15%	20%	500 Trees	1,839 lb/yr
Rain Gardens / Bioretention	80%	85%	90%	2 imp. ac.	3,310 lb/yr
Total TSS Reduction					136,423

CRUM CREEK

ZONING DISTRICT	MS4 Drainage Area	Parsed Area		Open Space		Total Parcel Area	Net PRP Area	Township/ Private Road	PRP Residential Area	PRP Commercial /Non-Res. Area	PRP Industrial Area	Building Area, Maximum	Paved	Allowed Per Zoning			PRP Areas			Gross (lbs./yr.)			BMP Removal (lbs./yr.)			Net (lbs./yr.)					
		Total	State Road ROW	TWP	Private									Total Impervious, Maximum	Non-Residential, Maximum Impervious	Open Space, Minimum	Impervious Developed, Area	Pervious Developed, Area	Non Developed, Area	Suspended Solids	Nitrogen Loading	Phosphorus Loading	Suspended Solids	Nitrogen Loading	Phosphorus Loading	Suspended Solids	Nitrogen Loading	Phosphorus Loading			
RESIDENTIAL																															
R1	25,262,279	1,203,815	1,203,086		4,589,666	21,224,278	19,378,389	2,834,916	16,543,474	90,409		15%		25%		50%		6,307,260	13,161,539	4,589,666	371,052.98	10,653.10	618.71	1,134.38	12.26	1.25	369,918.60	10,640.84	617.45		
R1A	2,264,313	57,628	57,628	79,188	108,419	2,110,692	2,019,079	95,993	1,923,085			15%		25%		50%		552,766	1,466,312	187,607	33,265.92	1,033.17	58.63	546.65	6.13	0.61	32,719.27	1,027.04	58.02		
R2	5,327,767	392,713	392,713	16,060	218,148	4,309,713	4,700,845	764,103	3,768,990	167,753		15%		30%		50%		1,787,650	2,913,195	234,208	94,451.67	2,385.83	151.52	890.29	9.99	0.99	93,561.38	2,375.84	150.53		
R3	13,000,948	425,556	425,556	110,372	250,907	10,426,391	10,574,425	2,149,001	8,425,424	1,639,688		20%		40%		50%		5,801,764	6,412,349	361,279	285,886.52	6,204.44	430.06	6,986.67	78.37	7.75	278,899.85	6,126.07	422.31		
R4	741,761			397,836	303,229	741,760	40,696	1	40,694			15%	30%	45%		40%		18,314	22,382	701,066	4,685.01	181.28	6.70				4,685.01	181.28	6.70		
R4A	1,441,725	89	89			1,441,725	1,441,636	73,641	1,367,995			15%	30%	45%		40%		670,829	770,808		33,009.34	721.77	49.98				33,009.34	721.77	49.98		
R5	39,687				39,586	39,687		0	101			20%		40%				40	60	39,586	215.26	9.14	0.30				215.26	9.14	0.30		
A												20%																			
A-O	2,269,555	107,536	107,536		48,516	2,123,464	2,113,503	38,555	2,074,948					50%		10%		1,066,390	1,047,113	48,516	51,650.97	1,073.74	76.38	27,433.26	307.79	30.43	24,217.72	765.96	45.94		
PRD	9,051,064	118,320	118,320		2,211,160	8,144,571	6,721,584	890,283	4,422,701	1,408,600		30%		60%				4,166,493	2,555,091	2,211,160	203,349.75	3,928.66	284.10	1,893.68	21.25	2.10	201,456.07	3,907.41	282.00		
COMMERCIAL																															
O	397,535	64,568	64,568			319,177	332,966	13,789	319,177			70%		70%		30%		233,766	99,200		10,472.44	170.94	14.15				10,472.44	170.94	14.15		
C-1	3,158,363	461,341	461,341		37,057	2,467,976	2,659,965	229,046	2,430,919			70%		70%				1,873,428	786,537	37,057	84,075.49	1,374.40	113.51	6,158.40	68.99	6.83	77,917.09	1,305.41	106.67		
C-2	874,291	221,531	221,531		652,638	652,760	122		122			25%		25%		15%		31	92	652,638	3,516.75	149.88	4.95				3,516.75	149.88	4.95		
C-2 Lifestyle	120,238	6,967	6,967		113,271	113,271	[0]		[0]			20%		20%		25%		[0]	[0]	113,271	610.04	26.00	0.86				610.04	26.00	0.86		
INDUSTRIAL																															
I	140,430	45,428	45,428			84,587	95,001	10,414				40%	25%	65%				62,792	32,209		2,846.86	48.56	3.91	944.92	3.74	1.05	1,901.94	44.82	2.86		
SU-1	3,882,679	243,451	243,451		230,609	2,947,612	3,408,619	691,616				30%	30%	30%				1,333,813	2,074,806	230,609	70,172.71	1,745.96	111.57	598.98	6.58	0.69	69,573.74	1,739.38	110.88		
SU-2	1,461,402	186,909	186,909	236,581		1,262,114	1,037,913	12,380				30%	30%	30%				316,945	720,968	236,581	19,040.20	565.04	32.28	4,812.81	54.00	5.34	14,227.39	511.04	26.95		
Total	69,434,038	3,535,853	3,535,124	840,037	8,803,206	58,409,778	54,524,745	7,803,738	38,567,412	6,056,669	3,827,124							24,192,280.44	32,062,662.18	9,643,242.89	1,268,301.92	30,271.92	1,957.61	51,400.03	569.09	57.05	1,216,901.89	29,702.83	1,900.56		

	TSS	TN	TP
Impervious Developed	1839	23.06	2.28
Pervious Developed	264.96	20.72	0.84
Undeveloped	234.6	10	0.33

Note:
The PRD Overlay Zoning District increases the maximum allowable impervious coverage of the underlying Zoning District. For areas within a PRD, the areas have been subtracted from the underlying zoning district to eliminate double counting of the area.

Existing BMP Removal Calculations

BMP #	BMP	BMP Name / Description	DA (sf)	Latitude	Longitude	Receiving Waters	Date Installed or Implemented	Within MS4 Drainage Area	Zoning District	Impervious Area Controlled (SF)	TSS Removal Efficiency (%)	Sediment Removed (#/Yr)	TN Removal Efficiency (%)	Nitrogen Removed (#/Yr)	TP Removal Efficiency (%)	Phosphorus Removed (#/Yr)
1		10 North Line Road		39° 59' 5.38"	-75° 22' 41.99"	Darby Creek		Yes	R3							
2	Rain Garden w/	105 Mason's Way (Lot 16)	< 1 acre	40° 1' 11.53"	-75° 24' 4.15"	Little Darby Creek		Yes	R1	15,089	80%	509.62	70%	5.59	75%	0.59
3	Infiltration Bed	108 Mason's Way (Lot 5)	< 1 acre	40° 1' 9.27"	-75° 23' 57.6"	Darby Creek	2013	No	R1	6,328	95%		85%			
4	Infiltration Bed	11 Northwood	< 1 acre	39° 59' 5.27"	-75° 22' 43.67"	Darby Creek	4/17/2013	Yes	R3	2,650	95%	106.28	85%	1.19	85%	0.12
5	Infiltration Bed	11 Phillips Lane	< 1 acre	39° 59' 07.5"	-75° 25' 57.3"	Crum Creek	12/16/2014	Yes	R1	4,207	95%	168.73	85%	1.89	85%	0.19
6	Rain Garden w/	111 Mason's Way (Lot 13)	< 1 acre	40° 01' 7.98"	-75° 23' 57.66"	Darby Creek	2013	Yes	R1	5,994	80%	202.45	70%	2.22	75%	0.24
7	Infiltration Bed	112 Main Street	< 1 acre	39° 58' 58.75"	-75° 24' 51.14"	Crum Creek	7/13/2012	Yes	R3	3,595	95%	144.18	85%	1.62	85%	0.16
8	Infiltration Bed	112 Mason's Way (Lot 7)	< 1 acre	40° 01' 5.03"	-75° 23' 57.34"	Darby Creek	1/18/2013	No	R1	8,711	95%		85%			
9	Infiltration Bed	114 Mason's Way (Lot 8)	< 1 acre	40° 1' 5.88"	-75° 25' 53.88"	Little Darby Creek	11/15/2013	No	R1	1,400	95%		85%			
10	Infiltration Bed	117 Mason's Way / 36 Dunminning	< 1 acre	40° 01' 2.28"	-75° 23' 55.19"	Darby Creek	12/11/2014	No	R1	11,659	95%		85%			
11	Infiltration Bed	12 Green Gables	< 1 acre	40° 1' 14.88"	-75° 24' 40.67"	Darby Creek	12/20/2013	Yes	R1	1,925	95%	77.21	85%	0.87	85%	0.09
12	Infiltration Bed	120 Brookside	< 1 acre	39° 59' 25.73"	-75° 23' 28.23"	Foxes Run	10/24/2014	No	R2	4,010	95%		85%			
13		120 Mason's Way (Lot 11)		40° 1' 2.54"	-75° 23' 49.40"	Darby Creek		No	R1	15,028						
14	Infiltration Bed	126 Hickory Lane	< 1 acre	39° 59' 1.05"	-75° 24' 54.90"	Preston Run		Yes	R3	2,614	95%	104.84	85%	1.18	85%	0.12
15	Infiltration Bed	14 Dunminning	< 1 acre	40° 1' 7.32"	-75° 24' 8"	Darby Creek		Yes	R1	10,999	95%	441.13	85%	4.95	85%	0.49
16	Infiltration Bed	145 Hunt Valley Circle	< 1 acre	39° 59' 45.58"	-75° 26' 24.14"	Crum Creek	2015	Yes	R1	8,429	95%	338.06	85%	3.79	85%	0.38
17	Infiltration Bed	16 Bryn Mawr Avenue	< 1 acre	39° 59' 13.43"	-75° 23' 25.16"	Crum Creek	2006	No	R2	7,877	95%		85%			
18	Bioret. w/ UD	19 Woolman Drive	< 1 acre	39° 59' 17.25"	-75° 25' 57.72"	Crum Creek		Yes	R1	3,555	55%	82.55	25%	0.47	45%	0.08
19	Infiltration Bed	20 Harrison Drive	< 1 acre	40° 1' 21"	-75° 24' 39.96"	Darby Creek	1/10/2013	No	R1	1,642	20%		85%			
20	Infiltration Bed	204 Park Avenue (Stlp)		39° 58' 35.94"	-75° 25' 49.85"	Crum Creek	7/8/1905	No	R3		95%		85%			
21	Infiltration Bed	21 Hickory Lane	< 1 acre	39° 59' 6.21"	-75° 24' 45.01"	Preston Run	9/14/2015	Yes	R3	2,360	95%	94.65	85%	1.06	85%	0.10
22	Infiltration Bed	212 Bishop Hollow Road	< 1 acre	39° 58' 45.80"	-75° 24' 27.98"	Tributary to Hunter Run	11/24/2015	No	R2		95%		85%			
23	Infiltration Bed	212 Hickory Lane	< 1 acre	39° 58' 57.43"	-75° 25' 0.24"	Preston Run	8/15/2014	Yes	R3	2,641	95%	105.92	85%	1.19	85%	0.12
24	Infiltration Bed	264 Aronimink Drive	< 1 acre	39° 59' 49.24"	-75° 23' 12.52"	Darby Creek		Yes	R2	883	95%	35.41	85%	0.40	85%	0.04
25	Infiltration Bed	264 Overbrook Drive	< 1 acre	39° 59' 44.25"	-75° 23' 14.91"	Darby Creek		No	R2		20%		85%			
26	Rain Garden w/	28 Papermill Road	< 1 acre	40° 00' 56.18"	-75° 23' 56.54"	Darby Creek	6/4/2014	Yes	R1	895	80%	30.23	70%	0.33	75%	0.04
27	Infiltration Bed	28 Stoney Brook Boulevard	< 1 acre	39° 58' 27.88"	-75° 24' 22.20"	Tributary to Hunter Run	6/29/2015	No	PRD		95%		85%			
28	Infiltration Bed	2900 Wayland	< 1 acre	39° 59' 41.64"	-75° 27' 2.51"	Crum Creek	10/18/2013	No	R1	8,386	95%		85%			
29	Infiltration Bed	3 Boulder Creek	< 1 acre	40° 00' 21.94"	-75° 24' 16.19"	Thomas Run	9/4/2015	Yes	R1	601	95%	24.10	85%	0.27	85%	0.03
30	Infiltration Bed	3 Gartley Drive	< 1 acre	40° 0' 27.09"	-75° 23' 54.05"	Thomas Run	2008	Yes	R1A	3,325	95%	133.35	80%	1.50	85%	0.15
31	Infiltration Bed	3 Greenbriar Lane	< 1 acre	39° 58' 55.65"	-75° 23' 55.39"	Hunter Run	2007	Yes	R2	375	95%	15.04	85%	0.17	85%	0.02
32	Rain Garden w/	303 Echo Valley Lane	< 1 acre	39° 59' 36.86"	-75° 25' 25.95"	Lewis Run	2013	Yes	R1	1,566	80%	52.89	70%	0.58	75%	0.06
33	Infiltration Bed	3206 St. David's Road	< 1 acre	40° 01' 18.36"	-75° 24' 4.25"	Darby Creek	3/26/2015	Yes	R1	3,394	95%	136.12	85%	1.53	85%	0.15
34	Infiltration Bed	3314 Sawmill Road	< 1 acre	40° 0' 34.57"	-75° 24' 4.67"	Thomas Run	2009	Yes	R1	7,872	95%	315.72	85%	3.54	85%	0.35
35	Infiltration Bed	3316 Sawmill Road	< 1 acre	40° 0' 33.37"	-75° 24' 6.56"	Thomas Run	2010	Yes	R1	7,618	95%	305.53	85%	3.43	85%	0.34
36	Infiltration Bed	34 Dunminning	< 1 acre	40° 0' 31.19"	-75° 23' 57.06"	Darby Creek	8/4/2015	Yes	R1	7,366	95%	295.43	85%	3.31	85%	0.33
37	Infiltration Bed	3417 Tyson Road	< 1 acre	39° 59' 48.04"	-75° 23' 37.54"	Foxes Run	2010	Yes	R2	1,177	95%	47.21	85%	0.53	85%	0.05
38	Infiltration Bed	3425 Tyson Road	< 1 acre	39° 59' 47.76"	-75° 23' 43.50"	Foxes Run	7/21/2014	Yes	R2	1,924	95%	77.17	85%	0.87	85%	0.09
39	Infiltration Bed	3444 Goshen Road	< 1 acre	39° 59' 49.69"	-75° 23' 45.24"	Foxes Run	7/7/2014	Yes	R2	950	95%	38.10	85%	0.43	85%	0.04
40	Infiltration Bed	3501 Goshen Road	< 1 acre	39° 59' 53.99"	-75° 23' 52.2"	Sawmill Run	2006	Yes	R1	4,871	95%	195.36	85%	2.19	85%	0.22
41	Infiltration Bed	3501 Sawmill Road	< 1 acre	40° 0' 17.75"	-75° 24' 16.47"	Sawmill Run	2006	Yes	R1	10,320	95%	413.90	85%	4.64	85%	0.46
42	Infiltration Bed	3503 Rhodes Avenue-Brynchester	> 1 acre	39° 59' 11.52"	-75° 23' 33.01"	Foxes Run	2007	Yes	R1		95%		85%			
43	Infiltration Bed	3511 Sawmill Road	< 1 acre	40° 0' 16.39"	-75° 24' 18.37"	Sawmill Run	2007	Yes	R1	10,491	95%	420.76	85%	4.72	85%	0.47
44	Infiltration Bed	3533 Sawmill Road	< 1 acre	40° 00' 12.13"	-75° 24' 24.65"	Darby Creek	11/18/2015	Yes	R1	9,950	95%	399.06	85%	4.48	85%	0.44
45	Infiltration Bed	3534 Rhodes Avenue	< 1 acre	39° 59' 13.83"	-75° 23' 48.50"	Crum Creek	2005	Yes	C1	4,796	95%	192.35	85%	2.16	85%	0.21
46	Infiltration Bed	3547 Sawmill Road	< 1 acre	40° 0' 8.76"	-75° 24' 30.08"	Sawmill Run	2009	No	R1	10,752	95%		85%			
47	Infiltration Bed	3607 Goshen Road	< 1 acre	39° 59' 49.21"	-75° 24' 23.01"	Sawmill Run	2016	Yes	R1	11,036	95%	442.62	85%	4.97	85%	0.49
48	Infiltration Bed	361 Echo Valley Lane	< 1 acre	39° 59' 44.21"	-75° 26' 10.51"	Crum Creek	2016	No	R3	270	95%		85%			
49	Infiltration Bed	37 Main Street	< 1 acre	39° 59' 1.68"	-75° 24' 44.99"	Crum Creek	12/16/2013	Yes	R3	2,226	95%	89.28	85%	1.00	85%	0.10
50	Infiltration Bed	3754 School Lane	< 1 acre	39° 59' 6.68"	-75° 24' 24.95"	Crum Creek	4/19/2016	Yes	R3	4,014	95%	160.99	85%	1.81	85%	0.18
51	Infiltration Bed	38 Walnut Street	< 1 acre	39° 58' 57.49"	-75° 24' 42.63"	Crum Creek		Yes	R3	600	95%	24.06	85%	0.27	85%	0.03
52	Infiltration Bed	20 Springton Pointe (3860 Gradyville Road)	< 1 acre	39° 57' 53.52"	-75° 24' 33.35"	Hunter Run	4/4/2014	No	R1	5,390	95%		85%			
53		3880 Gradyville Road (Lot 2)		39° 58' 1.89"	-75° 24' 46.95"	Crum Creek		No	R1							
54	Infiltration Bed	39 Baren Road	< 1 acre	39° 59' 12.80"	-75° 22' 45.34"	Darby Creek	2009	Yes	R3	2,076	95%	83.26	85%	0.93	85%	0.09
55	Infiltration Bed	398 Hempstead Circle (Lot 4)	< 1 acre	39° 58' 25.02"	-75° 24' 54.24"	Hunter Run	11/10/2014	Yes	R2	4,020	95%	161.23	85%	1.81	85%	0.18
56	Infiltration Bed	399 Hempstead Circle (Lot 5)	< 1 acre	39° 58' 25.02"	-75° 24' 54.24"	Hunter Run	3/25/2015	Yes	R2	4,255	95%	170.65	85%	1.91	85%	0.19
57	Infiltration Bed	400 Hempstead Circle (Lot 2)	< 1 acre	39° 58' 25.02"	-75° 24' 54.24"	Hunter Run	3/19/2015	Yes	R2	7,195	95%	288.57	85%	3.24	85%	0.32
58	Infiltration Bed	402 Hempstead Circle (Lot 3)	< 1 acre	39° 58' 25.96"	-75° 24' 51.53"	Crum Creek	2016	Yes	R2	849	95%	34.05	85%	0.38	85%	0.04
59	Infiltration Bed	41 Dunminning Road	> 1 acre	40° 0' 58.88"	-75° 23' 56.62"	Darby Creek	2016	No	R1		95%		85%			
60	Infiltration Bed	410 Media Line Road	< 1 acre	39° 58' 34.41"	-75° 23' 55.01"	Crum Creek	2009	Yes	R3	3,028	95%	121.44	85%	1.36	85%	0.13
61	Infiltration Bed	411 Timber Lane	< 1 acre	40° 0' 34.32"	-75° 24' 19.54"	Darby Creek		Yes	R1		95%		85%			
62	Infiltration Bed	4241 Fairview	< 1 acre	39° 58' 47.73"	-75° 25' 32.01"	Crum Creek		Yes	R3	3,671	95%	147.23	85%	1.65	85%	0.16
63	Infiltration Bed	45 Boot Road	< 1 acre	39° 59' 10.66"	-75° 25' 30.00"	Crum Creek		Yes	R1		95%		85%			
64	Infiltration Bed	45 Harrison Drive	< 1 acre	40° 01' 21.35"	-75° 24' 5.28"	Darby Creek	2015	Yes	R1	10,500	95%	421.12	85%	4.72	85%	0.47
65	Infiltration Bed	4522 Fairview Road	< 1 acre	39° 45' 30.64"	-75° 25' 44.86"	Crum Creek	12/18/2015	No	R3	5,293	95%		85%			
66	Infiltration Bed	54 Farrier Lane	> 1 acre	40° 0' 11.11"	-75° 25' 46.22"	Crum Creek	2017	Yes	R1	1,094	95%	43.88	85%	0.49	85%	0.05
67	Infiltration Bed	601 Newtown Street Road	< 1 acre	39° 57' 42.46"	-75° 23' 40.77"	Darby Creek	2016	Yes	R1	10,300	95%	413.10	85%	4.63	85%	0.46
68	Infiltration Bed	602 Andover Road	< 1 acre	40° 0' 46.8"	-75° 24' 43.50"	Thomas Run	2006	Yes	R1	8,186	95%	328.31	85%	3.68	85%	0.36
69	Infiltration Bed	603 Newtown Street Road	< 1 acre	40° 0' 34.14"	-75° 25' 8.12"	Darby Creek										